Yoga Psychology and Modern Psychological Theories

I

There are two physiological theories advanced by two writers of the present day who seek to explain the psychonic system in terms of modern thought: The theory advanced by Sir John Woodroffe and Pramathanath Mukhopadhyaya on the one hand and Dr. Vasant Rele on the other. Dr. Rele's theory is on the lines of neural explanation and is worthy of study as it gives excellent cues as to a future theory of Nadis and chakras.

1.The theory of Dr. Rele:

Dr. Rele holds in his work on *Mysterious Kundalini, that Kundalini is the right vagus nerve and the physiological nervous plexuses are the chakras and the several nerves can be identified with the Nadis described by the two books Satcakra Nirupana and the Mahanirvanatantra. "All explanations about this (kundalini sakti) though learned, could as well apply to the autonomic nervous system" he says (P-34). The static or anabolic power is the para-sympathetic portion of it and the Dynamic or Katabolic power is the sympathetic portion of it. "The Vagus, pneumogastric or tenth cranial nerve, as we know, is developed from the hind brain and has a more extensive distribution

than any of the other cranial nerves.

The notes on Endocrinology were brought up-to-date by Dr. V. S. R. Murthy, S. V. University College, Tirupati.

*Mysterious Kundalini: vasant Rele: Bombay

Halliburtons Hand-book of Physiology Ch.XVI P-171

"It arises with other cranial nerves (ninth and eleventh) from the grey matter in the floor of the fourth ventricle, where it is attached by eight or ten filaments to the Medulla Oblongata in the groove between the olive and restiform body. The nerve as it emerges from the jugular foramen at the base of the skull, presents a well-marked swelling, called the ganglion of the root of the Vagus (jugular ganglion). This ganglion sends a branch to the carotid plexus which is situated at the base of the skull and is known as the taluka chakra.*

After its emergence from the jugular foramen, it presents another swelling called the ganglion of the trunk of the Vagus (ganglion nodosum) from this the Vagus nerve passes along the spinal column vertically down through the neck, chest and abdomen where it ends into a plexus and forms connections with the solar plexus. In its journey downwards and before it ends, it sends branches to the prevertebral plexuses of the sympathetic portion of the autonomic nervous system. In the neck, it sends a branch to the pharyngeal plexus, i.e., Visuddha Chakra; in the thorax it sends branches to

the deep and the superficial cardiac plexus i.e., Anahata Chakra; in the abdomen it forms connections with the plexus of the coeliac axis i.e., Manipuraka chakra and then ends in a plexus known as the solar plexus i.e. Kundalini chakra which is the downward extension of the Manipuraka chakra. The Vagus also supplies branches to the renal, hepatic, splenic, and pancreatic plexuses."**

*Yoga Raja up. Mentions that the taluka chakra is just below the Ajna at the root of the palate as its name signifies.

**Mysterious Kundalini pp.46-47 and the plan and origin of the Vagus nerve P.248. See also the frontispiece of that work.

This then is the general outline of his theory of Kundalini. One single nerve vagus embraces all the plexuses and controls all the plexuses and therefore the organs to which they send nerve fibres.

More interesting than this is his appendix which gives us his complete view with regard to the nerves and pranas.

The Prana is a centre and vayu is an impulse. The Samana Prana is identified with the subsidiary nerve centre in the thoracicolumbar region regulating the activities of the solar plexus; Udanaprana with the subsidiary nerve centre in the cervical region of the

spinal cord. And the Udana vayu is identified with the afferent nerve impulse along the spinal cord. Vyana prana is identified with the reflex centre found at the bottom of the junction of prana and apana impulses as well as of udana and samana. Apanaprana is the subsidiary nerve centre in the lumbar region and apana vayu is the afferent nerve impulse along the autonomic nerves.

Prana according to him is a centre in spinal region: apana and Udana are afferent nerve impulses: samana vayu is efferent nerve impulse along the cerebro-spinal nerves. "Vyana is the reflex movement of the prana and apana, as well as udana and samana". Here we have a theory which even goes to the extent of tracing the entire nadis along the paths described by the tantra and hatha yoga. Not only this, Akasa is identified with the sub-arachnoid space which surrounds the brain and spinal cord. The mention of the Akas-chakra would certainly, on this interpretation, mean the plexus at the point.

Criticism of this theory:

1. The theory holds that the Vagus is the Kundalini. Kundalini is according to the tantra sastra placed within the spinal cord, the 'tube' of the embryologists. The Kundalini is contained by the Sushumna which is said to be in the spinal cord. The plexuses are strung like lotuses in the Sushumna. "It is said for instance" says Woodroffe, "that the Adhara Chakra is the

sacrococcygeal plexus and that the Svadhisthana is the sacral plexus and so forth". *This work (Shatchakra Nirupana) not to mention others, makes it plain that the chakras are in the Sushumna. Verse I speaks of the lotuses inside the Meru (spinal column); and as the Sushumna supports these (that is the lotuses) she must be within the Meru".

2. The identification of the Vagus with the Kundalini is defective because the authors of the upanishads as also the tantra claim that they are so subtle as to be unseen by the eye and that only a yogi can see them.

3. Dr. Rele by identifying the Sushumna with the spinal cord and by identifying the Kundalini with the Vagus commits two mistakes. Firstly, the Sushumna is within the spinal cord and the Kundalini is in the Sushumna. Dr. Rele takes Vajranadi which is not mentioned by the Upanishads but which is mentioned in the Shatchakra Nirupana as being within the spinal cord as the Fibre of Reissner.

Shatchakra Nirupana refutes the theory of those who place the Sushumna, Ida and Pingala, within the spinal cord (Meru)** The second verse of the work says that inside the Vajra which is within the Meru and the Sushumna there is the Chitrini on which lotuses are strung as gems and which like a spider's thread pierces all the lotuses within the spinal cord.

*Shatchakra Nirupana: p.161-162 introduction. 'Serpent

Power"

Serpent Power: Sir John Woodroffe. Ganesh and Co. Madras.

**ibid: P 164-165

The author of the Shatchakra Nirupana further refutes the view of the Kalpa Sutra that the lotuses are within the Chitrini. These lotuses are within the Sushumna but Chitrini only pierces through them and does not contain them.

Thus the lotuses are within the Sushumna which is the Brahmanadi and the spinal cord and they exist as extremely vital and subtle centres of radiative force and as centres of grossened consciousness (more or less). Sir John quoting the verdict of a medical man not finding the chakras on dissection remarks that the chakras as such are extremely subtle and vital centres and are not available in a body after death: nor could they be seen in life unless one is a Yogi.

All activity is due to constant vivification of these centres which control however subtly yet powerfully, by Prana which is the active manifestation of Brahman. Only through the chakras can the entire organism be controlled and only through the control of breath can there be actual and dynamic vivification of the chakras.

Every cell of our organism throbs with its own

individuality of activity and though to a certain extent the functions of a particular organism can be usurped by another, yet it would not be a substantial way of making that organism function integrally. Every cell of the body has a consciousness of its own which has sunk into the unconscious or autonomic level. In integrating the functions of the several segments of our organism into a unity and in making them function in a conscious and purposive manner, void of the biological accretions and habits to which it unduly surrendered itself at the beginning of the evolutionary career, the entire organism undergoes a metabolic change which not unduly and certainly profoundly alters its entire facility in action, intuition and enjoyment. The use of Prana according to the example described by Dr. Rele seems to be that the entire nervous system is made to focus itself on the primal centres therefrom the drainage of neural and psychonic power discharges itself and when it is commanded into the reginiste channels. The constant connection between the Vagus which controls the several plexuses as shown by the radio-photography of Dr. Rele and the spinal cord (the Sushumna in other words for it is myelinated by it) reveals the important manner in which the entire vital energy is drained into the spinal channel stimulating the entire series of plexuses of the psychonic level. In embryological development it is not the Vagus but the tube that becomes the spinal cord and develops into the brain and its parts and later differentiates itself into the cranial nerves etc.* Thus the theory of Dr.Rele reveals on the

one hand acute correlation between itself and the theories of the Upanishads and on the other the dissimilarity between itself and the tantric theory. These dissimilarities Sir John Woodroffe himself notes down in his introduction of Dr.Vasant Rele's book.

II

Sri Aurobindo Ghose who holds a very high place so far as Yogic culture goes, in his book Yogic sadhan (His letters published in the Advent August 1948, give a fuller account of the chakras and their place in the Subtle body) wrote, "I must warn you against stumbling into the error of those who try to harmonize Yogic science with the physical science of the Europeans and search for the Yogic nadis and chakras in the physical body. You will not find them there. There are certain centres in the physical nervous system with which the chakras correspond, otherwise Hatha Yoga would be impossible. But the Chakras are not these centres." "The Sukshma prana moves in the nervous system of the subtle body as prescribed in the Yogic books, the sthula prana moves in the nervous system of the gross body. The two are closely connected and almost act upon each other." He says, being himself an advanced Yogi, that the identification of the physical and the psychical centres (centres in the Sukshma body) is fraught with "horrible confusion".

According to these two writers there is a cleavage of opinion but Sri Aurobindo is true to the Upanishads, whereas Rele's is a hypothesis. Between them it is the Upanishads that have to prevail, so far and so long as we are studying the psychological aspect of the Upanishads.

III

We shall next consider what the modern writers have to say regarding the psychonic theories of psychology independently.

The latest writers on the subject of Mind postulate a Psychon as different from a theory of Neuron and the proton. Two writers on the subject are Dr. Marston and Mr. Bousfield.

"Just as protons and electrons are aggregated into protoplasm, it is suggested that the psychons may be aggregated into psychoplasmic structures. The protons and electrons which constitute a protoplasmic structure are widely spread apart and hence there is no difficulty in the way of conception of an interpenetrating psychoplasmic structure. The psychoplasm may be regarded as a constituent of every living cell including the germplasm and also as capable of constituting psychic structures comparable with the complex structures which are built out of protoplasm. The

protoplasm and the psychoplasm are thus regarded as 'concomitants' the one carrying the physical basis of life, the other its psychical basis, both interacting electrons and psychons belong to the physical realm. Psychonic psychoplasm is regarded as being of mass so small as to be practically negligible. says Bousfield. He further says regarding the brain, "we may conceive of the psychic brain as distributed through the open atomic network of the material brain, though this is not essential. In any case the material brain and the psychic brain are both bathed in the ether which separates them and yet links them by etheric vibrations without the necessity of any direct paths such as nerves."

The suggestion of Mr. Bousfield is of value if only for its recognition of the limiting character of the neurological theories and physiological explanations and because it goes deeper and appears to suggest the theory which Aurobindo hints, namely, the existence of an overlapping psychonic brain functioning in all psychic processes, and effecting all changes in the physical through the vibration of ether that whilst separating them yet links them. We have the Sandilya Upanishad telling us that the prana extends twelve digits above the head which seems to be echoed by the theory of Bousfield who says that ether envelops both the psychonic and the physical brains.

The theory of the Upanishads also deals with the problem of spandana (throbbing) of vayu as the media of movement of chitta and Manas. All associative

virility issues out of the throbbing movement of Vayu or akasa. The linga-sarira itself is a product of Akasa and Vayu in one sense. Mind, meaning Manas in Bousfield's theory, is called the Mnema of all impressions and is memory.* It is a manufacturer of psycho-grams; that is, it carries the impressions and congeals them into a set, unbreakable but powerfully influencing the entire mental processes.

Dr. Mc Dougall in his 'Mind and Body' says "the fusion of effects of simultaneous sensory stimuli to a unitary resultant is not a physiological or physical fusion or composition; but a purely psychical fusion; the unitary result exists only in the psychic sphere." He adds, "The materialistic assumption," that the structure of the mind may be fully described in terms of cerebral structure is untenable." There exists in the brain no such psychical medium of composition and the processes of the several sensory nerves simultaneously excited do not affect any common material medium to produce in it a complex physical resultant." It is meaning that is the cause of neural activity and there exists 'no such' unitary neural process correlated with 'meaning'. All response in fact is really in relation to meaning or significance. Thus there is needed this psychonic system, a system which has place for meaning and is able to correlate its activities with the physical neural system and influence all its motor expressions.

*Bousfield also affirms that there is no such thing as Unconscious mind, for all storage of impressions ideas

etc. which are nascent are unconscious

Mind and Body Dr. W. Mc Dougall p-293.ibid p.289.

Dr. Marston in his Emotions of normal people seeks to establish a theory of psychonic impulse contradistinct from a neural impulse. "Motor or affective consciousness is psychonic energy released within the psychonic or connective tissues of the motor synapse of the central nervous system." Defining the 'psychon' he says "the totality of energy generated within the junctional tissue between any two neurones, whenever the junctional membrane is continuously energized, from the emissive pole of one adjacent tissue to the receptive pole of the next intrinsically constitutes consciousness ... The structural unit of psychology is the psychon; any wave of psycho-chemical excitation initiated within the psychon is consciousness."* The above definition, in spite of its chemical explanation of change within the neural and psychonic systems, is a clear statement of the need for understanding the principle and function of consciousness in terms of some theory or hypothesis countering the physiological and purely neural theories. But the theory of psychon whilst useful is done away with in the statement that consciousness is the product of continuous energisation of the membrane of the junctional tissue; and to say that it is the energy so generated, is too neural an explanation.

Rightly does Dr. Mc. Dougall write "many of those who

have written upon mental evolution and comparative psychology began their study by looking for indications of mental life in the lowest organisms, and failing to find any such indications of an indisputable kind, proceed to search the scale of life from below upwards ... It is a sounder procedure to attempt to trace mind downwards in the scale from man in whom by common agreement, we have the surest and clearest expressions of mind, endeavouring by analysis of animal behaviour in the height of analogy of human behaviour, to seize every indication of mental life, of purposive activity as far down the scale as impartial observation warrants." Dr. Mc. Dougall's observation is mainly intended to show that consciousness has a mechanism of its own which can best be understood by the study of human consciousness itself and in the measure the brain mechanisms are active in the animals they may be considered to be growing intelligent or conscious animals.

But there is an impulse in the entire organism which is in nature at the beginning but aims at integrating its nervous paths with all the other systems (through exercise) thus making for coordinated action which shows the absolute vitality of purposive action in all evolution and integration. The same purposiveness which appears as the adjustment to the environment in the animals appears as consciousness and will in men and also as the integrative power which affects the entire associative tracts in the brain and links them together powerfully. It is that again which seeks to

make the consciousness dominant in actual life. It is consciousness or more truly spirit that seeks motor expression and in its expressing it 'stoops to conquer!' its own earlier manifestations. The Sukshma (subtle) is an earlier stage in evolution than the sthula (gross) according to the upanishads. The sukshma has the psychonic system - which expresses the antah karana (internal organ) and its phases and whose centres are placed along with the chakras within it and connecting with the physical organs placed at those places respectively.

But accustomed as we are to the physical alone we have left behind the sukshma conceptions and think in terms of gross neural systems and therefore the whole of Yoga philosophy and practice seeks to influence the direction of the physical by making the sukshma more efficient and vital with regard to our life and experience. This means the recognition of the theory which postulates the transmission of energy from the neural to the psychonic and from the psychonic to the neural systems reciprocally, till finally they are completely integrated. This also means perfect sensibility and perfect knowledge and conscious control. In a sense, the psychon and the neuron are next brothers being born from a more primary element say Akasa or ether.

Thus the latest theorists in psychology reveal the anxiety to re-embrace consciousness into psychology, which had first lost its soul and then its mind in recent

years thanks to the Behaviourists. Lest finally consciousness the epiphenomenon, should also be crucified. Dr. Mc. Dougal and Dr. Marston have brought out a psychonic theory which may yet save consciousness to psychology.

Endocrine theory of chakras.

So far we have considered the neural and psychonic theories. We shall now discuss the endocrine theory of chakras. There is no theory called as such but the identification in some circles of the chakras with certain glands lends the view that they have a plausible theory of glandular correlation. The theory is stated in two sentences. It is said the pineal gland and the pituitary glands correspond with the Sahasrara. Des Cartes * and his followers held that the pineal gland was the seat of the soul. The interest lies not in the fact that the theory has the remotest chance of being accepted but as revealing how a little known organ has been pitched upon as the centre of the soul, or the Sahasrara, the pineal gland and the centre of the Divine.

The endocrine glands of the body are closely connected with the metabolic processes of the body and their importance is very great. With the exception of the reproductive organs, the ductless glands are all characteristic of the vertebrate group alone and some authorities regard them as relatively recent acquisitions and their activities as something which came into existence after the development of the central and

sympathetic nervous system. But it would seem that the appearance of the primitive nervous system and the reproductive organs are about the same time and the development of the nervous system into the autonomic system and the cranial series occurs before the appearance of the endocrine system.

The number of these glands is seven if we add the thymus and the pancreas, namely, the pineal, the pituitary, the thyroid, the thymus, the pancreas, the adrenal and the genital. This correspondence with the seven plexuses is no doubt a basis of this hypothesis. The location of the pineal in the cavity of the head, with the pituitary close to it point to the value of the theory of glands; added to this we have the version of a Upanishad which speaks of the genital organ as the Svadhisthana.

Dr. Sajous in his valuable work on 'Internal Secretions and the Principles of Medicine' says that there is complete coordination between the several glands. "the close linkage of the several glands to each other confirms the view that they form a single system in close touch with each other and the blood circulation and the nerves of the central system. The pituitary is connected with the adrenals by direct nerve paths and it governs through the adrenals the general oxidation metabolism and nutrition".

The genitals according to Sajous is intimately connected with the adrenal system because the

testicular preparations give the same reactions and tests in precisely the same way as does the adrenal principle.* Milk also contains the adrenal principle, the lactic glands being thus united with the adrenal principle. As to the physiological aspect of the connection with the spinal system," the pituitaro-adrenal path leaves the spinal cord through the upper four or five rami, to enter the sympathetic chain and then the great splanchnic which through the intermediary of the semilunar ganglia, supplies nerves to the adrenals."

Dhyanabindu up: verse 48: Medhrameva nigadyate: also Sajous Vol. I, P-87.

Sajous: Internal Secretions and Principles of Medicine Vol.I. of Alice E Bailey: The Soul and its Mechanism, where she identifies the Chakras with glands. She equates sahasrara with the pineal, Ajna with the pituitary, visuddha with the thyroid, Anahata with thymus and Muladhara with adrenal. The identifications of Anahata and Muladhara are open to objection as the one is too higher up and the other degenerates very early after infancy.

*Sajous: p 87.

ibid P 97.

ibid pp 72, 79, 169, 171, and 173.

"There has been some speculation in the literature as to which is probably the more primitive integrating mechanism within animals-nervous or endocrine. Obviously both mechanisms, when broadly interpreted extend to all forms of living organisms, both unicellular and multicellular. (The phenomena of excitation and conduction and chemical intercellular transmission of information, the basic underlying activities in the physiology of the nervous system, are common to all cells ... Some organizing and differentiating forces obviously had to precede both of these coordinating mechanisms in both phylogeny and ontogeny. In development, gene induced differentiation must precede organizer activity".)

"There is no good reason to postulate, therefore that either the excitatory or the chemical coordination factor is phylogenetically the more primitive. Both types of coordinating mechanisms probably evolved simultaneously and entirely parallelly and in response to the functional needs of the larger size multicellular character and division of labour within organisms, highly specialized, cooperating nervous endocrine systems became differentiated".

"There appears to have been an evolution of certain essential endocrine sources from tissue possessing a simple nervous or conductive function and located within the central nervous system through an intermediate stage where the cells exhibited their secretary function while still retaining the special

conductile ability of nerve cells, to a condition in which the cells have become specialized for endocrine activity alone and form glandular tissues or organs apart from the nervous system."

"And in these instances where the secreting cell bodies are still retained within nervous organs special intracellular conductile means are utilized to convey the secreted product beyond the bounds of the highly specialized 'brain-blood barrier' and into proximity to their own vascular beds. Secondarily, other endocrine organs appear to have developed morphologically, but never physiologically, independent of either direct or indirect regulation by the nervous system".

From Comparative Animal Physiology by Prosser, C. L. and Brown, F. A. W. B. Saunders Co. Philadelphia, 1962.

" ... the integration of endocrine activities is a major function of the central nervous system. The situation of the pituitary just beneath the cephalic brain stem, to which it is attached by the infundibular stalk and portal circulatory channels, enables the basal fore - brain and hypothalamus to bring their influences to bear upon the secretion of trophic hormones by this endocrine 'brain'.

From the Waking Brain by Magoun, H.W. Charles C. Thomas, 1958.

"Characteristic hormones of protein nature are

extractable from the three lobes of hypophysis. The trophic hormones of the adenohypophysis are of great importance since they regulate the functional states of other glands belonging to the endocrine system. The hypophysis is known to exercise direct or indirect control over a wide variety of physiologic processes.

Anatomically and physiologically the hypophysis is closely associated with the hypothalamic portion of the brain.

A relationship which is still poorly understood seems to exist between the neurosecretory cells of the brain and the adenohypophysis. There can be no doubt that nervous stimuli are important in regulating the release of secretions from this important gland.

A reciprocal interaction has been demonstrated between the hormones of the anterior hypophysis and the adrenal cortex. A similar reciprocity exists between the gonads and the anterior hypophysis. The thyroid gland and the anterior hypophysis are reciprocally interrelated."

C. Donnell Turnor.

W.B. Saunders Co. Philadelphia. 1955.

Thus we have the adrenals as important as the Manipuraka chakra and as important as the Solar plexus of the nervous system, sending out its currents to every portion of the body and governing all metabolic action

through its connection with the pituitary gland as against the rest. The pineal gland almost passes unnoticed by the modern theorists as the function of that gland is unknown.

In the Human adult, the organ is about a third of an inch long and weighs some two grains (0.18grm.) In children, it is relatively somewhat larger. Beginning at about the seventh year it begins to regress, from which time on it tends to become loaded with sand-like concretions of calcium salts ... brain sand. Contrary to earlier belief, it persists in fairly definite anatomical integrity throughout life."

"The evidences available suggest that the gland produces a hormone which helps to regulate the rate of bodily development and the onset of puberty'.

From Endocrinology - The glands and their functions by Hoskins, R. G. W. W. Norton and Co. inc. New York. 1950.

The pituitary gland in the body may correspond with the Ajna chakra the next highest chakra before the Sahasrara. In spite of this fact the pituitary may be studied in another connection viz. The Khechari Vidya, which involves stimulation of the akasa centre in the brain. Pro. Dakin describes the pituitary as the outgrowth from the mouth "This small organ (weighing only about 1/2 grm. in an adult man) appended to the under surface of the brain has for some time past been

recognized as consisting of two parts and since one of these lies in front of the other, it was customary to speak of the glandular anterior lobe and a nervous posterior lobe. Not only is the structure of these parts visibly different, but their origin is also very different, for whilst this posterior part arises from the brain at an early stage; the anterior part is actually an upgrowth from the buccal or mouth cavity of the embryo. In fishes and amphibia it originates as a solid ingrowth from the surface in front of the mouth.) At an early stage it becomes separated from the mouth and applies to the downward process of the brain. The development of the cranium still further separates it from the mouth and thus we have the anomaly of the structure, which although it appears to be part of the brain is non-nervous in character (actually glandular) and whose origin in any individual is distinct from that of the brain." Thus the pituitary gland though situated in the brain is an outgrowth from the buccal cavity. This makes it possible for us to think of Khechari Vidya in this connection.

The Khechari Vidya involves the reversal of the tongue into the cavity of the brain in order (perhaps) to reach this outgrowth which has isolated itself leaving its embryonic parent. To achieve this end, the freanum lingui is cut by the Yogi and the tongue is made to go back into the cavity by gently pushing it into the buccal cavity and then still interior into the base of the brain, where there are the brahmarandhra (the third ventricle) and the Kapala vastra (either the thalamus or the optic

chiasma which are full of nerve fibres.) Posterior to which is the pituitary gland at the base of the brain connecting itself with the third ventricle by a hollow stalk, the infundibulum.

Whether this is a possibility or not, the Yoga kundalini. Up and the Sandilya Upanishads have mentioned this method. The chief point in criticism of this method lies in the fact that the pituitary to be stimulated or in fact any nerve centre to be stimulated by the reversal of the tongue so as to stir them into activity needs the piercing through the bones of the cranium, which alone separates the gustatory from the neural portions.

Why should we speak of the possibility of the pituitary rather than the pineal? The real nature of pineal activity is yet conjectural; but in the case of the pituitary we have a mass of evidence. Dr. Sajous writes regarding the pituitary:

"The pituitary body is the general governing centre of the spinal system which includes the grey substance of the base of the brain pons, bulb and spinal cord and the nerves derived from any of these structures, cranial or spinal, though subsidiary centres, are also present in the bulb and spinal cord."

The pituitary body is the governing centre of all vegetative functions i.e. somatic brain.

The brain (as differentiated from the somatic brain) is

the organ of mental processes and not the governing organ of motor functions though capable through the voluntary impulse it transmits to the spinal system of having its mandates carried out.

"There is no obvious nervous interconnections between the neural and the glandular part of the hypophysis".

Paul Glees. Experimental Neurology, Clarendon Press. Oxford. 1961. But the circulatory relationship should prove valuable evidence of their intermaintenance.

Neither the anterior nor posterior pituitary body is a secreting gland. The anterior pituitary body is a lymphoid organ which through the mediary of the centre located in the posterior pituitary body and a nerve path in the spinal system, the upper dorsal sympathetic ganglia and the splanchnic nerves governs the functional activity of the adrenals. The anterior pituitary body governs through the posterior pituitary body all the oxidation - processes of the body. The centre in the posterior pituitary body through which the anterior pituitary body governs the adrenals also controls the functional activity of the thyroid gland and thus constitutes the adreno-thyroid centre.

The pituitary body, the adrenals and the thyroid gland (including the para - thyroid) are functionally united, forming the adrenal system. The posterior pituitary body is the seat of the highly specialized centres, which governs all the vegetative or somatic functions of the

body and each organ individually.

The posterior pituitary body receives all the sensory impressions belonging to the field of common sensibility: pain, touch, muscular sense etc., initiated in any one organ including the mucous membrane, the skin and brain.

"Owing to this fact, the posterior pituitary body is the sensorium commune upon which all emotions, shocks, psychical or traumatic concussions etc., react. The resulting impairment of its functions being the cause of the morbid phenomena observed under such conditions.* The stimulation of such a centre full of possibilities of a very intense life also means death if it is done without proper expert guidance. Thus the Khechari-vidya is a dangerous procedure to undertake, as the Yoga Kundalini Upanishad itself says, for it may slay the individual." It is only after long and continuous practice under the direction of a guru that this should be undertaken: years must elapse before the final stimulation or manthana takes place and the psychic centre stirred into divine action. The khechari-vidya may mean the stimulation of the pituitary gland and not any other thing.

The value of all these theories lies in the fact that they breathe the air of research into the intimate connections between the neural and the glandular and the psychonic systems. The way of their development studied embryologically shows the way in which they

progressed coordinating themselves and reveals the importance of their transformations. In their differentiations lies the problem of separation of functions and in their integrated activity consciously carried out we may either shatter the entire organism or develop unnatural phases of our life or else we may be able to perfect the organisms under the skilful operation of the cortical and the supracortical centres, induced by the psychonic system and the self. Small lesions of the brain do not affect the rate of learning for the entire mass of tissue in the brain functions as a regulated organism and therefore the importance of the cortical and the supracortical areas of the brain whilst they reveal the entire mechanism of the intelligent life, are by themselves controlled by the ideational sphere which cannot be explained on the principle of neural - memory in association.

The Problem of Emotion.

It is a well known fact in psychology that all emotion is explainable according to the theory of James and Lange who hold that physical attitudes reveal emotion and are emotion. The theory of Dr. Cannon shows that adrenal stimulation is the most important physiological occurrence in emotion and that leads to visceral function stopping and cardiac muscles being enervated. Mr. Lashley holds "that the problem of emotion is still in confusion that one can draw no conclusion with confidence, but the accumulation of evidence upon the variability of expressive reactions and the repeated

failures to find any consistent correlations between bodily changes and either exciting situations or reported subjective states lends little support to the visceral theory." He continues "the weight of evidence, I believe favours the view that in emotion, in all persistence of attitudes, in all serial activity, there are continuously maintained central processes which, if they become intense, may irradiate to motor centres, speech and the like. The pattern of radiation varies from subject to subject according to chance variations in the excitability of the motor or vegetative nervous systems and the peripheral activities are not an essential condition for the maintenance of the central processes" The maintenance of the central processes throughout any emotion is what is advanced by Mr. K. S. Lashley as a more commendable theory than the visceral. The adrenal function automatically increases the heart beat, stops all vegetative functions and in all emotion it is these adrenals that cause the highest amount of tension in the physical condition; reflection on the contrary is what gradually inhibits all the activities of the adrenals. The control exercised over the adrenal secretions therefore is certainly from the higher centres. But in a consideration of rage and anger etc. we find that the stimulation offered by the natural opponents leads to enormous activity. Whilst emotion as such cannot be explained on the lines of visceral theory yet the adrenal action in emotion plays a very important part. Neither the nervous system, nor yet the adrenal system but the processes of biological inheritance and suggestions

from them play a huge part in the emotive life of each individual. These are called the vasanas of the citta; it is these that stimulate the cortical centres which allow them to express themselves and when these intrigues between the vasanas and the adrenal are cut off, all vitality floods the other systems and supplying the needed power for metabolic changes. The entire energy instead of being released into the circulatory system is drained into other paths of control and makes for the control of emotion.

Thus neither the glandular system which is in full command of the emotional and the metabolic activity of the human body, nor the neural system which is in full command of the sensory and motor activity as also the autonomic system and in fact radiates through the muscles and glands and controls the entire system, offers the complete solution of the problem of psychical life and consciousness and its expressions. It seems that all these systems which have differentiated themselves from the unicellular organism have developed an integral dynamic rhythm. They are whilst distinct mutually dependent and co-operative in function.

IV

Psychonic system and the Upanishad:

It is clear that the Upanishads offer something like the

psychonic system called by them, the Sukshma Sarira. The Nadis belong to this body, so also the chakras, and it is Sukshma prana which flows through it, that connects radiantly the entire functions of the organism. It is also the Sukshma prana that connects the Sukshma body with the sthula or gross body at the corresponding places, for emotions with the adrenal and other glands and the solar plexus, for sensory functions with the brain and the sensory centres of the brain, for intellectual and highly specialized reactions with the cortex and the supra cortex, and the nervous system for the preservation of the body with the entire organism. The nervous system may be considered to be the fire-tattva, the glands, water tattva and the Sukshma Sarira is formed not out of the gross vayu which pervades the body and helps the organism to live but is formed out of akasa and the sukshma akasa which is indivisible and subtle. The link between the sthula and the sukshma sarira is supplied by vayu in its subtler phase. That the vayu extends twelve digits above the head is a suggestion in point. And it is suggested that through control the entire prana must be made to be neither more nor less than the physical body. That leads to complete control of the physical body and is perfect integration of all levels, perfect harmonization of the functions of the body. This is one definition of yoga according to the Sandilya Upanishad.

Regarding chakras we have no mention of them by the Sariraka and the Garbha Upanishads which are

considered to be physiological Upanishads.

The Garbha mentions the Sushumna and the coursing of vayu in the body as prana, the original prana, which descends through the Sushumna to be the heart at the time of birth. Thus at the time of the Garbha and the Sariraka either the literature with regard to the chakras have not been known generally or else their descriptions being merely the physical gross descriptions, they have not referred to the nadis and chakras which belong to the Sukshma Sarira and could be seen only by Yogis.

Whilst it is true that the neurons are instruments of mind and act as the medium of the bodily expression, it is not absolutely true that the phenomena of mind "can only be correctly interpreted in terms of neurons and neuronic arcs" for the neurons are just one stage of evolution of the organism and not the most important, but along with other systems they form an inseparable function in the body.

The neural explanations as much as the glandular explanations do not make their explanations perfectly acceptable in psychic life in both cases with all good intentions after a search for behaviour and experimentation of reactions, the motive of an action or an expression is not found - that subtle mark which makes all the difference does not make any difference in behaviour of the internal organs nor external organs. This crux of the situation in Yoga and mystic life leads many to postulate that the mystic and the Yogic life are

merely due to neurosis and this is not an explanation at all. It states the disease or it calls what some think as the highest consciousness - the perception of true spirit and the finding of true Individuality by a name and seeks to explain them away. In order to avoid such a summary treatment of mystic, William James writes in his Varieties of Religious Experience that "the states of consciousness of the mystics have a right and are true to those who have that experience."

The Psychological phases of motive or sankalpa which plays such a part in psychic life have indeed as yet no active counterpart physiologically and but for the barest instincts we cannot show the physiological situation or organ of reception of ideas and location of ideas, in a portion of the brain and the cortex. We have as yet no shade of distinctions drawn between one idea and another corresponding superficially to it. We have for all of them the same kind of response and the same stimulation, provided the circumstances are similar though this similarity is as superficial as mere identity of dress.

This is atleast the criticism of K. S. Lashley against the theory of visceral connection to emotion. The basic neural mechanism differentiates neither between one set of incidents and another set of incidents having but a slight similarity: nor does it vary even its intentive response with the shades of intensity of the circumstances. It is inhibition by the intellectual functions that inhibits also the intensities of reaction of

neural mechanism.

True yoga consists in ordering all things and functions within the body. With the consciousness or purposiveness of a harmony which can only arise out of deep contemplation of all forms and their relations and their bearing to the making of a cosmos. It means the attempt at a synthesis of all levels of individual life, all planes of consciousness, all organs of activity and all activities of senses and sensory functions and emotive influence. Direct perception does not jump into being of a sudden. All the fatalities of life and conception and embryonic growth have to take full course, the normal period of human gestation must take place and then will be brought out the finest flower of intellect and feeling, the direct perception which is the most intrinsic function of the self. It is something having birth in congenial surroundings of harmony of the intellect and feeling, emotion and sensibility, memory and aspiration. The physical body no less than mental life has to be organized and controlled by the will which seeks harmonization between the psychic and the physical hemispheres of being. Regulation means harmonization through self control and self ordering which is performed by the Prana when guided consciously. Thus the effort of will towards a creation of new and facile type of being fully aware of the moral and real bear; of his life and conscious and deliberate and facile in each of his actions, involves rigorous moral training and in this consists the moral aim and ethical observance of the Yoga system. It is no less

moral than it is aesthetic; and skill in action has been not stressed by the Gita as the consummation of Yoga. This conscious exercise for the betterment of the individual as also the whole world (the latter being the larger aim nascent only at the beginning of his course of yoga) involves inhibitions of emotional habits and mental associations and memory inflictions on sensory content and means acceleration and strengthening of those synaptic connections which are inhibitory of the autonomous actions and emotional outbursts. It means the draining off of the entire vital reserve energies towards development of volitional and metabolic centres in the brain. In a yogic sense it means the utilization of these energies for the purposes of connecting the physical annamaya chakra with the highest centre of our being, or the Muladhara with the other higher centres and finally with the Sahasrara. This and nothing else will make knowledge direct perception aparokshanubhuti.

In trance, it is said, that the body is apparently depleted of all consciousness and yet the mind is vigilant and is aware of the fullness and expansiveness of its sway; its power and perfection are said to become luminous and function as self-consciousness. As intrinsic Turiya consciousness, the self rests in its pristine purity, perfection and splendour and functions with complete mastery on its return to the levels of ordinary life of waking consciousness over all the organs,. Then not manas nor chitta, not ahamkara, not buddhi, not even prana, but only the self suffusing the entire organism

literally bathing it in its own radiance and harmony. This is the samadhi which is inducive of direct apperception. On the path of samadhi, unconsciousness does not mean anything other than non-activity of the senses and the memory and it does not mean the loss of self-consciousness as self.

Thus, we have in Yoga, Inhibition as the first mantra of self-control and self-consciousness. This means the renunciation of activity for a while so that the mind established in harmony may become facile through intelligent direction. The physiological control is also psychic control; the explanation which merely cares for behaviour will certainly face in the explanation of the mystic consciousness, a rock on which it will break and flounder. The reciprocal explanation even if it be satisfactory will not go far unless the explanation issues out of the problem of attitude. In morals, as in mysticism, the explanation must proceed from motive to expression, attitude to behaviour and never from behaviour to motive, for that is not what is characteristic of the mystic's life. One goal, the goal of union, is the absolute criterion. It is the one poise, the one destiny of his being. This is the differentia between the behaviourist and the true psychologist; one seeks for the expression or behaviour, the other for the attitude, the all governing and focussing idea.

For "the identity of symptom does not mean identity of person. Deep oscillations of emotional tone, ecstasies and even hysterical attacks do not necessarily imply the

intellectual and moral insufficiency characteristic of Medeline and her class. They may, on the contrary be allied with traits which make the genius.*

V

We shall now discuss the criticisms levelled against the methods of yoga: about its metaphysics we have nothing to do especially because the metaphysics of the Yoga theory are not perhaps acceptable to the Vedantic thinkers. Truly later interpreters of yoga have made it into a system instead of what was called a darsana: a way or method of knowing the real, of experiencing reality of being.

"To characterize Yoga as a system of philosophy or ethics would be misleading. Its more direct analogy is with our manual of religion, for its central purpose, like that of our own books of worship is to teach salvation. But its practical directions are imbedded in more or less fanciful psychology and unnecessary metaphysics." says Leuba who devotes an entire chapter to the consideration of the Yoga system and its relation to Religious Mysticism. But he fails to observe that some of the tenets of the yoga have as hoary an association with its past, as the later Christian mystics have their own, however, flexible metaphysical theories on which was based their own experiences.

We have the admission of Patanjali even at the very start of his Sutras, that his Yoga sutras are a restatement (anusasana) of the Yoga of the ancients, of the Upanishads and the Vedas. Anusasana is what he speaks of as the attitude of his book. That there is an endeavour on his part to treat the Isvara as merely a governor and the Ideal of world life to whom all things are subordinate because he is free from their influences, may be a theory that is not justifiable from the vedantic or Upanishadic point of view; with this phase of his thought there follows the acceptance of the absolute caintany (mere consciousness or Intelligence) as the real nature of individual Purusha. Consciousness which cannot be annihilated is shrouded by Prakriti and release from the shroud of Prakritic forces is what makes the individual come into his own effulgent consciousness. He will never again be implicated in the shroud of Prakriti and will be free even as the Isvara, resting in his own consciousness. This is the Kevalatva proposed by Patanjali. But in the sense of Vedanta and in a meaningful sense, it means not only the release from the bondage of objects and objective leanings, it also means the utilizing of nature and her forces in a manner which will lead to Jivanmukti or Isvara type: not the Jivanmukti of mere getting rid of bondage or the attitude of bondage and acting like a man who has renounced life, and its normal activities. In life the attitude of freedom actually realized in him dominates dynamically every incident and every phase of evolutionary ascent and governs them with the inner

light which is the light of all. This is 'lordship over the Prakriti and its movements' in the light of the Isvara who is the antaryamin of all beings dwelling in the heart caves of all beings. This is the synthetic acceptance of Yoga which is the poise supreme, the real samanvaya of the external as well as the internal in the Supreme, the Brahman; this is the highest aim of Yoga.

The criticism of fanciful psychology and unnecessary metaphysics is a criticism that will not be justified from the standpoint of Indian thought or even modern thought, because the metaphysical theory is absolutely adequate for any religious consciousness and some basis of procedure which shall avoid great complications of mythical symbolism is what is provided by Patanjali. He avoids the extraordinary proposals of Vedanta of the evolution of elements and merely accepts them to have proceeded from one common substance, the Prakriti and then he avoids the implications of causal connection between the Isvara and the evolution of the world or even its appearance. He takes only those absolutely necessary factors which make for an uninterrupted course of Yogic practice, for the light that comes in freedom is unriddling, dissolving and vouchsafes direct apprehension of all Reality. Till then metaphysical theories about God and the individual may stand. The minimum of metaphysics is what one finds in Patanjali and not unnecessary complications. As to fanciful psychology we have surely instances of the extraordinary lengths to which conjectural relations can be formulated. In fact it

follows the lead of inner introvert experiencing more than observation of outer expressions and the physiological bases. This building up of psychology, though it is open to grave charges of misinterpretation from a physiological and behaviouristic angle, is indeed true to its mystical instinct and purpose. It is the mysticism of Unity of all life that is the mystic's greatest and profoundest metaphysical principle formed out of a greater vision and experience.

In Patanjali in fact there is no metaphysical bearing but only the instruction as to the profoundest depths of being and attainment. God is necessary and only as a spiritual guru is He to be appealed for help on the path of Yoga.

But the criticism of Mr. Leuba is not altogether wrong. But he ventures to state that "an ethical purpose and practice is, nevertheless not logically demanded by the goal of Yoga; for honesty, friendliness etc. are irrelevant to one who seeks utter detachment in isolation. Cultivating friendliness and rejoicing with those who rejoice are demands hardly in agreement with a desire for suppression of personality. This is one of the incongruities that betray the confusion of thought from which this system suffers".* This criticism far from being right is positively wrong, because all mystics by virtue of their aspiration to alter the circumstances in which they are placed, pass through a moral preparation. The isolation which the Yogi of the Patanjali school demands is the isolation from the

bondage of Prakriti,, for the promise always remains that he can become the splendid ever-free Isvara of the Guru free from the bondage of Karma; the acceptance of Kapila is not a fault in Patanjali, because both of them wanted to represent to humanity the acuteness of the stress of environment, habitual actions and emotional disturbances and unethical behaviour on individual personality which contradict the way of harmony and because of their intimate connections with bondage. All bondage is due to uncognized and unconscious and unthought out activity and to lift all actions to the level of consciousness means to inhibit consciously all actions connected with such actions having their play in an autonomous fashion. To break the autonomy of the several habits and nerves and nervous systems and endocrine systems is the true aim of intelligence (Jitendriya). This can be done only through nirodha, restrain or control of all modifications in mind, that is in thought, all movements of habit all autonomic functions of the several organisms. Truly it is the way of regaining control. Once the control has been transferred to the levels of spiritual being, there is samadhi, the trance-state in which all are absorbed into the fold of spirit and thence function spiritually. This is the highest morality, beyond even the limits of social morality. If reflective action seeking harmony of being is unmoral and has no bearing on the moral practices of honesty and friendliness then one cannot understand the aim of mysticism, of even morality. That the initial aim of Yoga is utter detachment from prakritic influences is

an absolute fact and is admitted; but that is the culmination of his entire existence or being is not necessarily involved in his attainment of perfect control or detachment from their leading strings. The isolation which is gained through the Yogic practice is the freedom to be within himself, 'ekanti', and that is not annihilation or becoming a prisoner in his own cave, nor is it the atomic existence which the individual seeks. Such is not the aim of Yoga, which is purely a mystical effort to join the true and the real and the perfect so as to be real, true and perfect. The meaning of cittavritti nirodha is not to be construed as the Path of Nirvana of Buddhist psychology, it is rather this self-establishment within oneself that one seeks. That there may be individuals who seek the release from the physical plane of existence does not involve the statement that those who exist in this world of matter are bound and those who are released from the bodily encasement are free and boundless.

That in trance the body assumes a state of absolute unconsciousness for days together sometimes is not due to the fact that trance constitutes the prime factor in freedom; it is rather the absolute domination of the self within which is able to deplete or withdraw consciousness from the physical body and its organs and functions. This is the Turiya consciousness - the self itself as it ever is and sees itself to be. In the Upanishad there is a passage which goes to show in the form of a parable how the several organs of the body claimed supremacy and how prana getting out made all

of them impotent. Then did they realize that prana was Brahman the real self. Prana is the physical manifestation of active self, the saman as Brihadaranyaka says. Morality being an essential harmonizing principle of life makes for the lucid functions of consciousness or the self, since it would not lead to internal conflicts or external conflicts with either truth or the society. The progress of the Yogi in actual existence is difficult and in the avoidance of all conflict which may make for disharmony with oneself and truth, in harmonizing the self and its movements with the best and the Good, one becomes less and less obsessed by the disharmonious elements of one's life. On the one hand, there is demand for a strict discipline over the external environment and, that is moral action and friendliness and others mentioned under Yama and Niyama, on the other hand, there is complete mastery of the mind which leads to the state of amanaska (Mindlessness) or unmani (above mind) when the mind (manas) does not function with fluctuating movement. Anyone who misunderstands the moral or ethical preparation of the Yogic path has not understood the broader motive and higher altitude of the Yogin's mind.

Mr. Leuba thinks that the entire scheme of Yoga is based on the creation of automatisms and hopes that concentration and relaxation of effort play a capital role in the productions of various automatisms. Such a statement is truly a misunderstanding of the motive underlying the yogic practice. That those who undertake the Yogic practice out of superficial motives may make

use of very many automatisms is possible. But neither concentration nor relaxation is out to create automatisms. The relaxation of all effort is undertaken for the sake of transforming the lower levels and making them feel the infusion of a richer consciousness, a noumenal light of supreme scintillative power. The postures of Yoga are integral part of the practice in order to make concentration or attention steady and unflickering and to this end all external strains must be avoided since strain will have its reaction on the system. The dialectical process of attentive consciousness has been very well understood by those ancient Yogis. They knew that every attention is inviting exhaustion to release itself from. Yoga aims at suspension of both this (attention or) concentration or expectancy - neurosis and exhaustion - neurosis, or relaxation.

They instruct not only steadiness of posture, but also moral training of neither enjoying too much nor attachment to anything too much good or bad as ordinarily conceived in the meaning of pleasurable. Their instruction thus consists of Vairagya, freedom from attachment and nirodha, control of mental activities which lead to attachment.

That the Yogi seeks mere automatisms is pure conjecture on the part of Mr. Leuba. Indeed the very reverse is the case. He seeks consciousness rather than unconsciousness; he seeks not habitual reactions but intelligent and consciously willed or supra - consciously directed actions; he seeks not mere continuity of this

quiescence of uniformity, dull, wooden, and binding but seeks full peace, harmony and the Bliss of dynamic attainment of reality. That Mr. Leuba should have styled the methods of Yoga as similar to the savage practices of stimulation only shows the terrible misinterpretation of the real Yoga. Even the Yoga sutras do not take the highest state to consist of intoxication. A study of caitanya and all Bhakti Yogins does reveal the psychic intoxication, which Mr. Leuba says corresponds to the Savages - cult. But the Raja Yogin is not one who is very much anxious to have intoxication that unbalances; rather he prefers the complete mastery of the self and its forces.

Truly it must be said that what Yoga aims is to "conquer oneself", Whilst the aim of Vedanta is to "know oneself". In synthesizing the two ideas of Yoga of the Upanishads is justifying its true character of integral harmony. This is perfect Yoga , not mere ecstatic conversions, nor mere prayer that makes for partial stimulations , partial alterations and partial fulfillments in union. It is not reduction of mental activity, but it is the transcendence of mental activity, a direct intuition of universal harmony that issues out from concentration and meditation. Trance is not intoxication. Nor is ethical practice mere humanization; on the other hand both trance and ethic make for real and integral uniqueness, Which is at the same time unique universal. Consciousness of the universal is the consciousness of the individual and vice versa. Real morality passes beyond the universals of social ethics

and becomes truth expression; truth in action. These criticisms are based on a misinterpretation of the yoga system; secondly the criticisms leveled against yoga morality is merely baseless. Connection between yoga and morals is intrinsic and absolutely determinative of the capacity for undertaking the path of yoga; without Morals there is no mystic achievement. On the whole the philosophies of Patanjali and the Samkhya are absolutely empiricistic mysticism and cannot be utilized to prove the metaphysical theories of Advaita or single soul. In all cases, the realistic pluralistic position has been taken up by Patanjali. Purusha Bahutvam Siddham . The world of matter of prakriti is also real. And there is an Isvara, the moral governor or guru of the universe, the ever-free and the ever -blissful being, lending a helping hand to each and every striving soul. All this is not metaphysics but mere ordinary acceptance. We may even say it is commonsense realism. It seeks to discover the real through svanubhava- self-experience. Towards this end, this amount of hypothesis is sufficient. The Varaha Upanishad speaks about the problem of the relation between the individual Jiva and the Supreme as a problem that can wait till fruition or fulfillment of perfection. And if we have the instruction into the mysteries of the universal and the individual relationship, it is something that is given after the practice of yoga. It is only when the lower self, the self that is burdened by the stigmata of experiences and karma due to Prakritic bondage, conquers or releases itself from the grasp of these forces of Prakriti and its

consequences, that the mind perceives its unique relation to the supreme luminously. Till then, even though the veil is lifted through an answer to prayer or any other pathway, the intimate relation of the universal self and the individual self cannot be fully discovered. It is therefore that in practice this conceptual fight between dualism or spirits or multiplicity of finites or existence of a single self are all misleading and mischievous if not merely misleading.

Now why is morality allowed to control the entire behaviour of the yogi from the very start? The moral preparation is the best cure against misuse of power, which naturally comes to an individual on the path of concentration and citta-vritti nirodha. Conquest over certain aspects of material existence within ourselves means an increased Power over those factors. It means the control over every organ in the body control leads to consciousness of power, over every organ of the body.

In a secondary significance it means control over every element in existence even through belonging to the objective realm. The constitution of the physical body is of the same substances as the outer world, whose natural product of evolution it is. This possession of power and exercise of them is what is called siddhi. As to the possibility of there being a pure siddhi, yoga says and Samkhya substantiates it, in its statement that the siddhis are facts and they occur through the will of the yogi. There is no absolute non validity about the theory of siddhi which is the appreciation of a profounder law

and the right use of the law of nature. It is that knowing of such laws and the ability to utilize them for its own purpose which constitutes a siddhi.

But siddis as such are what the yogi is instructed not to worry about or even asked for. Morality guides the use of the power which accrues to the individual as he develops and this power then becomes not the Neitszchian power that is intolerant and consumes, but the self -disciplined power that works for synthesis and harmony. In one word he is heading towards Godhood (Isvaratva). It is the cosmic consciousness, the coterminality of vision and consciousness with the divine and the ineffable, having its birth in a perfect morality and an aesthetic harmony overflowing with cosmic delight. For all universal acts are indeed moral acts. All harmony is aesthetic; all perfection of being is reality of existence and truth; thus through them the individual lifting himself to the vision of delight, becomes at one with the Divine inalienably and supremely. This is the highest consummation of his entire existence this joyous freedom even of the stars in the firmament of God. But one has to pass through the fireheat of life and even through the world of soul making gathering the experience and seek spiritual regeneration through the divine. It is this union of the individual and the divine borne from out of an entire sorrow and strain and awaiting and expectation that makes the achievement all the richer and greater and profounder. It has then the lyric of love, the passion of the soul and the symphony of life gathered into its

essence. This is Yoga, which is synthesis.

The usual criticism offered against the Yoga practices, even by the orthodox Indian Thinkers, is that it is a dangerous method of mystic practice and that it involves great danger to the physical system. The practice of breath control tones up the system undoubtedly, but the hathayogic practice of stimulation of the centres through uniting prana and apana, which constitutes in their opinion pranayama, is really courting disaster. The primary centre of the body is the Muladhara and along with the Svadhisthana forms the physical system and the piercing through these two centres causes undoubtedly terrible metabolic changes culminating sometimes even in death, or great perversions. But, even as the Varaha Upanishad says, the path has to be followed even to its fullness, even till death claims us for its own, for even through death shall we learn to live integrally. This fearfulness of the inert and the incapacitated is not preferred by some Yogins who feel that mere contemplation of the Essence of Existence, the Divine would make for release. The Bhakti and the Jnana Yogins seek philosophical contemplation and emotional expression, which latter sometimes tends to great emotional outburst. Pranayama occupies a regular but minor phase in the life of the ordinary individual and one chooses a life of mere study and philosophic speculation or else intense bhakti through the way of prapatti. The aim of an integral life, the integral transformation of the entire psychonic and the physical system, has been abandoned

completely in exchange for aery metaphysics and silent or passive dogmatism, or else to a kind of vehement emotionalism that is not grounded in integral purification. And when the practice has been undertaken, we have not an integral transformation but an effort at mere physical development of muscular control in Asanas, or else mere pranayama without significance or purpose. In both cases, it has led to mere formalism or ritualism. Formalism is the complementary phase of materialism, it too is binding and has no purposive outlook which sustains it. It is as much dead of life and movement as matter itself. The bondage of forms and formal elements once they have standardized or habituated themselves in us, acts as a cog in the wheel of spiritual evolution. Indian thought in its practices has come to the level of formalistic inertness, without courage of movement towards great vistas of active union with the highest, the Divine. The mystic outlook, which is essentially dynamic regulation, firm discipline and intense purposiveness towards enlightenment and enlargement of life in and out of us, is the very negation of formalistic practice and silent or passive dogmatism. Mysticism challenges life and thus evaluates its formalistic movement materialistic attitude and moulds the world in significance. Thus tradition which loses its soul is resurrected into vital and dynamic existence in the mystic consciousness. For to the Yogi and the mystic nothing in this world is material or spiritual, but the significance each person is prepared to give to it and in

this quality of attributing significance to even dead dogma consists his turn of mind and spiritual activistic outlook. The Upanishads breathe this daring spirit of absolute mastery over everything and inculcate that life of strenuous practice even till death. For the brave and the courageous is the world of God the great destiny of coitive union with the highest, the spirit that is resident in all, attaining which he is the master of the world. Siddhis as such are merely the intimations of the equality growing steadily within the individual, who knowing that all these are merely taking him to the Divine and not making for perfect union, prefers the perfect to his manifestations and loyally clings to the Goal of Union - Yoga and none other.

There is nothing to say against the possibilities of Siddhis and any one who walks the path of Yoga may expect to get at the siddhis. That the siddhis are improbable and mere arthavada is the opinion of some writers, but in philosophy as in dogmatism we have this scepticism in Indian thought. But the upanishadic position, is that they accept Siddhis as normal to the knower of the Divine and in this they are supported even by the ancient Upanishads which speak of samya, with the Divine, who is satyasankalpa and satya kama. The Vedanta sutras also speak of the individual as being equal to the Divine in all respects except with regard to agency of the world-creation and sustenance and destruction. The siddhis are further supported by the Samkhya which claims that when buddhi is purified it

manifests the powers of anima and others.*

VI

The turiya and its Relation to Evolution

In the first chapter an effort was made to show that the Turiya and the Turiyatita are not states of consciousness as much as the Self itself. The Turiya is the individual self, the Turiyatita is the cosmic self, the divine. The fusion of both is so integral and complete, there resting in each other so overflowing, that there can be distinction between the Turiya and the Turiyatita. They are aspects of how we view the individual. One is the body of the other. The vaster truer consciousness or being is the Divine the satyasya satyam, mahatomahiyana. The turiya is described by the Mandakyopanishad - speaks about the turiya as the highest state, beyond the three states of our pragmatic existence, which bind. The three states of our conscious life, are the deep sleep, the dream and the waking. The functions of these three states are in the deep sleep, sushupti- the mind is absolutely set in abeyance and the self is merely looking on, or there is mere awareness (prajna) in the second state of consciousness. There we have dream-consciousness full of gorgeous splendour of images string - like phantoms on the state: but there is one order of desire of the Isvara, the maker; this is the stage of imagination. No implicit stage of

consciousness reveals the extraordinary part imagination plays in the dream - life - it is full of revelations of combinations of sensual data which are reformed or unformed and synthesized by the logic of desire. In fact in the early period of one's life the wish-fulfillment has a predominant phase in dream-life: and later only we have the compensation playing an almost supreme role in dream-consciousness. Waking consciousness is the meeting ground of the actual field of imagination and fulfillment. Deterred fulfillment seeks its compensation in dream-life; success also seeks its wings in speculative dreams.

But it is also interesting to think of these states of consciousness as merely establishing that continuity of our life with our evolution. These three are merely phases of our biological experience. The deep sleep is the state of our primitive life already undergone which apparently seems to be so alien to our modern existence of our waking life. But an investigation into the study of the unconscious level reveals it to be no mystery as the psychoanalysts seek to make it. The only mystery is the mystery that it is the complete history of our consciousness and its experience written even in blood. It is the memory that has sunk into ineffectuality, but yet operating through the trait developed by the race, as also the individual, in the forms of instinctive traits common to all individuals and special tendencies peculiar to the individual alone. It is therefore the background of our waking and imaginative life. The dream - consciousness analysed to its source of

simplicity is the imaginative level which seeks fresh combinations in actuality, it is the creative factor of our life. The waking is the creative or imaginative phase of our being seeking manifestation conditioned by the deep unconscious. In dream-con-sciousness, the imagination may take the way of perversion of the unconscious or else a straight transfiguration of the unconscious or else it may argue for its continuation. In every case, the dream and the unconscious far from merely vanishing into each other seek that completion or satisfaction of their expression in the waking, the world of experience. The comparison thus means in other words, the unconscious level, is the level of the past, the biological background of our life; the dreaming is the future, the ideational and the imaginative and the waking-consciousness is the present - the meeting of both dream and the unconscious. But considered as a product of the strife between the unconscious universal background, the individuation of the individual must have been due only to his seeking to formulate his environment himself. The imaginative process or the process of associating a distinct activity instead of the routine makes for perfect individuation. Dream and ideation lead not a little to the culmination of creative activity. That intelligent occasion has got coherent conceptions whilst dream-life does not possess them reveals only that the imagination seeks expression somehow and factors of unconscious make that goal nebulous, in intelligent thought it becomes clear and coherent; the dream is the substitute

for creative life of imagination and in the measure that it acts as the stimulus to creative art and formative evolution consists its claim to be called the intimator of futurity. Dream in the intelligent and developed people moves between the unconscious level of biological self and the future of the ideational level and becomes a house of conflicts, compensations and subtle expressions. The provocation of the biological life, undergone in the lower strata of being grip the entire life and coming into conflict with ethical and social norms of a civilized society, seeks escape in symbolism or else in and through a naked expression of the biological instinct. The symbolic activity is the activity of adjustment, which the dream refuses to express, when such an expression is not conducive to development. In all cases the dream is just the period of adjustment and symbolism, a stage when consciousness relieved from the stress of life and its completely binding nature, releases itself to its freedom and sometimes runs riot also on the wake of great repression of content seeking expression in the waking life. Compensation, the play of imagination, symbolism and repressed contents seek their fulfillment in dream. That the theory that Isvara inflicts these several chariots and other sensations occur, could only mean that what a man deserves that he gets, what a man has by his activities stimulated seek their manifestation in the dream state. That a man suffers for what he does outside in his waking life is merely the theory of compensation in life. But it also means the index to

temperament.

Yoga tries to control this dream life as well as the waking life. The causes of dream are imaginative liveliness and associative potencies. In making these associations entirely moral and consciously so, we make the oscillatory movements between waking-consciousness and dream-life merely a continuity and not violent as in the case of immoral and high-tension actions. The bondage to the unconscious elements can be got over when we make the biological collectivity merely non-existent to us, that never shows the least attention to its commandments and potencies. In triumphing over the instinctive life or reorganizing our life in the light of conscious spirituality all the several stages of our life lose their meaning and one becomes free from the wheel of evolutionary reactions. One becomes himself and does not travel into the realms of unconscious or dream, but expresses himself from the turia in the waking. The continuity is made by one leap.

Jung's Unconscious and the Turia:

Jung calls his unconscious the collective history of Mankind. "The unconscious is continually active creating from its material combinations that serve the needs of the future. It creates subliminal prospective combinations just as does the conscious, only they are markedly superior to the conscious combination both in refinement and extent. The unconscious therefore can also be an unequalled guide for man." But this would

mean reducing the level intelligent fulfillment to the instinctive level, however, it may guarantee continuity of history between the individual and the collective society. Yet he thinks that the deep-rooted prejudices the instincts and tendencies of the race preserved in its bosom will be invaluable guides for man seeking intelligent function. For Jung "Individuation dispositions of mankind since an adequate consideration of the peculiarity of the individual is more conducive to a better social achievement, than when the peculiarity is neglected or repressed." Here Jung seems to be lapsing into the view that collective dispositions of mankind is exactly the aspiration of the entire Humanity to its completed height. The collective disposition of mankind is almost a product of social adjustment and its aspiration is however the aspiration for a better kind of world that what was available through the biological history. The aspiration of mankind of the most imaginative people of the world and the most creative spirits is to make man more divine and less animal like. The spiritual aspiration is not identical with the aspiration of biological history, which has sunk into the unconscious below the threshold of consciousness. But it is true that the true individuality seeks its expression through the intermediary biological history, inhibiting gradually the trait of its course and tortuous experience and limitation. The spirit is born in matter and finds itself. This is the lila of the spirit.

CG.Jung: Two essays in Analytical Psychology pp.162.

Ibid. pp.184.

Yoga Psychology and Modern Psychological Theories

I

There are two physiological theories advanced by two writers of the present day who seek to explain the psychonic system in terms of modern thought: The theory advanced by Sir John Woodroffe and Pramathanath Mukhopadhyaya on the one hand and Dr. Vasant Rele on the other. Dr. Rele's theory is on the lines of neural explanation and is worthy of study as it gives excellent cues as to a future theory of Nadis and chakras.

1.The theory of Dr. Rele:

Dr. Rele holds in his work on *Mysterious Kundalini, that Kundalini is the right vagus nerve and the physiological nervous plexuses are the chakras and the several nerves can be identified with the Nadis described by the two books Satcakra Nirupana and the Mahanirvanatantra. "All explanations about this (kundalini sakti) though learned, could as well apply to the autonomic nervous system" he says (P-34). The static or anabolic power is the para-sympathetic portion

of it and the Dynamic or Katabolic power is the sympathetic portion of it. "The Vagus, pneumogastric or tenth cranial nerve, as we know, is developed from the hind brain and has a more extensive distribution than any of the other cranial nerves.

The notes on Endocrinology were brought up-to-date by Dr. V. S. R. Murthy, S. V. University College, Tirupati.

*Mysterious Kundalini: vasant Rele: Bombay

Halliburtons Hand-book of Physiology Ch.XVI P-171

"It arises with other cranial nerves (ninth and eleventh) from the grey matter in the floor of the fourth ventricle, where it is attached by eight or ten filaments to the Medulla Oblongata in the groove between the olive and restiform body. The nerve as it emerges from the jugular foramen at the base of the skull, presents a well-marked swelling, called the ganglion of the root of the Vagus (jugular ganglion). This ganglion sends a branch to the carotid plexus which is situated at the base of the skull and is known as the taluka chakra.*

After its emergence from the jugular foramen, it presents another swelling called the ganglion of the trunk of the Vagus (ganglion nodosum) from this the Vagus nerve passes along the spinal column vertically down through the neck, chest and abdomen where it ends into a plexus and forms connections with the solar plexus. In its journey downwards and before it ends, it

sends branches to the prevertebral plexuses of the sympathetic portion of the autonomic nervous system. In the neck, it sends a branch to the pharyngeal plexus, i.e., Visuddha Chakra; in the thorax it sends branches to the deep and the superficial cardiac plexus i.e., Anahata Chakra; in the abdomen it forms connections with the plexus of the coeliac axis i.e., Manipuraka chakra and then ends in a plexus known as the solar plexus i.e. Kundalini chakra which is the downward extension of the Manipuraka chakra. The Vagus also supplies branches to the renal, hepatic, splenic, and pancreatic plexuses."**

*Yoga Raja up. Mentions that the taluka chakra is just below the Ajna at the root of the palate as its name signifies.

**Mysterious Kundalini pp.46-47 and the plan and origin of the Vagus nerve P.248. See also the frontispiece of that work.

This then is the general outline of his theory of Kundalini. One single nerve vagus embraces all the plexuses and controls all the plexuses and therefore the organs to which they send nerve fibres.

More interesting than this is his appendix which gives us his complete view with regard to the nerves and pranas.

The Prana is a centre and vayu is an impulse. The

Samana Prana is identified with the subsidiary nerve centre in the thoracicolumbar region regulating the activities of the solar plexus; Udanaprana with the subsidiary nerve centre in the cervical region of the spinal cord. And the Udana vayu is identified with the afferent nerve impulse along the spinal cord. Vyana prana is identified with the reflex centre found at the bottom of the junction of prana and apana impulses as well as of udana and samana. Apanaprana is the subsidiary nerve centre in the lumbar region and apana vayu is the afferent nerve impulse along the autonomic nerves.

Prana according to him is a centre in spinal region: apana and Udana are afferent nerve impulses: samana vayu is efferent nerve impulse along the cerebro-spinal nerves. "Vyana is the reflex movement of the prana and apana, as well as udana and samana". Here we have a theory which even goes to the extent of tracing the entire nadis along the paths described by the tantra and hatha yoga. Not only this, Akasa is identified with the sub-arachnoid space which surrounds the brain and spinal cord. The mention of the Akas-chakra would certainly, on this interpretation, mean the plexus at the point.

Criticism of this theory:

1. The theory holds that the Vagus is the Kundalini. Kundalini is according to the tantra sastra placed within the spinal cord, the 'tube' of the embryologists. The

Kundalini is contained by the Sushumna which is said to be in the spinal cord. The plexuses are strung like lotuses in the Sushumna. "It is said for instance" says Woodroffe, "that the Adhara Chakra is the sacrococcygeal plexus and that the Svadhisthana is the sacral plexus and so forth". *This work (Shatchakra Nirupana) not to mention others, makes it plain that the chakras are in the Sushumna. Verse I speaks of the lotuses inside the Meru (spinal column); and as the Sushumna supports these (that is the lotuses) she must be within the Meru".

2. The identification of the Vagus with the Kundalini is defective because the authors of the upanishads as also the tantra claim that they are so subtle as to be unseen by the eye and that only a yogi can see them.

3. Dr. Rele by identifying the Sushumna with the spinal cord and by identifying the Kundalini with the Vagus commits two mistakes. Firstly, the Sushumna is within the spinal cord and the Kundalini is in the Sushumna. Dr. Rele takes Vajranadi which is not mentioned by the Upanishads but which is mentioned in the Shatchakra Nirupana as being within the spinal cord as the Fibre of Reissner.

Shatchakra Nirupana refutes the theory of those who place the Sushumna, Ida and Pingala, within the spinal cord (Meru)** The second verse of the work says that inside the Vajra which is within the Meru and the Sushumna there is the Chitrini on which lotuses are

strung as gems and which like a spider's thread pierces all the lotuses within the spinal cord.

*Shatchakra Nirupana: p.161-162 introduction. 'Serpent Power"

Serpent Power: Sir John Woodroffe. Ganesh and Co. Madras.

**ibid: P 164-165

The author of the Shatchakra Nirupana further refutes the view of the Kalpa Sutra that the lotuses are within the Chitrini. These lotuses are within the Sushumna but Chitrini only pierces through them and does not contain them.

Thus the lotuses are within the Sushumna which is the Brahmanadi and the spinal cord and they exist as extremely vital and subtle centres of radiative force and as centres of grossened consciousness (more or less). Sir John quoting the verdict of a medical man not finding the chakras on dissection remarks that the chakras as such are extremely subtle and vital centres and are not available in a body after death: nor could they be seen in life unless one is a Yogi.

All activity is due to constant vivification of these centres which control however subtly yet powerfully, by Prana which is the active manifestation of Brahman. Only through the chakras can the entire organism be

controlled and only through the control of breath can there be actual and dynamic vivification of the chakras.

Every cell of our organism throbs with its own individuality of activity and though to a certain extent the functions of a particular organism can be usurped by another, yet it would not be a substantial way of making that organism function integrally. Every cell of the body has a consciousness of its own which has sunk into the unconscious or autonomic level. In integrating the functions of the several segments of our organism into a unity and in making them function in a conscious and purposive manner, void of the biological accretions and habits to which it unduly surrendered itself at the beginning of the evolutionary career, the entire organism undergoes a metabolic change which not unduly and certainly profoundly alters its entire facility in action, intuition and enjoyment. The use of Prana according to the example described by Dr. Rele seems to be that the entire nervous system is made to focus itself on the primal centres therefrom the drainage of neural and psychonic power discharges itself and when it is commanded into the reginiste channels. The constant connection between the Vagus which controls the several plexuses as shown by the radio-photography of Dr. Rele and the spinal cord (the Sushumna in other words for it is myelinated by it) reveals the important manner in which the entire vital energy is drained into the spinal channel stimulating the entire series of plexuses of the psychonic level. In embryological development it is not the Vagus but the tube that

becomes the spinal cord and develops into the brain and its parts and later differentiates itself into the cranial nerves etc.* Thus the theory of Dr.Rele reveals on the one hand acute correlation between itself and the theories of the Upanishads and on the other the dissimilarity between itself and the tantric theory. These dissimilarities Sir John Woodroffe himself notes down in his introduction of Dr.Vasant Rele's book.

II

Sri Aurobindo Ghose who holds a very high place so far as Yogic culture goes, in his book Yogic sadhan (His letters published in the Advent August 1948, give a fuller account of the chakras and their place in the Subtle body) wrote, "I must warn you against stumbling into the error of those who try to harmonize Yogic science with the physical science of the Europeans and search for the Yogic nadis and chakras in the physical body. You will not find them there. There are certain centres in the physical nervous system with which the chakras correspond, otherwise Hatha Yoga would be impossible. But the Chakras are not these centres." "The Sukshma prana moves in the nervous system of the subtle body as prescribed in the Yogic books, the sthula prana moves in the nervous system of the gross body. The two are closely connected and almost act upon each other." He says, being himself an advanced Yogi, that the identification of the physical and the psychical

centres (centres in the Sukshma body) is fraught with "horrible confusion".

According to these two writers there is a cleavage of opinion but Sri Aurobindo is true to the Upanishads, whereas Rele's is a hypothesis. Between them it is the Upanishads that have to prevail, so far and so long as we are studying the psychological aspect of the Upanishads.

III

We shall next consider what the modern writers have to say regarding the psychonic theories of psychology independently.

The latest writers on the subject of Mind postulate a Psychon as different from a theory of Neuron and the proton. Two writers on the subject are Dr. Marston and Mr. Bousfield.

"Just as protons and electrons are aggregated into protoplasm, it is suggested that the psychons may be aggregated into psychoplasmic structures. The protons and electrons which constitute a protoplasmic structure are widely spread apart and hence there is no difficulty in the way of conception of an interpenetrating psychoplasmic structure. The psychoplasm may be regarded as a constituent of every living cell including

the germplasm and also as capable of constituting psychic structures comparable with the complex structures which are built out of protoplasm. The protoplasm and the psychoplasm are thus regarded as 'concomitants' the one carrying the physical basis of life, the other its psychical basis, both interacting electrons and psychons belong to the physical realm. Psychonic psychoplasm is regarded as being of mass so small as to be practically negligible. says Bousfield. He further says regarding the brain, "we may conceive of the psychic brain as distributed through the open atomic network of the material brain, though this is not essential. In any case the material brain and the psychic brain are both bathed in the ether which separates them and yet links them by etheric vibrations without the necessity of any direct paths such as nerves."

The suggestion of Mr. Bousfield is of value if only for its recognition of the limiting character of the neurological theories and physiological explanations and because it goes deeper and appears to suggest the theory which Aurobindo hints, namely, the existence of an overlapping psychonic brain functioning in all psychic processes, and effecting all changes in the physical through the vibration of ether that whilst separating them yet links them. We have the Sandilya Upanishad telling us that the prana extends twelve digits above the head which seems to be echoed by the theory of Bousfield who says that ether envelops both the psychonic and the physical brains.

The theory of the Upanishads also deals with the problem of spandana (throbbing) of vayu as the media of movement of chitta and Manas. All associative virility issues out of the throbbing movement of Vayu or akasa. The linga-sarira itself is a product of Akasa and Vayu in one sense. Mind, meaning Manas in Bousfield's theory, is called the Mnema of all impressions and is memory.* It is a manufacturer of psycho-grams; that is, it carries the impressions and congeals them into a set, unbreakable but powerfully influencing the entire mental processes.

Dr. Mc Dougall in his 'Mind and Body' says "the fusion of effects of simultaneous sensory stimuli to a unitary resultant is not a physiological or physical fusion or composition; but a purely psychical fusion; the unitary result exists only in the psychic sphere." He adds, "The materialistic assumption," that the structure of the mind may be fully described in terms of cerebral structure is untenable." There exists in the brain no such psychical medium of composition and the processes of the several sensory nerves simultaneously excited do not affect any common material medium to produce in it a complex physical resultant." It is meaning that is the cause of neural activity and there exists 'no such' unitary neural process correlated with 'meaning'. All response in fact is really in relation to meaning or significance. Thus there is needed this psychonic system, a system which has place for meaning and is able to correlate its activities with the physical neural system and influence all its

motor expressions.

*Bousfield also affirms that there is no such thing as Unconscious mind, for all storage of impressions ideas etc. which are nascent are unconscious

Mind and Body Dr. W. Mc Dougall p-293.ibid p.289.

Dr. Marston in his Emotions of normal people seeks to establish a theory of psychonic impulse contradistinct from a neural impulse. "Motor or affective consciousness is psychonic energy released within the psychonic or connective tissues of the motor synapse of the central nervous system." Defining the 'psychon' he says "the totality of energy generated within the junctional tissue between any two neurones, whenever the junctional membrane is continuously energized, from the emissive pole of one adjacent tissue to the receptive pole of the next intrinsically constitutes consciousness ... The structural unit of psychology is the psychon; any wave of psycho-chemical excitation initiated within the psychon is consciousness."* The above definition, in spite of its chemical explanation of change within the neural and psychonic systems, is a clear statement of the need for understanding the principle and function of consciousness in terms of some theory or hypothesis countering the physiological and purely neural theories. But the theory of psychon whilst useful is done away with in the statement that consciousness is the product of continuous energisation of the membrane of the junctional tissue; and to say that

it is the energy so generated, is too neural an explanation.

Rightly does Dr. Mc. Dougall write "many of those who have written upon mental evolution and comparative psychology began their study by looking for indications of mental life in the lowest organisms, and failing to find any such indications of an indisputable kind, proceed to search the scale of life from below upwards ... It is a sounder procedure to attempt to trace mind downwards in the scale from man in whom by common agreement, we have the surest and clearest expressions of mind, endeavouring by analysis of animal behaviour in the height of analogy of human behaviour, to seize every indication of mental life, of purposive activity as far down the scale as impartial observation warrants." Dr. Mc. Dougall's observation is mainly intended to show that consciousness has a mechanism of its own which can best be understood by the study of human consciousness itself and in the measure the brain mechanisms are active in the animals they may be considered to be growing intelligent or conscious animals.

But there is an impulse in the entire organism which is in nature at the beginning but aims at integrating its nervous paths with all the other systems (through exercise) thus making for coordinated action which shows the absolute vitality of purposive action in all evolution and integration. The same purposiveness which appears as the adjustment to the environment in

the animals appears as consciousness and will in men and also as the integrative power which affects the entire associative tracts in the brain and links them together powerfully. It is that again which seeks to make the consciousness dominant in actual life. It is consciousness or more truly spirit that seeks motor expression and in its expressing it 'stoops to conquer!' its own earlier manifestations. The Sukshma (subtle) is an earlier stage in evolution than the sthula (gross) according to the upanishads. The sukshma has the psychonic system - which expresses the antah karana (internal organ) and its phases and whose centres are placed along with the chakras within it and connecting with the physical organs placed at those places respectively.

But accustomed as we are to the physical alone we have left behind the sukshma conceptions and think in terms of gross neural systems and therefore the whole of Yoga philosophy and practice seeks to influence the direction of the physical by making the sukshma more efficient and vital with regard to our life and experience. This means the recognition of the theory which postulates the transmission of energy from the neural to the psychonic and from the psychonic to the neural systems reciprocally, till finally they are completely integrated. This also means perfect sensibility and perfect knowledge and conscious control. In a sense, the psychon and the neuron are next brothers being born from a more primary element say

Akasa or ether.

Thus the latest theorists in psychology reveal the anxiety to re-embrace consciousness into psychology, which had first lost its soul and then its mind in recent years thanks to the Behaviourists. Lest finally consciousness the epiphenomenon, should also be crucified. Dr. Mc. Dougal and Dr. Marston have brought out a psychonic theory which may yet save consciousness to psychology.

Endocrine theory of chakras.

So far we have considered the neural and psychonic theories. We shall now discuss the endocrine theory of chakras. There is no theory called as such but the identification in some circles of the chakras with certain glands lends the view that they have a plausible theory of glandular correlation. The theory is stated in two sentences. It is said the pineal gland and the pituitary glands correspond with the Sahasrara. Des Cartes * and his followers held that the pineal gland was the seat of the soul. The interest lies not in the fact that the theory has the remotest chance of being accepted but as revealing how a little known organ has been pitched upon as the centre of the soul, or the Sahasrara, the pineal gland and the centre of the Divine.

The endocrine glands of the body are closely connected with the metabolic processes of the body and their importance is very great. With the exception of the

reproductive organs, the ductless glands are all characteristic of the vertebrate group alone and some authorities regard them as relatively recent acquisitions and their activities as something which came into existence after the development of the central and sympathetic nervous system. But it would seem that the appearance of the primitive nervous system and the reproductive organs are about the same time and the development of the nervous system into the autonomic system and the cranial series occurs before the appearance of the endocrine system.

The number of these glands is seven if we add the thymus and the pancreas, namely, the pineal, the pituitary, the thyroid, the thymus, the pancreas, the adrenal and the genital. This correspondence with the seven plexuses is no doubt a basis of this hypothesis. The location of the pineal in the cavity of the head, with the pituitary close to it point to the value of the theory of glands; added to this we have the version of a Upanishad which speaks of the genital organ as the Svadhisthana.

Dr. Sajous in his valuable work on 'Internal Secretions and the Principles of Medicine' says that there is complete coordination between the several glands. "the close linkage of the several glands to each other confirms the view that they form a single system in close touch with each other and the blood circulation and the nerves of the central system. The pituitary is connected with the adrenals by direct nerve paths and it

governs through the adrenals the general oxidation metabolism and nutrition".

The genitals according to Sajous is intimately connected with the adrenal system because the testicular preparations give the same reactions and tests in precisely the same way as does the adrenal principle.* Milk also contains the adrenal principle, the lactic glands being thus united with the adrenal principle. As to the physiological aspect of the connection with the spinal system," the pituitaro-adrenal path leaves the spinal cord through the upper four or five rami, to enter the sympathetic chain and then the great splanchnic which through the intermediary of the semilunar ganglia, supplies nerves to the adrenals."

Dhyanabindu up: verse 48: Medhrameva nigadyate: also Sajous Vol. I, P-87.

Sajous: Internal Secretions and Principles of Medicine Vol.I. of Alice E Bailey: The Soul and its Mechanism, where she identifies the Chakras with glands. She equates sahasrara with the pineal, Ajna with the pituitary, visuddha with the thyroid, Anahata with thymus and Muladhara with adrenal. The identifications of Anahata and Muladhara are open to objection as the one is too higher up and the other degenerates very early after infancy.

*Sajous: p 87.

ibid P 97.

ibid pp 72, 79, 169, 171, and 173.

"There has been some speculation in the literature as to which is probably the more primitive integrating mechanism within animals-nervous or endocrine. Obviously both mechanisms, when broadly interpreted extend to all forms of living organisms, both unicellular and multicellular. (The phenomena of excitation and conduction and chemical intercellular transmission of information, the basic underlying activities in the physiology of the nervous system, are common to all cells ... Some organizing and differentiating forces obviously had to precede both of these coordinating mechanisms in both phylogeny and ontogeny. In development, gene induced differentiation must precede organizer activity".)

"There is no good reason to postulate, therefore that either the excitatory or the chemical coordination factor is phylogenetically the more primitive. Both types of coordinating mechanisms probably evolved simultaneously and entirely parallelly and in response to the functional needs of the larger size multicellular character and division of labour within organisms, highly specialized, cooperating nervous endocrine systems became differentiated".

"There appears to have been an evolution of certain essential endocrine sources from tissue possessing a simple nervous or conductive function and located within the central nervous system through an intermediate stage where the cells exhibited their secretary function while still retaining the special conductile ability of nerve cells, to a condition in which the cells have become specialized for endocrine activity alone and form glandular tissues or organs apart from the nervous system."

"And in these instances where the secreting cell bodies are still retained within nervous organs special intracellular conductile means are utilized to convey the secreted product beyond the bounds of the highly specialized 'brain-blood barrier' and into proximity to their own vascular beds. Secondarily, other endocrine organs appear to have developed morphologically, but never physiologically, independent of either direct or indirect regulation by the nervous system".

From Comparative Animal Physiology by Prosser, C. L. and Brown, F. A. W. B. Saunders Co. Philadelphia, 1962.

" ... the integration of endocrine activities is a major function of the central nervous system. The situation of the pituitary just beneath the cephalic brain stem, to which it is attached by the infundibular stalk and portal circulatory channels, enables the basal fore - brain and hypothalamus to bring their influences to bear upon the

secretion of trophic hormones by this endocrine 'brain'.

From the Waking Brain by Magoun, H.W. Charles C. Thomas, 1958.

"Characteristic hormones of protein nature are extractable from the three lobes of hypophysis. The trophic hormones of the adenohypophysis are of great importance since they regulate the functional states of other glands belonging to the endocrine system. The hypophysis is known to exercise direct or indirect control over a wide variety of physiologic processes.

Anatomically and physiologically the hypophysis is closely associated with the hypothalamic portion of the brain.

A relationship which is still poorly understood seems to exist between the neurosecretory cells of the brain and the adenohypophysis. There can be no doubt that nervous stimuli are important in regulating the release of secretions from this important gland.

A reciprocal interaction has been demonstrated between the hormones of the anterior hypophysis and the adrenal cortex. A similar reciprocity exists between the gonads and the anterior hypophysis. The thyroid gland and the anterior hypophysis are reciprocally interrelated."

C. Donnell Turnor.

W.B. Saunders Co. Philadelphia. 1955.

Thus we have the adrenals as important as the Manipuraka chakra and as important as the Solar plexus of the nervous system, sending out its currents to every portion of the body and governing all metabolic action through its connection with the pituitary gland as against the rest. The pineal gland almost passes unnoticed by the modern theorists as the function of that gland is unknown.

In the Human adult, the organ is about a third of an inch long and weighs some two grains (0.18grm.) In children, it is relatively somewhat larger. Beginning at about the seventh year it begins to regress, from which time on it tends to become loaded with sand-like concretions of calcium salts ... brain sand. Contrary to earlier belief, it persists in fairly definite anatomical integrity throughout life."

"The evidences available suggest that the gland produces a hormone which helps to regulate the rate of bodily development and the onset of puberty'.

From Endocrinology - The glands and their functions by Hoskins, R. G. W. W. Norton and Co. inc. New York. 1950.

The pituitary gland in the body may correspond with the Ajna chakra the next highest chakra before the Sahasrara. In spite of this fact the pituitary may be

studied in another connection viz. The Khechari Vidya, which involves stimulation of the akasa centre in the brain. Pro. Dakin describes the pituitary as the outgrowth from the mouth "This small organ (weighing only about 1/2 grm. in an adult man) appended to the under surface of the brain has for some time past been recognized as consisting of two parts and since one of these lies in front of the other, it was customary to speak of the glandular anterior lobe and a nervous posterior lobe. Not only is the structure of these parts visibly different, but their origin is also very different, for whilst this posterior part arises from the brain at an early stage; the anterior part is actually an upgrowth from the buccal or mouth cavity of the embryo. In fishes and amphibia it originates as a solid ingrowth from the surface in front of the mouth.) At an early stage it becomes separated from the mouth and applies to the downward process of the brain. The development of the cranium still further separates it from the mouth and thus we have the anomaly of the structure, which although it appears to be part of the brain is non-nervous in character (actually glandular) and whose origin in any individual is distinct from that of the brain." Thus the pituitary gland though situated in the brain is an outgrowth from the buccal cavity. This makes it possible for us to think of Khechari Vidya in this connection.

The Khechari Vidya involves the reversal of the tongue into the cavity of the brain in order (perhaps) to reach this outgrowth which has isolated itself leaving its

embryonic parent. To achieve this end, the freanum lingui is cut by the Yogi and the tongue is made to go back into the cavity by gently pushing it into the buccal cavity and then still interior into the base of the brain, where there are the brahmarandhra (the third ventricle) and the Kapala vastra (either the thalamus or the optic chiasma which are full of nerve fibres.) Posterior to which is the pituitary gland at the base of the brain connecting itself with the third ventricle by a hollow stalk, the infundibulum.

Whether this is a possibility or not, the Yoga kundalini. Up and the Sandilya Upanishads have mentioned this method. The chief point in criticism of this method lies in the fact that the pituitary to be stimulated or in fact any nerve centre to be stimulated by the reversal of the tongue so as to stir them into activity needs the piercing through the bones of the cranium, which alone separates the gustatory from the neural portions.

Why should we speak of the possibility of the pituitary rather than the pineal? The real nature of pineal activity is yet conjectural; but in the case of the pituitary we have a mass of evidence. Dr. Sajous writes regarding the pituitary:

"The pituitary body is the general governing centre of the spinal system which includes the grey substance of the base of the brain pons, bulb and spinal cord and the nerves derived from any of these structures, cranial or spinal, though subsidiary centres, are also present in the

bulb and spinal cord."

The pituitary body is the governing centre of all vegetative functions i.e. somatic brain.

The brain (as differentiated from the somatic brain) is the organ of mental processes and not the governing organ of motor functions though capable through the voluntary impulse it transmits to the spinal system of having its mandates carried out.

"There is no obvious nervous interconnections between the neural and the glandular part of the hypophysis".

Paul Glees. Experimental Neurology, Clarendon Press. Oxford. 1961. But the circulatory relationship should prove valuable evidence of their intermaintenance.

Neither the anterior nor posterior pituitary body is a secreting gland. The anterior pituitary body is a lymphoid organ which through the mediary of the centre located in the posterior pituitary body and a nerve path in the spinal system, the upper dorsal sympathetic ganglia and the splanchnic nerves governs the functional activity of the adrenals. The anterior pituitary body governs through the posterior pituitary body all the oxidation - processes of the body. The centre in the posterior pituitary body through which the anterior pituitary body governs the adrenals also controls the functional activity of the thyroid gland and

thus constitutes the adreno-thyroid centre.

The pituitary body, the adrenals and the thyroid gland (including the para - thyroid) are functionally united, forming the adrenal system. The posterior pituitary body is the seat of the highly specialized centres, which governs all the vegetative or somatic functions of the body and each organ individually.

The posterior pituitary body receives all the sensory impressions belonging to the field of common sensibility: pain, touch, muscular sense etc., initiated in any one organ including the mucous membrane, the skin and brain.

"Owing to this fact, the posterior pituitary body is the sensorium commune upon which all emotions, shocks, psychical or traumatic concussions etc., react. The resulting impairment of its functions being the cause of the morbid phenomena observed under such conditions.* The stimulation of such a centre full of possibilities of a very intense life also means death if it is done without proper expert guidance. Thus the Khechari-vidya is a dangerous procedure to undertake, as the Yoga Kundalini Upanishad itself says, for it may slay the individual." It is only after long and continuous practice under the direction of a guru that this should be undertaken: years must elapse before the final stimulation or manthana takes place and the psychic centre stirred into divine action. The khechari-vidya may mean the stimulation of the pituitary gland and not

any other thing.

The value of all these theories lies in the fact that they breathe the air of research into the intimate connections between the neural and the glandular and the psychonic systems. The way of their development studied embryologically shows the way in which they progressed coordinating themselves and reveals the importance of their transformations. In their differentiations lies the problem of separation of functions and in their integrated activity consciously carried out we may either shatter the entire organism or develop unnatural phases of our life or else we may be able to perfect the organisms under the skilful operation of the cortical and the supracortical centres, induced by the psychonic system and the self. Small lesions of the brain do not affect the rate of learning for the entire mass of tissue in the brain functions as a regulated organism and therefore the importance of the cortical and the supracortical areas of the brain whilst they reveal the entire mechanism of the intelligent life, are by themselves controlled by the ideational sphere which cannot be explained on the principle of neural - memory in association.

The Problem of Emotion.

It is a well known fact in psychology that all emotion is explainable according to the theory of James and Lange who hold that physical attitudes reveal emotion and are emotion. The theory of Dr. Cannon shows that adrenal

stimulation is the most important physiological occurrence in emotion and that leads to visceral function stopping and cardiac muscles being enervated. Mr. Lashley holds "that the problem of emotion is still in confusion that one can draw no conclusion with confidence, but the accumulation of evidence upon the variability of expressive reactions and the repeated failures to find any consistent correlations between bodily changes and either exciting situations or reported subjective states lends little support to the visceral theory." He continues "the weight of evidence, I believe favours the view that in emotion, in all persistence of attitudes, in all serial activity, there are continuously maintained central processes which, if they become intense, may irradiate to motor centres, speech and the like. The pattern of radiation varies from subject to subject according to chance variations in the excitability of the motor or vegetative nervous systems and the peripheral activities are not an essential condition for the maintenance of the central processes" The maintenance of the central processes throughout any emotion is what is advanced by Mr. K. S. Lashley as a more commendable theory than the visceral. The adrenal function automatically increases the heart beat, stops all vegetative functions and in all emotion it is these adrenals that cause the highest amount of tension in the physical condition; reflection on the contrary is what gradually inhibits all the activities of the adrenals. The control exercised over the adrenal secretions therefore is certainly from the higher centres. But in a

consideration of rage and anger etc. we find that the stimulation offered by the natural opponents leads to enormous activity. Whilst emotion as such cannot be explained on the lines of visceral theory yet the adrenal action in emotion plays a very important part. Neither the nervous system, nor yet the adrenal system but the processes of biological inheritance and suggestions from them play a huge part in the emotive life of each individual. These are called the vasanas of the citta; it is these that stimulate the cortical centres which allow them to express themselves and when these intrigues between the vasanas and the adrenal are cut off, all vitality floods the other systems and supplying the needed power for metabolic changes. The entire energy instead of being released into the circulatory system is drained into other paths of control and makes for the control of emotion.

Thus neither the glandular system which is in full command of the emotional and the metabolic activity of the human body, nor the neural system which is in full command of the sensory and motor activity as also the autonomic system and in fact radiates through the muscles and glands and controls the entire system, offers the complete solution of the problem of psychical life and consciousness and its expressions. It seems that all these systems which have differentiated themselves from the unicellular organism have developed an integral dynamic rhythm. They are whilst distinct mutually dependent and co-operative in function.

IV

Psychonic system and the Upanishad:

It is clear that the Upanishads offer something like the psychonic system called by them, the Sukshma Sarira. The Nadis belong to this body, so also the chakras, and it is Sukshma prana which flows through it, that connects radiantly the entire functions of the organism. It is also the Sukshma prana that connects the Sukshma body with the sthula or gross body at the corresponding places, for emotions with the adrenal and other glands and the solar plexus, for sensory functions with the brain and the sensory centres of the brain, for intellectual and highly specialized reactions with the cortex and the supra cortex, and the nervous system for the preservation of the body with the entire organism. The nervous system may be considered to be the fire-tattva, the glands, water tattva and the Sukshma Sarira is formed not out of the gross vayu which pervades the body and helps the organism to live but is formed out of akasa and the sukshma akasa which is indivisible and subtle. The link between the sthula and the sukshma sarira is supplied by vayu in its subtler phase. That the vayu extends twelve digits above the head is a suggestion in point. And it is suggested that through control the entire prana must be made to be neither more nor less than the physical body. That leads to complete control of the physical body and is perfect

integration of all levels, perfect harmonization of the functions of the body. This is one definition of yoga according to the Sandilya Upanishad.

Regarding chakras we have no mention of them by the Sariraka and the Garbha Upanishads which are considered to be physiological Upanishads.

The Garbha mentions the Sushumna and the coursing of vayu in the body as prana, the original prana, which descends through the Sushumna to be the heart at the time of birth. Thus at the time of the Garbha and the Sariraka either the literature with regard to the chakras have not been known generally or else their descriptions being merely the physical gross descriptions, they have not referred to the nadis and chakras which belong to the Sukshma Sarira and could be seen only by Yogis.

Whilst it is true that the neurons are instruments of mind and act as the medium of the bodily expression, it is not absolutely true that the phenomena of mind "can only be correctly interpreted in terms of neurons and neuronic arcs" for the neurons are just one stage of evolution of the organism and not the most important, but along with other systems they form an inseparable function in the body.

The neural explanations as much as the glandular explanations do not make their explanations perfectly acceptable in psychic life in both cases with all good intentions after a search for behaviour and

experimentation of reactions, the motive of an action or an expression is not found - that subtle mark which makes all the difference does not make any difference in behaviour of the internal organs nor external organs. This crux of the situation in Yoga and mystic life leads many to postulate that the mystic and the Yogic life are merely due to neurosis and this is not an explanation at all. It states the disease or it calls what some think as the highest consciousness - the perception of true spirit and the finding of true Individuality by a name and seeks to explain them away. In order to avoid such a summary treatment of mystic, William James writes in his Varieties of Religious Experience that "the states of consciousness of the mystics have a right and are true to those who have that experience."

The Psychological phases of motive or sankalpa which plays such a part in psychic life have indeed as yet no active counterpart physiologically and but for the barest instincts we cannot show the physiological situation or organ of reception of ideas and location of ideas, in a portion of the brain and the cortex. We have as yet no shade of distinctions drawn between one idea and another corresponding superficially to it. We have for all of them the same kind of response and the same stimulation, provided the circumstances are similar though this similarity is as superficial as mere identity of dress.

This is atleast the criticism of K. S. Lashley against the theory of visceral connection to emotion. The basic

neural mechanism differentiates neither between one set of incidents and another set of incidents having but a slight similarity: nor does it vary even its intentive response with the shades of intensity of the circumstances. It is inhibition by the intellectual functions that inhibits also the intensities of reaction of neural mechanism.

True yoga consists in ordering all things and functions within the body. With the consciousness or purposiveness of a harmony which can only arise out of deep contemplation of all forms and their relations and their bearing to the making of a cosmos. It means the attempt at a synthesis of all levels of individual life, all planes of consciousness, all organs of activity and all activities of senses and sensory functions and emotive influence. Direct perception does not jump into being of a sudden. All the fatalities of life and conception and embryonic growth have to take full course, the normal period of human gestation must take place and then will be brought out the finest flower of intellect and feeling, the direct perception which is the most intrinsic function of the self. It is something having birth in congenial surroundings of harmony of the intellect and feeling, emotion and sensibility, memory and aspiration. The physical body no less than mental life has to be organized and controlled by the will which seeks harmonization between the psychic and the physical hemispheres of being. Regulation means harmonization through self control and self ordering which is performed by the Prana when guided

consciously. Thus the effort of will towards a creation of new and facile type of being fully aware of the moral and real bear; of his life and conscious and deliberate and facile in each of his actions, involves rigorous moral training and in this consists the moral aim and ethical observance of the Yoga system. It is no less moral than it is aesthetic; and skill in action has been not stressed by the Gita as the consummation of Yoga. This conscious exercise for the betterment of the individual as also the whole world (the latter being the larger aim nascent only at the beginning of his course of yoga) involves inhibitions of emotional habits and mental associations and memory inflictions on sensory content and means acceleration and strengthening of those synaptic connections which are inhibitory of the autonomous actions and emotional outbursts. It means the draining off of the entire vital reserve energies towards development of volitional and metabolic centres in the brain. In a yogic sense it means the utilization of these energies for the purposes of connecting the physical annamaya chakra with the highest centre of our being, or the Muladhara with the other higher centres and finally with the Sahasrara. This and nothing else will make knowledge direct perception aparokshanubhuti.

In trance, it is said, that the body is apparently depleted of all consciousness and yet the mind is vigilant and is aware of the fullness and expansiveness of its sway; its power and perfection are said to become luminous and function as self-consciousness. As intrinsic Turiya

consciousness, the self rests in its pristine purity, perfection and splendour and functions with complete mastery on its return to the levels of ordinary life of waking consciousness over all the organs,. Then not manas nor chitta, not ahamkara, not buddhi, not even prana, but only the self suffusing the entire organism literally bathing it in its own radiance and harmony. This is the samadhi which is inducive of direct apperception. On the path of samadhi, unconsciousness does not mean anything other than non-activity of the senses and the memory and it does not mean the loss of self-consciousness as self.

Thus, we have in Yoga, Inhibition as the first mantra of self-control and self-consciousness. This means the renunciation of activity for a while so that the mind established in harmony may become facile through intelligent direction. The physiological control is also psychic control; the explanation which merely cares for behaviour will certainly face in the explanation of the mystic consciousness, a rock on which it will break and flounder. The reciprocal explanation even if it be satisfactory will not go far unless the explanation issues out of the problem of attitude. In morals, as in mysticism, the explanation must proceed from motive to expression, attitude to behaviour and never from behaviour to motive, for that is not what is characteristic of the mystic's life. One goal, the goal of union, is the absolute criterion. It is the one poise, the one destiny of his being. This is the differentia between the behaviourist and the true psychologist; one seeks for

the expression or behaviour, the other for the attitude, the all governing and focussing idea.

For "the identity of symptom does not mean identity of person. Deep oscillations of emotional tone, ecstasies and even hysterical attacks do not necessarily imply the intellectual and moral insufficiency characteristic of Medeline and her class. They may, on the contrary be allied with traits which make the genius.*

V

We shall now discuss the criticisms levelled against the methods of yoga: about its metaphysics we have nothing to do especially because the metaphysics of the Yoga theory are not perhaps acceptable to the Vedantic thinkers. Truly later interpreters of yoga have made it into a system instead of what was called a darsana: a way or method of knowing the real, of experiencing reality of being.

"To characterize Yoga as a system of philosophy or ethics would be misleading. Its more direct analogy is with our manual of religion, for its central purpose, like that of our own books of worship is to teach salvation. But its practical directions are imbedded in more or less fanciful psychology and unnecessary metaphysics." says Leuba who devotes an entire chapter to the consideration of the Yoga system and its relation to

Religious Mysticism. But he fails to observe that some of the tenets of the yoga have as hoary an association with its past, as the later Christian mystics have their own, however, flexible metaphysical theories on which was based their own experiences.

We have the admission of Patanjali even at the very start of his Sutras, that his Yoga sutras are a restatement (anusasana) of the Yoga of the ancients, of the Upanishads and the Vedas. Anusasana is what he speaks of as the attitude of his book. That there is an endeavour on his part to treat the Isvara as merely a governor and the Ideal of world life to whom all things are subordinate because he is free from their influences, may be a theory that is not justifiable from the vedantic or Upanishadic point of view; with this phase of his thought there follows the acceptance of the absolute caintany (mere consciousness or Intelligence) as the real nature of individual Purusha. Consciousness which cannot be annihilated is shrouded by Prakriti and release from the shroud of Prakritic forces is what makes the individual come into his own effulgent consciousness. He will never again be implicated in the shroud of Prakriti and will be free even as the Isvara, resting in his own consciousness. This is the Kevalatva proposed by Patanjali. But in the sense of Vedanta and in a meaningful sense, it means not only the release from the bondage of objects and objective leanings, it also means the utilizing of nature and her forces in a manner which will lead to Jivanmukti or Isvara type: not the Jivanmukti of mere getting rid of bondage or the

attitude of bondage and acting like a man who has renounced life, and its normal activities. In life the attitude of freedom actually realized in him dominates dynamically every incident and every phase of evolutionary ascent and governs them with the inner light which is the light of all. This is 'lordship over the Prakriti and its movements' in the light of the Isvara who is the antaryamin of all beings dwelling in the heart caves of all beings. This is the synthetic acceptance of Yoga which is the poise supreme, the real samanvaya of the external as well as the internal in the Supreme, the Brahman; this is the highest aim of Yoga.

The criticism of fanciful psychology and unnecessary metaphysics is a criticism that will not be justified from the standpoint of Indian thought or even modern thought, because the metaphysical theory is absolutely adequate for any religious consciousness and some basis of procedure which shall avoid great complications of mythical symbolism is what is provided by Patanjali. He avoids the extraordinary proposals of Vedanta of the evolution of elements and merely accepts them to have proceeded from one common substance, the Prakriti and then he avoids the implications of causal connection between the Isvara and the evolution of the world or even its appearance. He takes only those absolutely necessary factors which make for an uninterrupted course of Yogic practice, for the light that comes in freedom is unriddling, dissolving and vouchsafes direct apprehension of all Reality. Till then metaphysical theories about God and the

individual may stand. The minimum of metaphysics is what one finds in Patanjali and not unnecessary complications. As to fanciful psychology we have surely instances of the extraordinary lengths to which conjectural relations can be formulated. In fact it follows the lead of inner introvert experiencing more than observation of outer expressions and the physiological bases. This building up of psychology, though it is open to grave charges of misinterpretation from a physiological and behaviouristic angle, is indeed true to its mystical instinct and purpose. It is the mysticism of Unity of all life that is the mystic's greatest and profoundest metaphysical principle formed out of a greater vision and experience.

In Patanjali in fact there is no metaphysical bearing but only the instruction as to the profoundest depths of being and attainment. God is necessary and only as a spiritual guru is He to be appealed for help on the path of Yoga.

But the criticism of Mr. Leuba is not altogether wrong. But he ventures to state that "an ethical purpose and practice is, nevertheless not logically demanded by the goal of Yoga; for honesty, friendliness etc. are irrelevant to one who seeks utter detachment in isolation. Cultivating friendliness and rejoicing with those who rejoice are demands hardly in agreement with a desire for suppression of personality. This is one of the incongruities that betray the confusion of thought from which this system suffers".* This criticism far

from being right is positively wrong, because all mystics by virtue of their aspiration to alter the circumstances in which they are placed, pass through a moral preparation. The isolation which the Yogi of the Patanjali school demands is the isolation from the bondage of Prakriti,, for the promise always remains that he can become the splendid ever-free Isvara of the Guru free from the bondage of Karma; the acceptance of Kapila is not a fault in Patanjali, because both of them wanted to represent to humanity the acuteness of the stress of environment, habitual actions and emotional disturbances and unethical behaviour on individual personality which contradict the way of harmony and because of their intimate connections with bondage. All bondage is due to uncognized and unconscious and unthought out activity and to lift all actions to the level of consciousness means to inhibit consciously all actions connected with such actions having their play in an autonomous fashion. To break the autonomy of the several habits and nerves and nervous systems and endocrine systems is the true aim of intelligence (Jitendriya). This can be done only through nirodha, restrain or control of all modifications in mind, that is in thought, all movements of habit all autonomic functions of the several organisms. Truly it is the way of regaining control. Once the control has been transferred to the levels of spiritual being, there is samadhi, the trance-state in which all are absorbed into the fold of spirit and thence function spiritually. This is the highest morality, beyond even the limits of social

morality. If reflective action seeking harmony of being is unmoral and has no bearing on the moral practices of honesty and friendliness then one cannot understand the aim of mysticism, of even morality. That the initial aim of Yoga is utter detachment from prakritic influences is an absolute fact and is admitted; but that is the culmination of his entire existence or being is not necessarily involved in his attainment of perfect control or detachment from their leading strings. The isolation which is gained through the Yogic practice is the freedom to be within himself, 'ekanti', and that is not annihilation or becoming a prisoner in his own cave, nor is it the atomic existence which the individual seeks. Such is not the aim of Yoga, which is purely a mystical effort to join the true and the real and the perfect so as to be real, true and perfect. The meaning of cittavritti nirodha is not to be construed as the Path of Nirvana of Buddhist psychology, it is rather this self-establishment within oneself that one seeks. That there may be individuals who seek the release from the physical plane of existence does not involve the statement that those who exist in this world of matter are bound and those who are released from the bodily encasement are free and boundless.

That in trance the body assumes a state of absolute unconsciousness for days together sometimes is not due to the fact that trance constitutes the prime factor in freedom; it is rather the absolute domination of the self within which is able to deplete or withdraw consciousness from the physical body and its organs

and functions. This is the Turiya consciousness - the self itself as it ever is and sees itself to be. In the Upanishad there is a passage which goes to show in the form of a parable how the several organs of the body claimed supremacy and how prana getting out made all of them impotent. Then did they realize that prana was Brahman the real self. Prana is the physical manifestation of active self, the saman as Brihadaranyaka says. Morality being an essential harmonizing principle of life makes for the lucid functions of consciousness or the self, since it would not lead to internal conflicts or external conflicts with either truth or the society. The progress of the Yogi in actual existence is difficult and in the avoidance of all conflict which may make for disharmony with oneself and truth, in harmonizing the self and its movements with the best and the Good, one becomes less and less obsessed by the disharmonious elements of one's life. On the one hand, there is demand for a strict discipline over the external environment and, that is moral action and friendliness and others mentioned under Yama and Niyama, on the other hand, there is complete mastery of the mind which leads to the state of amanaska (Mindlessness) or unmani (above mind) when the mind (manas) does not function with fluctuating movement. Anyone who misunderstands the moral or ethical preparation of the Yogic path has not understood the broader motive and higher altitude of the Yogin's mind.

Mr. Leuba thinks that the entire scheme of Yoga is based on the creation of automatisms and hopes that

concentration and relaxation of effort play a capital role in the productions of various automatisms. Such a statement is truly a misunderstanding of the motive underlying the yogic practice. That those who undertake the Yogic practice out of superficial motives may make use of very many automatisms is possible. But neither concentration nor relaxation is out to create automatisms. The relaxation of all effort is undertaken for the sake of transforming the lower levels and making them feel the infusion of a richer consciousness, a noumenal light of supreme scintillative power. The postures of Yoga are integral part of the practice in order to make concentration or attention steady and unflickering and to this end all external strains must be avoided since strain will have its reaction on the system. The dialectical process of attentive consciousness has been very well understood by those ancient Yogis. They knew that every attention is inviting exhaustion to release itself from. Yoga aims at suspension of both this (attention or) concentration or expectancy - neurosis and exhaustion - neurosis, or relaxation.

They instruct not only steadiness of posture, but also moral training of neither enjoying too much nor attachment to anything too much good or bad as ordinarily conceived in the meaning of pleasurable. Their instruction thus consists of Vairagya, freedom from attachment and nirodha, control of mental activities which lead to attachment.

That the Yogi seeks mere automatisms is pure

conjecture on the part of Mr. Leuba. Indeed the very reverse is the case. He seeks consciousness rather than unconsciousness; he seeks not habitual reactions but intelligent and consciously willed or supra - consciously directed actions; he seeks not mere continuity of this quiescence of uniformity, dull, wooden, and binding but seeks full peace, harmony and the Bliss of dynamic attainment of reality. That Mr. Leuba should have styled the methods of Yoga as similar to the savage practices of stimulation only shows the terrible misinterpretation of the real Yoga. Even the Yoga sutras do not take the highest state to consist of intoxication. A study of caitanya and all Bhakti Yogins does reveal the psychic intoxication, which Mr. Leuba says corresponds to the Savages - cult. But the Raja Yogin is not one who is very much anxious to have intoxication that unbalances; rather he prefers the complete mastery of the self and its forces.

Truly it must be said that what Yoga aims is to "conquer oneself", Whilst the aim of Vedanta is to "know oneself". In synthesizing the two ideas of Yoga of the Upanishads is justifying its true character of integral harmony. This is perfect Yoga , not mere ecstatic conversions, nor mere prayer that makes for partial stimulations , partial alterations and partial fulfillments in union. It is not reduction of mental activity, but it is the transcendence of mental activity, a direct intuition of universal harmony that issues out from concentration and meditation. Trance is not intoxication. Nor is ethical practice mere humanization;

on the other hand both trance and ethic make for real and integral uniqueness, Which is at the same time unique universal. Consciousness of the universal is the consciousness of the individual and vice versa. Real morality passes beyond the universals of social ethics and becomes truth expression; truth in action. These criticisms are based on a misinterpretation of the yoga system; secondly the criticisms leveled against yoga morality is merely baseless. Connection between yoga and morals is intrinsic and absolutely determinative of the capacity for undertaking the path of yoga; without Morals there is no mystic achievement. On the whole the philosophies of Patanjali and the Samkhya are absolutely empiricistic mysticism and cannot be utilized to prove the metaphysical theories of Advaita or single soul. In all cases, the realistic pluralistic position has been taken up by Patanjali. Purusha Bahutvam Siddham . The world of matter of prakriti is also real. And there is an Isvara, the moral governor or guru of the universe, the ever-free and the ever -blissful being, lending a helping hand to each and every striving soul. All this is not metaphysics but mere ordinary acceptance. We may even say it is commonsense realism. It seeks to discover the real through svanubhava- self-experience. Towards this end, this amount of hypothesis is sufficient. The Varaha Upanishad speaks about the problem of the relation between the individual Jiva and the Supreme as a problem that can wait till fruition or fulfillment of perfection. And if we have the instruction into the mysteries of the universal and the individual

relationship, it is something that is given after the practice of yoga. It is only when the lower self, the self that is burdened by the stigmata of experiences and karma due to Prakritic bondage, conquers or releases itself from the grasp of these forces of Prakriti and its consequences, that the mind perceives its unique relation to the supreme luminously. Till then, even though the veil is lifted through an answer to prayer or any other pathway, the intimate relation of the universal self and the individual self cannot be fully discovered. It is therefore that in practice this conceptual fight between dualism or spirits or multiplicity of finites or existence of a single self are all misleading and mischievous if not merely misleading.

Now why is morality allowed to control the entire behaviour of the yogi from the very start? The moral preparation is the best cure against misuse of power, which naturally comes to an individual on the path of concentration and citta-vritti nirodha. Conquest over certain aspects of material existence within ourselves means an increased Power over those factors. It means the control over every organ in the body control leads to consciousness of power, over every organ of the body.

In a secondary significance it means control over every element in existence even through belonging to the objective realm. The constitution of the physical body is of the same substances as the outer world, whose natural product of evolution it is. This possession of power and exercise of them is what is called siddhi. As

to the possibility of there being a pure siddhi, yoga says and Samkhya substantiates it, in its statement that the siddhis are facts and they occur through the will of the yogi. There is no absolute non validity about the theory of siddhi which is the appreciation of a profounder law and the right use of the law of nature. It is that knowing of such laws and the ability to utilize them for its own purpose which constitutes a siddhi.

But siddis as such are what the yogi is instructed not to worry about or even asked for. Morality guides the use of the power which accrues to the individual as he develops and this power then becomes not the Neitszchian power that is intolerant and consumes, but the self -disciplined power that works for synthesis and harmony. In one word he is heading towards Godhood (Isvaratva). It is the cosmic consciousness, the coterminality of vision and consciousness with the divine and the ineffable, having its birth in a perfect morality and an aesthetic harmony overflowing with cosmic delight. For all universal acts are indeed moral acts. All harmony is aesthetic; all perfection of being is reality of existence and truth; thus through them the individual lifting himself to the vision of delight, becomes at one with the Divine inalienably and supremely. This is the highest consummation of his entire existence this joyous freedom even of the stars in the firmament of God. But one has to pass through the fireheat of life and even through the world of soul making gathering the experience and seek spiritual regeneration through the divine. It is this union of the

individual and the divine borne from out of an entire sorrow and strain and awaiting and expectation that makes the achievement all the richer and greater and profounder. It has then the lyric of love, the passion of the soul and the symphony of life gathered into its essence. This is Yoga, which is synthesis.

The usual criticism offered against the Yoga practices, even by the orthodox Indian Thinkers, is that it is a dangerous method of mystic practice and that it involves great danger to the physical system. The practice of breath control tones up the system undoubtedly, but the hathayogic practice of stimulation of the centres through uniting prana and apana, which constitutes in their opinion pranayama, is really courting disaster. The primary centre of the body is the Muladhara and along with the Svadhisthana forms the physical system and the piercing through these two centres causes undoubtedly terrible metabolic changes culminating sometimes even in death, or great perversions. But, even as the Varaha Upanishad says, the path has to be followed even to its fullness, even till death claims us for its own, for even through death shall we learn to live integrally. This fearfulness of the inert and the incapacitated is not preferred by some Yogins who feel that mere contemplation of the Essence of Existence, the Divine would make for release. The Bhakti and the Jnana Yogins seek philosophical contemplation and emotional expression, which latter sometimes tends to great emotional outburst. Pranayama occupies a regular but minor phase in the

life of the ordinary individual and one chooses a life of mere study and philosophic speculation or else intense bhakti through the way of prapatti. The aim of an integral life, the integral transformation of the entire psychonic and the physical system, has been abandoned completely in exchange for aery metaphysics and silent or passive dogmatism, or else to a kind of vehement emotionalism that is not grounded in integral purification. And when the practice has been undertaken, we have not an integral transformation but an effort at mere physical development of muscular control in Asanas, or else mere pranayama without significance or purpose. In both cases, it has led to mere formalism or ritualism. Formalism is the complementary phase of materialism, it too is binding and has no purposive outlook which sustains it. It is as much dead of life and movement as matter itself. The bondage of forms and formal elements once they have standardized or habituated themselves in us, acts as a cog in the wheel of spiritual evolution. Indian thought in its practices has come to the level of formalistic inertness, without courage of movement towards great vistas of active union with the highest, the Divine. The mystic outlook, which is essentially dynamic regulation, firm discipline and intense purposiveness towards enlightenment and enlargement of life in and out of us, is the very negation of formalistic practice and silent or passive dogmatism. Mysticism challenges life and thus evaluates its formalistic movement materialistic attitude and moulds the world in

significance. Thus tradition which loses its soul is resurrected into vital and dynamic existence in the mystic consciousness. For to the Yogi and the mystic nothing in this world is material or spiritual, but the significance each person is prepared to give to it and in this quality of attributing significance to even dead dogma consists his turn of mind and spiritual activistic outlook. The Upanishads breathe this daring spirit of absolute mastery over everything and inculcate that life of strenuous practice even till death. For the brave and the courageous is the world of God the great destiny of coitive union with the highest, the spirit that is resident in all, attaining which he is the master of the world. Siddhis as such are merely the intimations of the equality growing steadily within the individual, who knowing that all these are merely taking him to the Divine and not making for perfect union, prefers the perfect to his manifestations and loyally clings to the Goal of Union - Yoga and none other.

There is nothing to say against the possibilities of Siddhis and any one who walks the path of Yoga may expect to get at the siddhis. That the siddhis are improbable and mere arthavada is the opinion of some writers, but in philosophy as in dogmatism we have this scepticism in Indian thought. But the upanishadic position, is that they accept Siddhis as normal to the knower of the Divine and in this they are supported even by the ancient Upanishads which speak of samya, with the Divine, who is satyasankalpa and satya kama. The Vedanta sutras also speak of the individual as being

equal to the Divine in all respects except with regard to agency of the world-creation and sustenance and destruction. The siddhis are further supported by the Samkhya which claims that when buddhi is purified it manifests the powers of anima and others.*

VI

The turiya and its Relation to Evolution

In the first chapter an effort was made to show that the Turiya and the Turiyatita are not states of consciousness as much as the Self itself. The Turiya is the individual self, the Turiyatita is the cosmic self, the divine. The fusion of both is so integral and complete, there resting in each other so overflowing, that there can be distinction between the Turiya and the Turiyatita. They are aspects of how we view the individual. One is the body of the other. The vaster truer consciousness or being is the Divine the satyasya satyam, mahatomahiyana. The turiya is described by the Mandakyopanishad - speaks about the turiya as the highest state, beyond the three states of our pragmatic existence, which bind. The three states of our conscious life, are the deep sleep, the dream and the waking. The functions of these three states are in the deep sleep, sushupti- the mind is absolutely set in abeyance and the self is merely looking on, or there is mere awareness (prajna) in the second state of consciousness. There we

have dream-consciousness full of gorgeous splendour of images string - like phantoms on the state: but there is one order of desire of the Isvara, the maker; this is the stage of imagination. No implicit stage of consciousness reveals the extraordinary part imagination plays in the dream - life - it is full of revelations of combinations of sensual data which are reformed or unformed and synthesized by the logic of desire. In fact in the early period of one's life the wish-fulfillment has a predominant phase in dream-life: and later only we have the compensation playing an almost supreme role in dream-consciousness. Waking consciousness is the meeting ground of the actual field of imagination and fulfillment. Deterred fulfillment seeks its compensation in dream-life; success also seeks its wings in speculative dreams.

But it is also interesting to think of these states of consciousness as merely establishing that continuity of our life with our evolution. These three are merely phases of our biological experience. The deep sleep is the state of our primitive life already undergone which apparently seems to be so alien to our modern existence of our waking life. But an investigation into the study of the unconscious level reveals it to be no mystery as the psychoanalysts seek to make it. The only mystery is the mystery that it is the complete history of our consciousness and its experience written even in blood. It is the memory that has sunk into ineffectuality, but yet operating through the trait developed by the race, as also the individual, in the forms of instinctive traits

common to all individuals and special tendencies peculiar to the individual alone. It is therefore the background of our waking and imaginative life. The dream - consciousness analysed to its source of simplicity is the imaginative level which seeks fresh combinations in actuality, it is the creative factor of our life. The waking is the creative or imaginative phase of our being seeking manifestation conditioned by the deep unconscious. In dream-con-sciousness, the imagination may take the way of perversion of the unconscious or else a straight transfiguration of the unconscious or else it may argue for its continuation. In every case, the dream and the unconscious far from merely vanishing into each other seek that completion or satisfaction of their expression in the waking, the world of experience. The comparison thus means in other words, the unconscious level, is the level of the past, the biological background of our life; the dreaming is the future, the ideational and the imaginative and the waking-consciousness is the present - the meeting of both dream and the unconscious. But considered as a product of the strife between the unconscious universal background, the individuation of the individual must have been due only to his seeking to formulate his environment himself. The imaginative process or the process of associating a distinct activity instead of the routine makes for perfect individuation. Dream and ideation lead not a little to the culmination of creative activity. That intelligent occasion has got coherent conceptions whilst dream-life

does not possess them reveals only that the imagination seeks expression somehow and factors of unconscious make that goal nebulous, in intelligent thought it becomes clear and coherent; the dream is the substitute for creative life of imagination and in the measure that it acts as the stimulus to creative art and formative evolution consists its claim to be called the intimator of futurity. Dream in the intelligent and developed people moves between the unconscious level of biological self and the future of the ideational level and becomes a house of conflicts, compensations and subtle expressions. The provocation of the biological life, undergone in the lower strata of being grip the entire life and coming into conflict with ethical and social norms of a civilized society, seeks escape in symbolism or else in and through a naked expression of the biological instinct. The symbolic activity is the activity of adjustment, which the dream refuses to express, when such an expression is not conducive to development. In all cases the dream is just the period of adjustment and symbolism, a stage when consciousness relieved from the stress of life and its completely binding nature, releases itself to its freedom and sometimes runs riot also on the wake of great repression of content seeking expression in the waking life. Compensation, the play of imagination, symbolism and repressed contents seek their fulfillment in dream. That the theory that Isvara inflicts these several chariots and other sensations occur, could only mean that what a man deserves that he gets, what a man has by his

activities stimulated seek their manifestation in the dream state. That a man suffers for what he does outside in his waking life is merely the theory of compensation in life. But it also means the index to temperament.

Yoga tries to control this dream life as well as the waking life. The causes of dream are imaginative liveliness and associative potencies. In making these associations entirely moral and consciously so, we make the oscillatory movements between waking-consciousness and dream-life merely a continuity and not violent as in the case of immoral and high-tension actions. The bondage to the unconscious elements can be got over when we make the biological collectivity merely non-existent to us, that never shows the least attention to its commandments and potencies. In triumphing over the instinctive life or reorganizing our life in the light of conscious spirituality all the several stages of our life lose their meaning and one becomes free from the wheel of evolutionary reactions. One becomes himself and does not travel into the realms of unconscious or dream, but expresses himself from the turia in the waking. The continuity is made by one leap.

Jung's Unconscious and the Turia:

Jung calls his unconscious the collective history of Mankind. "The unconscious is continually active creating from its material combinations that serve the needs of the future. It creates subliminal prospective

combinations just as does the conscious, only they are markedly superior to the conscious combination both in refinement and extent. The unconscious therefore can also be an unequalled guide for man." But this would mean reducing the level intelligent fulfillment to the instinctive level, however, it may guarantee continuity of history between the individual and the collective society. Yet he thinks that the deep-rooted prejudices the instincts and tendencies of the race preserved in its bosom will be invaluable guides for man seeking intelligent function. For Jung "Individuation dispositions of mankind since an adequate consideration of the peculiarity of the individual is more conducive to a better social achievement, than when the peculiarity is neglected or repressed." Here Jung seems to be lapsing into the view that collective dispositions of mankind is exactly the aspiration of the entire Humanity to its completed height. The collective disposition of mankind is almost a product of social adjustment and its aspiration is however the aspiration for a better kind of world that what was available through the biological history. The aspiration of mankind of the most imaginative people of the world and the most creative spirits is to make man more divine and less animal like. The spiritual aspiration is not identical with the aspiration of biological history, which has sunk into the unconscious below the threshold of consciousness. But it is true that the true individuality seeks its expression through the intermediary biological history, inhibiting gradually the

trait of its course and tortuous experience and limitation. The spirit is born in matter and finds itself. This is the lila of the spirit.

CG.Jung: Two essays in Analytical Psychology pp.162.

Ibid. pp.184.

Yoga Psychology and Modern Psychological Theories

I

There are two physiological theories advanced by two writers of the present day who seek to explain the psychonic system in terms of modern thought: The theory advanced by Sir John Woodroffe and Pramathanath Mukhopadhyaya on the one hand and Dr. Vasant Rele on the other. Dr. Rele's theory is on the lines of neural explanation and is worthy of study as it gives excellent cues as to a future theory of Nadis and chakras.

1.The theory of Dr. Rele:

Dr. Rele holds in his work on *Mysterious Kundalini, that Kundalini is the right vagus nerve and the physiological nervous plexuses are the chakras and the several nerves can be identified with the Nadis described by the two books Satcakra Nirupana and the

Mahanirvanatantra. "All explanations about this (kundalini sakti) though learned, could as well apply to the autonomic nervous system" he says (P-34). The static or anabolic power is the para-sympathetic portion of it and the Dynamic or Katabolic power is the sympathetic portion of it. "The Vagus, pneumogastric or tenth cranial nerve, as we know, is developed from the hind brain and has a more extensive distribution than any of the other cranial nerves.

The notes on Endocrinology were brought up-to-date by Dr. V. S. R. Murthy, S. V. University College, Tirupati.

*Mysterious Kundalini: vasant Rele: Bombay

Halliburtons Hand-book of Physiology Ch.XVI P-171

"It arises with other cranial nerves (ninth and eleventh) from the grey matter in the floor of the fourth ventricle, where it is attached by eight or ten filaments to the Medulla Oblongata in the groove between the olive and restiform body. The nerve as it emerges from the jugular foramen at the base of the skull, presents a well-marked swelling, called the ganglion of the root of the Vagus (jugular ganglion). This ganglion sends a branch to the carotid plexus which is situated at the base of the skull and is known as the taluka chakra.*

After its emergence from the jugular foramen, it presents another swelling called the ganglion of the trunk of the Vagus (ganglion nodosum) from this the

Vagus nerve passes along the spinal column vertically down through the neck, chest and abdomen where it ends into a plexus and forms connections with the solar plexus. In its journey downwards and before it ends, it sends branches to the prevertebral plexuses of the sympathetic portion of the autonomic nervous system. In the neck, it sends a branch to the pharyngeal plexus, i.e., Visuddha Chakra; in the thorax it sends branches to the deep and the superficial cardiac plexus i.e., Anahata Chakra; in the abdomen it forms connections with the plexus of the coeliac axis i.e., Manipuraka chakra and then ends in a plexus known as the solar plexus i.e. Kundalini chakra which is the downward extension of the Manipuraka chakra. The Vagus also supplies branches to the renal, hepatic, splenic, and pancreatic plexuses."**

*Yoga Raja up. Mentions that the taluka chakra is just below the Ajna at the root of the palate as its name signifies.

**Mysterious Kundalini pp.46-47 and the plan and origin of the Vagus nerve P.248. See also the frontispiece of that work.

This then is the general outline of his theory of Kundalini. One single nerve vagus embraces all the plexuses and controls all the plexuses and therefore the organs to which they send nerve fibres.

More interesting than this is his appendix which gives

us his complete view with regard to the nerves and pranas.

The Prana is a centre and vayu is an impulse. The Samana Prana is identified with the subsidiary nerve centre in the thoracicolumbar region regulating the activities of the solar plexus; Udanaprana with the subsidiary nerve centre in the cervical region of the spinal cord. And the Udana vayu is identified with the afferent nerve impulse along the spinal cord. Vyana prana is identified with the reflex centre found at the bottom of the junction of prana and apana impulses as well as of udana and samana. Apanaprana is the subsidiary nerve centre in the lumbar region and apana vayu is the afferent nerve impulse along the autonomic nerves.

Prana according to him is a centre in spinal region: apana and Udana are afferent nerve impulses: samana vayu is efferent nerve impulse along the cerebro-spinal nerves. "Vyana is the reflex movement of the prana and apana, as well as udana and samana". Here we have a theory which even goes to the extent of tracing the entire nadis along the paths described by the tantra and hatha yoga. Not only this, Akasa is identified with the sub-arachnoid space which surrounds the brain and spinal cord. The mention of the Akas-chakra would certainly, on this interpretation, mean the plexus at the point.

Criticism of this theory:

1. The theory holds that the Vagus is the Kundalini. Kundalini is according to the tantra sastra placed within the spinal cord, the 'tube' of the embryologists. The Kundalini is contained by the Sushumna which is said to be in the spinal cord. The plexuses are strung like lotuses in the Sushumna. "It is said for instance" says Woodroffe, "that the Adhara Chakra is the sacrococcygeal plexus and that the Svadhisthana is the sacral plexus and so forth". *This work (Shatchakra Nirupana) not to mention others, makes it plain that the chakras are in the Sushumna. Verse I speaks of the lotuses inside the Meru (spinal column); and as the Sushumna supports these (that is the lotuses) she must be within the Meru".

2. The identification of the Vagus with the Kundalini is defective because the authors of the upanishads as also the tantra claim that they are so subtle as to be unseen by the eye and that only a yogi can see them.

3. Dr. Rele by identifying the Sushumna with the spinal cord and by identifying the Kundalini with the Vagus commits two mistakes. Firstly, the Sushumna is within the spinal cord and the Kundalini is in the Sushumna. Dr. Rele takes Vajranadi which is not mentioned by the Upanishads but which is mentioned in the Shatchakra Nirupana as being within the spinal cord as the Fibre of Reissner.

Shatchakra Nirupana refutes the theory of those who

place the Sushumna, Ida and Pingala, within the spinal cord (Meru)** The second verse of the work says that inside the Vajra which is within the Meru and the Sushumna there is the Chitrini on which lotuses are strung as gems and which like a spider's thread pierces all the lotuses within the spinal cord.

*Shatchakra Nirupana: p.161-162 introduction. 'Serpent Power"

Serpent Power: Sir John Woodroffe. Ganesh and Co. Madras.

**ibid: P 164-165

The author of the Shatchakra Nirupana further refutes the view of the Kalpa Sutra that the lotuses are within the Chitrini. These lotuses are within the Sushumna but Chitrini only pierces through them and does not contain them.

Thus the lotuses are within the Sushumna which is the Brahmanadi and the spinal cord and they exist as extremely vital and subtle centres of radiative force and as centres of grossened consciousness (more or less). Sir John quoting the verdict of a medical man not finding the chakras on dissection remarks that the chakras as such are extremely subtle and vital centres and are not available in a body after death: nor could they be seen in life unless one is a Yogi.

All activity is due to constant vivification of these centres which control however subtly yet powerfully, by Prana which is the active manifestation of Brahman. Only through the chakras can the entire organism be controlled and only through the control of breath can there be actual and dynamic vivification of the chakras.

Every cell of our organism throbs with its own individuality of activity and though to a certain extent the functions of a particular organism can be usurped by another, yet it would not be a substantial way of making that organism function integrally. Every cell of the body has a consciousness of its own which has sunk into the unconscious or autonomic level. In integrating the functions of the several segments of our organism into a unity and in making them function in a conscious and purposive manner, void of the biological accretions and habits to which it unduly surrendered itself at the beginning of the evolutionary career, the entire organism undergoes a metabolic change which not unduly and certainly profoundly alters its entire facility in action, intuition and enjoyment. The use of Prana according to the example described by Dr. Rele seems to be that the entire nervous system is made to focus itself on the primal centres therefrom the drainage of neural and psychonic power discharges itself and when it is commanded into the reginiste channels. The constant connection between the Vagus which controls the several plexuses as shown by the radio-photography of Dr. Rele and the spinal cord (the Sushumna in other words for it is myelinated by it) reveals the important

manner in which the entire vital energy is drained into the spinal channel stimulating the entire series of plexuses of the psychonic level. In embryological development it is not the Vagus but the tube that becomes the spinal cord and develops into the brain and its parts and later differentiates itself into the cranial nerves etc.* Thus the theory of Dr.Rele reveals on the one hand acute correlation between itself and the theories of the Upanishads and on the other the dissimilarity between itself and the tantric theory. These dissimilarities Sir John Woodroffe himself notes down in his introduction of Dr.Vasant Rele's book.

II

Sri Aurobindo Ghose who holds a very high place so far as Yogic culture goes, in his book Yogic sadhan (His letters published in the Advent August 1948, give a fuller account of the chakras and their place in the Subtle body) wrote, "I must warn you against stumbling into the error of those who try to harmonize Yogic science with the physical science of the Europeans and search for the Yogic nadis and chakras in the physical body. You will not find them there. There are certain centres in the physical nervous system with which the chakras correspond, otherwise Hatha Yoga would be impossible. But the Chakras are not these centres." "The Sukshma prana moves in the nervous system of the subtle body as prescribed in the Yogic books, the sthula

prana moves in the nervous system of the gross body. The two are closely connected and almost act upon each other." He says, being himself an advanced Yogi, that the identification of the physical and the psychical centres (centres in the Sukshma body) is fraught with "horrible confusion".

According to these two writers there is a cleavage of opinion but Sri Aurobindo is true to the Upanishads, whereas Rele's is a hypothesis. Between them it is the Upanishads that have to prevail, so far and so long as we are studying the psychological aspect of the Upanishads.

III

We shall next consider what the modern writers have to say regarding the psychonic theories of psychology independently.

The latest writers on the subject of Mind postulate a Psychon as different from a theory of Neuron and the proton. Two writers on the subject are Dr. Marston and Mr. Bousfield.

"Just as protons and electrons are aggregated into protoplasm, it is suggested that the psychons may be aggregated into psychoplasmic structures. The protons and electrons which constitute a protoplasmic structure

are widely spread apart and hence there is no difficulty in the way of conception of an interpenetrating psychoplasmic structure. The psychoplasm may be regarded as a constituent of every living cell including the germplasm and also as capable of constituting psychic structures comparable with the complex structures which are built out of protoplasm. The protoplasm and the psychoplasm are thus regarded as 'concomitants' the one carrying the physical basis of life, the other its psychical basis, both interacting electrons and psychons belong to the physical realm. Psychonic psychoplasm is regarded as being of mass so small as to be practically negligible. says Bousfield. He further says regarding the brain, "we may conceive of the psychic brain as distributed through the open atomic network of the material brain, though this is not essential. In any case the material brain and the psychic brain are both bathed in the ether which separates them and yet links them by etheric vibrations without the necessity of any direct paths such as nerves."

The suggestion of Mr. Bousfield is of value if only for its recognition of the limiting character of the neurological theories and physiological explanations and because it goes deeper and appears to suggest the theory which Aurobindo hints, namely, the existence of an overlapping psychonic brain functioning in all psychic processes, and effecting all changes in the physical through the vibration of ether that whilst separating them yet links them. We have the Sandilya Upanishad telling us that the prana extends twelve

digits above the head which seems to be echoed by the theory of Bousfield who says that ether envelops both the psychonic and the physical brains.

The theory of the Upanishads also deals with the problem of spandana (throbbing) of vayu as the media of movement of chitta and Manas. All associative virility issues out of the throbbing movement of Vayu or akasa. The linga-sarira itself is a product of Akasa and Vayu in one sense. Mind, meaning Manas in Bousfield's theory, is called the Mnema of all impressions and is memory.* It is a manufacturer of psycho-grams; that is, it carries the impressions and congeals them into a set, unbreakable but powerfully influencing the entire mental processes.

Dr. Mc Dougall in his 'Mind and Body' says "the fusion of effects of simultaneous sensory stimuli to a unitary resultant is not a physiological or physical fusion or composition; but a purely psychical fusion; the unitary result exists only in the psychic sphere." He adds, "The materialistic assumption," that the structure of the mind may be fully described in terms of cerebral structure is untenable." There exists in the brain no such psychical medium of composition and the processes of the several sensory nerves simultaneously excited do not affect any common material medium to produce in it a complex physical resultant." It is meaning that is the cause of neural activity and there exists 'no such' unitary neural process correlated with 'meaning'. All response in fact is really in relation to meaning or significance. Thus there

is needed this psychonic system, a system which has place for meaning and is able to correlate its activities with the physical neural system and influence all its motor expressions.

*Bousfield also affirms that there is no such thing as Unconscious mind, for all storage of impressions ideas etc. which are nascent are unconscious

Mind and Body Dr. W. Mc Dougall p-293.ibid p.289.

Dr. Marston in his Emotions of normal people seeks to establish a theory of psychonic impulse contradistinct from a neural impulse. "Motor or affective consciousness is psychonic energy released within the psychonic or connective tissues of the motor synapse of the central nervous system." Defining the 'psychon' he says "the totality of energy generated within the junctional tissue between any two neurones, whenever the junctional membrane is continuously energized, from the emissive pole of one adjacent tissue to the receptive pole of the next intrinsically constitutes consciousness ... The structural unit of psychology is the psychon; any wave of psycho-chemical excitation initiated within the psychon is consciousness."* The above definition, in spite of its chemical explanation of change within the neural and psychonic systems, is a clear statement of the need for understanding the principle and function of consciousness in terms of some theory or hypothesis countering the physiological and purely neural theories. But the theory of psychon

whilst useful is done away with in the statement that consciousness is the product of continuous energisation of the membrane of the junctional tissue; and to say that it is the energy so generated, is too neural an explanation.

Rightly does Dr. Mc. Dougall write "many of those who have written upon mental evolution and comparative psychology began their study by looking for indications of mental life in the lowest organisms, and failing to find any such indications of an indisputable kind, proceed to search the scale of life from below upwards ... It is a sounder procedure to attempt to trace mind downwards in the scale from man in whom by common agreement, we have the surest and clearest expressions of mind, endeavouring by analysis of animal behaviour in the height of analogy of human behaviour, to seize every indication of mental life, of purposive activity as far down the scale as impartial observation warrants." Dr. Mc. Dougall's observation is mainly intended to show that consciousness has a mechanism of its own which can best be understood by the study of human consciousness itself and in the measure the brain mechanisms are active in the animals they may be considered to be growing intelligent or conscious animals.

But there is an impulse in the entire organism which is in nature at the beginning but aims at integrating its nervous paths with all the other systems (through exercise) thus making for coordinated action which

shows the absolute vitality of purposive action in all evolution and integration. The same purposiveness which appears as the adjustment to the environment in the animals appears as consciousness and will in men and also as the integrative power which affects the entire associative tracts in the brain and links them together powerfully. It is that again which seeks to make the consciousness dominant in actual life. It is consciousness or more truly spirit that seeks motor expression and in its expressing it 'stoops to conquer!' its own earlier manifestations. The Sukshma (subtle) is an earlier stage in evolution than the sthula (gross) according to the upanishads. The sukshma has the psychonic system - which expresses the antah karana (internal organ) and its phases and whose centres are placed along with the chakras within it and connecting with the physical organs placed at those places respectively.

But accustomed as we are to the physical alone we have left behind the sukshma conceptions and think in terms of gross neural systems and therefore the whole of Yoga philosophy and practice seeks to influence the direction of the physical by making the sukshma more efficient and vital with regard to our life and experience. This means the recognition of the theory which postulates the transmission of energy from the neural to the psychonic and from the psychonic to the neural systems reciprocally, till finally they are completely integrated. This also means perfect sensibility and perfect knowledge and conscious

control. In a sense, the psychon and the neuron are next brothers being born from a more primary element say Akasa or ether.

Thus the latest theorists in psychology reveal the anxiety to re-embrace consciousness into psychology, which had first lost its soul and then its mind in recent years thanks to the Behaviourists. Lest finally consciousness the epiphenomenon, should also be crucified. Dr. Mc. Dougal and Dr. Marston have brought out a psychonic theory which may yet save consciousness to psychology.

Endocrine theory of chakras.

So far we have considered the neural and psychonic theories. We shall now discuss the endocrine theory of chakras. There is no theory called as such but the identification in some circles of the chakras with certain glands lends the view that they have a plausible theory of glandular correlation. The theory is stated in two sentences. It is said the pineal gland and the pituitary glands correspond with the Sahasrara. Des Cartes * and his followers held that the pineal gland was the seat of the soul. The interest lies not in the fact that the theory has the remotest chance of being accepted but as revealing how a little known organ has been pitched upon as the centre of the soul, or the Sahasrara, the pineal gland and the centre of the Divine.

The endocrine glands of the body are closely connected

with the metabolic processes of the body and their importance is very great. With the exception of the reproductive organs, the ductless glands are all characteristic of the vertebrate group alone and some authorities regard them as relatively recent acquisitions and their activities as something which came into existence after the development of the central and sympathetic nervous system. But it would seem that the appearance of the primitive nervous system and the reproductive organs are about the same time and the development of the nervous system into the autonomic system and the cranial series occurs before the appearance of the endocrine system.

The number of these glands is seven if we add the thymus and the pancreas, namely, the pineal, the pituitary, the thyroid, the thymus, the pancreas, the adrenal and the genital. This correspondence with the seven plexuses is no doubt a basis of this hypothesis. The location of the pineal in the cavity of the head, with the pituitary close to it point to the value of the theory of glands; added to this we have the version of a Upanishad which speaks of the genital organ as the Svadhisthana.

Dr. Sajous in his valuable work on 'Internal Secretions and the Principles of Medicine' says that there is complete coordination between the several glands. "the close linkage of the several glands to each other confirms the view that they form a single system in close touch with each other and the blood circulation

and the nerves of the central system. The pituitary is connected with the adrenals by direct nerve paths and it governs through the adrenals the general oxidation metabolism and nutrition".

The genitals according to Sajous is intimately connected with the adrenal system because the testicular preparations give the same reactions and tests in precisely the same way as does the adrenal principle.* Milk also contains the adrenal principle, the lactic glands being thus united with the adrenal principle. As to the physiological aspect of the connection with the spinal system," the pituitaro-adrenal path leaves the spinal cord through the upper four or five rami, to enter the sympathetic chain and then the great splanchnic which through the intermediary of the semilunar ganglia, supplies nerves to the adrenals."

Dhyanabindu up: verse 48: Medhrameva nigadyate: also Sajous Vol. I, P-87.

Sajous: Internal Secretions and Principles of Medicine Vol.I. of Alice E Bailey: The Soul and its Mechanism, where she identifies the Chakras with glands. She equates sahasrara with the pineal, Ajna with the pituitary, visuddha with the thyroid, Anahata with thymus and Muladhara with adrenal. The identifications of Anahata and Muladhara are open to objection as the one is too higher up and the other degenerates very

early after infancy.

*Sajous: p 87.

ibid P 97.

ibid pp 72, 79, 169, 171, and 173.

"There has been some speculation in the literature as to which is probably the more primitive integrating mechanism within animals-nervous or endocrine. Obviously both mechanisms, when broadly interpreted extend to all forms of living organisms, both unicellular and multicellular. (The phenomena of excitation and conduction and chemical intercellular transmission of information, the basic underlying activities in the physiology of the nervous system, are common to all cells ... Some organizing and differentiating forces obviously had to precede both of these coordinating mechanisms in both phylogeny and ontogeny. In development, gene induced differentiation must precede organizer activity".)

"There is no good reason to postulate, therefore that either the excitatory or the chemical coordination factor is phylogenetically the more primitive. Both types of coordinating mechanisms probably evolved simultaneously and entirely parallelly and in response to the functional needs of the larger size multicellular character and division of labour within organisms, highly specialized, cooperating nervous endocrine

systems became differentiated".

"There appears to have been an evolution of certain essential endocrine sources from tissue possessing a simple nervous or conductive function and located within the central nervous system through an intermediate stage where the cells exhibited their secretary function while still retaining the special conductile ability of nerve cells, to a condition in which the cells have become specialized for endocrine activity alone and form glandular tissues or organs apart from the nervous system."

"And in these instances where the secreting cell bodies are still retained within nervous organs special intracellular conductile means are utilized to convey the secreted product beyond the bounds of the highly specialized 'brain-blood barrier' and into proximity to their own vascular beds. Secondarily, other endocrine organs appear to have developed morphologically, but never physiologically, independent of either direct or indirect regulation by the nervous system".

From Comparative Animal Physiology by Prosser, C. L. and Brown, F. A. W. B. Saunders Co. Philadelphia, 1962.

" ... the integration of endocrine activities is a major function of the central nervous system. The situation of the pituitary just beneath the cephalic brain stem, to which it is attached by the infundibular stalk and portal

circulatory channels, enables the basal fore - brain and hypothalamus to bring their influences to bear upon the secretion of trophic hormones by this endocrine 'brain'.

From the Waking Brain by Magoun, H.W. Charles C. Thomas, 1958.

"Characteristic hormones of protein nature are extractable from the three lobes of hypophysis. The trophic hormones of the adenohypophysis are of great importance since they regulate the functional states of other glands belonging to the endocrine system. The hypophysis is known to exercise direct or indirect control over a wide variety of physiologic processes.

Anatomically and physiologically the hypophysis is closely associated with the hypothalamic portion of the brain.

A relationship which is still poorly understood seems to exist between the neurosecretory cells of the brain and the adenohypophysis. There can be no doubt that nervous stimuli are important in regulating the release of secretions from this important gland.

A reciprocal interaction has been demonstrated between the hormones of the anterior hypophysis and the adrenal cortex. A similar reciprocity exists between the gonads and the anterior hypophysis. The thyroid gland and the anterior hypophysis are reciprocally interrelated."

C. Donnell Turnor.

W.B. Saunders Co. Philadelphia. 1955.

Thus we have the adrenals as important as the Manipuraka chakra and as important as the Solar plexus of the nervous system, sending out its currents to every portion of the body and governing all metabolic action through its connection with the pituitary gland as against the rest. The pineal gland almost passes unnoticed by the modern theorists as the function of that gland is unknown.

In the Human adult, the organ is about a third of an inch long and weighs some two grains (0.18grm.) In children, it is relatively somewhat larger. Beginning at about the seventh year it begins to regress, from which time on it tends to become loaded with sand-like concretions of calcium salts ... brain sand. Contrary to earlier belief, it persists in fairly definite anatomical integrity throughout life."

"The evidences available suggest that the gland produces a hormone which helps to regulate the rate of bodily development and the onset of puberty'.

From Endocrinology - The glands and their functions by Hoskins, R. G. W. W. Norton and Co. inc. New York. 1950.

The pituitary gland in the body may correspond with

the Ajna chakra the next highest chakra before the Sahasrara. In spite of this fact the pituitary may be studied in another connection viz. The Khechari Vidya, which involves stimulation of the akasa centre in the brain. Pro. Dakin describes the pituitary as the outgrowth from the mouth "This small organ (weighing only about 1/2 grm. in an adult man) appended to the under surface of the brain has for some time past been recognized as consisting of two parts and since one of these lies in front of the other, it was customary to speak of the glandular anterior lobe and a nervous posterior lobe. Not only is the structure of these parts visibly different, but their origin is also very different, for whilst this posterior part arises from the brain at an early stage; the anterior part is actually an upgrowth from the buccal or mouth cavity of the embryo. In fishes and amphibia it originates as a solid ingrowth from the surface in front of the mouth.) At an early stage it becomes separated from the mouth and applies to the downward process of the brain. The development of the cranium still further separates it from the mouth and thus we have the anomaly of the structure, which although it appears to be part of the brain is non-nervous in character (actually glandular) and whose origin in any individual is distinct from that of the brain." Thus the pituitary gland though situated in the brain is an outgrowth from the buccal cavity. This makes it possible for us to think of Khechari Vidya in this connection.

The Khechari Vidya involves the reversal of the tongue

into the cavity of the brain in order (perhaps) to reach this outgrowth which has isolated itself leaving its embryonic parent. To achieve this end, the freanum lingui is cut by the Yogi and the tongue is made to go back into the cavity by gently pushing it into the buccal cavity and then still interior into the base of the brain, where there are the brahmarandhra (the third ventricle) and the Kapala vastra (either the thalamus or the optic chiasma which are full of nerve fibres.) Posterior to which is the pituitary gland at the base of the brain connecting itself with the third ventricle by a hollow stalk, the infundibulum.

Whether this is a possibility or not, the Yoga kundalini. Up and the Sandilya Upanishads have mentioned this method. The chief point in criticism of this method lies in the fact that the pituitary to be stimulated or in fact any nerve centre to be stimulated by the reversal of the tongue so as to stir them into activity needs the piercing through the bones of the cranium, which alone separates the gustatory from the neural portions.

Why should we speak of the possibility of the pituitary rather than the pineal? The real nature of pineal activity is yet conjectural; but in the case of the pituitary we have a mass of evidence. Dr. Sajous writes regarding the pituitary:

"The pituitary body is the general governing centre of the spinal system which includes the grey substance of the base of the brain pons, bulb and spinal cord and the

nerves derived from any of these structures, cranial or spinal, though subsidiary centres, are also present in the bulb and spinal cord."

The pituitary body is the governing centre of all vegetative functions i.e. somatic brain.

The brain (as differentiated from the somatic brain) is the organ of mental processes and not the governing organ of motor functions though capable through the voluntary impulse it transmits to the spinal system of having its mandates carried out.

"There is no obvious nervous interconnections between the neural and the glandular part of the hypophysis".

Paul Glees. Experimental Neurology, Clarendon Press. Oxford. 1961. But the circulatory relationship should prove valuable evidence of their intermaintenance.

Neither the anterior nor posterior pituitary body is a secreting gland. The anterior pituitary body is a lymphoid organ which through the mediary of the centre located in the posterior pituitary body and a nerve path in the spinal system, the upper dorsal sympathetic ganglia and the splanchnic nerves governs the functional activity of the adrenals. The anterior pituitary body governs through the posterior pituitary body all the oxidation - processes of the body. The centre in the posterior pituitary body through which the anterior pituitary body governs the adrenals also

controls the functional activity of the thyroid gland and thus constitutes the adreno-thyroid centre.

The pituitary body, the adrenals and the thyroid gland (including the para - thyroid) are functionally united, forming the adrenal system. The posterior pituitary body is the seat of the highly specialized centres, which governs all the vegetative or somatic functions of the body and each organ individually.

The posterior pituitary body receives all the sensory impressions belonging to the field of common sensibility: pain, touch, muscular sense etc., initiated in any one organ including the mucous membrane, the skin and brain.

"Owing to this fact, the posterior pituitary body is the sensorium commune upon which all emotions, shocks, psychical or traumatic concussions etc., react. The resulting impairment of its functions being the cause of the morbid phenomena observed under such conditions.* The stimulation of such a centre full of possibilities of a very intense life also means death if it is done without proper expert guidance. Thus the Khechari-vidya is a dangerous procedure to undertake, as the Yoga Kundalini Upanishad itself says, for it may slay the individual." It is only after long and continuous practice under the direction of a guru that this should be undertaken: years must elapse before the final stimulation or manthana takes place and the psychic centre stirred into divine action. The khechari-vidya

may mean the stimulation of the pituitary gland and not any other thing.

The value of all these theories lies in the fact that they breathe the air of research into the intimate connections between the neural and the glandular and the psychonic systems. The way of their development studied embryologically shows the way in which they progressed coordinating themselves and reveals the importance of their transformations. In their differentiations lies the problem of separation of functions and in their integrated activity consciously carried out we may either shatter the entire organism or develop unnatural phases of our life or else we may be able to perfect the organisms under the skilful operation of the cortical and the supracortical centres, induced by the psychonic system and the self. Small lesions of the brain do not affect the rate of learning for the entire mass of tissue in the brain functions as a regulated organism and therefore the importance of the cortical and the supracortical areas of the brain whilst they reveal the entire mechanism of the intelligent life, are by themselves controlled by the ideational sphere which cannot be explained on the principle of neural - memory in association.

The Problem of Emotion.

It is a well known fact in psychology that all emotion is explainable according to the theory of James and Lange who hold that physical attitudes reveal emotion and are

emotion. The theory of Dr. Cannon shows that adrenal stimulation is the most important physiological occurrence in emotion and that leads to visceral function stopping and cardiac muscles being enervated. Mr. Lashley holds "that the problem of emotion is still in confusion that one can draw no conclusion with confidence, but the accumulation of evidence upon the variability of expressive reactions and the repeated failures to find any consistent correlations between bodily changes and either exciting situations or reported subjective states lends little support to the visceral theory." He continues "the weight of evidence, I believe favours the view that in emotion, in all persistence of attitudes, in all serial activity, there are continuously maintained central processes which, if they become intense, may irradiate to motor centres, speech and the like. The pattern of radiation varies from subject to subject according to chance variations in the excitability of the motor or vegetative nervous systems and the peripheral activities are not an essential condition for the maintenance of the central processes" The maintenance of the central processes throughout any emotion is what is advanced by Mr. K. S. Lashley as a more commendable theory than the visceral. The adrenal function automatically increases the heart beat, stops all vegetative functions and in all emotion it is these adrenals that cause the highest amount of tension in the physical condition; reflection on the contrary is what gradually inhibits all the activities of the adrenals. The control exercised over the adrenal secretions

therefore is certainly from the higher centres. But in a consideration of rage and anger etc. we find that the stimulation offered by the natural opponents leads to enormous activity. Whilst emotion as such cannot be explained on the lines of visceral theory yet the adrenal action in emotion plays a very important part. Neither the nervous system, nor yet the adrenal system but the processes of biological inheritance and suggestions from them play a huge part in the emotive life of each individual. These are called the vasanas of the citta; it is these that stimulate the cortical centres which allow them to express themselves and when these intrigues between the vasanas and the adrenal are cut off, all vitality floods the other systems and supplying the needed power for metabolic changes. The entire energy instead of being released into the circulatory system is drained into other paths of control and makes for the control of emotion.

Thus neither the glandular system which is in full command of the emotional and the metabolic activity of the human body, nor the neural system which is in full command of the sensory and motor activity as also the autonomic system and in fact radiates through the muscles and glands and controls the entire system, offers the complete solution of the problem of psychical life and consciousness and its expressions. It seems that all these systems which have differentiated themselves from the unicellular organism have developed an integral dynamic rhythm. They are whilst distinct

mutually dependent and co-operative in function.

IV

Psychonic system and the Upanishad:

It is clear that the Upanishads offer something like the psychonic system called by them, the Sukshma Sarira. The Nadis belong to this body, so also the chakras, and it is Sukshma prana which flows through it, that connects radiantly the entire functions of the organism. It is also the Sukshma prana that connects the Sukshma body with the sthula or gross body at the corresponding places, for emotions with the adrenal and other glands and the solar plexus, for sensory functions with the brain and the sensory centres of the brain, for intellectual and highly specialized reactions with the cortex and the supra cortex, and the nervous system for the preservation of the body with the entire organism. The nervous system may be considered to be the fire-tattva, the glands, water tattva and the Sukshma Sarira is formed not out of the gross vayu which pervades the body and helps the organism to live but is formed out of akasa and the sukshma akasa which is indivisible and subtle. The link between the sthula and the sukshma sarira is supplied by vayu in its subtler phase. That the vayu extends twelve digits above the head is a suggestion in point. And it is suggested that through control the entire prana must be made to be neither

more nor less than the physical body. That leads to complete control of the physical body and is perfect integration of all levels, perfect harmonization of the functions of the body. This is one definition of yoga according to the Sandilya Upanishad.

Regarding chakras we have no mention of them by the Sariraka and the Garbha Upanishads which are considered to be physiological Upanishads.

The Garbha mentions the Sushumna and the coursing of vayu in the body as prana, the original prana, which descends through the Sushumna to be the heart at the time of birth. Thus at the time of the Garbha and the Sariraka either the literature with regard to the chakras have not been known generally or else their descriptions being merely the physical gross descriptions, they have not referred to the nadis and chakras which belong to the Sukshma Sarira and could be seen only by Yogis.

Whilst it is true that the neurons are instruments of mind and act as the medium of the bodily expression, it is not absolutely true that the phenomena of mind "can only be correctly interpreted in terms of neurons and neuronic arcs" for the neurons are just one stage of evolution of the organism and not the most important, but along with other systems they form an inseparable function in the body.

The neural explanations as much as the glandular explanations do not make their explanations perfectly

acceptable in psychic life in both cases with all good intentions after a search for behaviour and experimentation of reactions, the motive of an action or an expression is not found - that subtle mark which makes all the difference does not make any difference in behaviour of the internal organs nor external organs. This crux of the situation in Yoga and mystic life leads many to postulate that the mystic and the Yogic life are merely due to neurosis and this is not an explanation at all. It states the disease or it calls what some think as the highest consciousness - the perception of true spirit and the finding of true Individuality by a name and seeks to explain them away. In order to avoid such a summary treatment of mystic, William James writes in his Varieties of Religious Experience that "the states of consciousness of the mystics have a right and are true to those who have that experience."

The Psychological phases of motive or sankalpa which plays such a part in psychic life have indeed as yet no active counterpart physiologically and but for the barest instincts we cannot show the physiological situation or organ of reception of ideas and location of ideas, in a portion of the brain and the cortex. We have as yet no shade of distinctions drawn between one idea and another corresponding superficially to it. We have for all of them the same kind of response and the same stimulation, provided the circumstances are similar though this similarity is as superficial as mere identity of dress.

This is atleast the criticism of K. S. Lashley against the theory of visceral connection to emotion. The basic neural mechanism differentiates neither between one set of incidents and another set of incidents having but a slight similarity: nor does it vary even its intentive response with the shades of intensity of the circumstances. It is inhibition by the intellectual functions that inhibits also the intensities of reaction of neural mechanism.

True yoga consists in ordering all things and functions within the body. With the consciousness or purposiveness of a harmony which can only arise out of deep contemplation of all forms and their relations and their bearing to the making of a cosmos. It means the attempt at a synthesis of all levels of individual life, all planes of consciousness, all organs of activity and all activities of senses and sensory functions and emotive influence. Direct perception does not jump into being of a sudden. All the fatalities of life and conception and embryonic growth have to take full course, the normal period of human gestation must take place and then will be brought out the finest flower of intellect and feeling, the direct perception which is the most intrinsic function of the self. It is something having birth in congenial surroundings of harmony of the intellect and feeling, emotion and sensibility, memory and aspiration. The physical body no less than mental life has to be organized and controlled by the will which seeks harmonization between the psychic and the physical hemispheres of being. Regulation means

harmonization through self control and self ordering which is performed by the Prana when guided consciously. Thus the effort of will towards a creation of new and facile type of being fully aware of the moral and real bear; of his life and conscious and deliberate and facile in each of his actions, involves rigorous moral training and in this consists the moral aim and ethical observance of the Yoga system. It is no less moral than it is aesthetic; and skill in action has been not stressed by the Gita as the consummation of Yoga. This conscious exercise for the betterment of the individual as also the whole world (the latter being the larger aim nascent only at the beginning of his course of yoga) involves inhibitions of emotional habits and mental associations and memory inflictions on sensory content and means acceleration and strengthening of those synaptic connections which are inhibitory of the autonomous actions and emotional outbursts. It means the draining off of the entire vital reserve energies towards development of volitional and metabolic centres in the brain. In a yogic sense it means the utilization of these energies for the purposes of connecting the physical annamaya chakra with the highest centre of our being, or the Muladhara with the other higher centres and finally with the Sahasrara. This and nothing else will make knowledge direct perception aparokshanubhuti.

In trance, it is said, that the body is apparently depleted of all consciousness and yet the mind is vigilant and is aware of the fullness and expansiveness of its sway; its

power and perfection are said to become luminous and function as self-consciousness. As intrinsic Turiya consciousness, the self rests in its pristine purity, perfection and splendour and functions with complete mastery on its return to the levels of ordinary life of waking consciousness over all the organs,. Then not manas nor chitta, not ahamkara, not buddhi, not even prana, but only the self suffusing the entire organism literally bathing it in its own radiance and harmony. This is the samadhi which is inducive of direct apperception. On the path of samadhi, unconsciousness does not mean anything other than non-activity of the senses and the memory and it does not mean the loss of self-consciousness as self.

Thus, we have in Yoga, Inhibition as the first mantra of self-control and self-consciousness. This means the renunciation of activity for a while so that the mind established in harmony may become facile through intelligent direction. The physiological control is also psychic control; the explanation which merely cares for behaviour will certainly face in the explanation of the mystic consciousness, a rock on which it will break and flounder. The reciprocal explanation even if it be satisfactory will not go far unless the explanation issues out of the problem of attitude. In morals, as in mysticism, the explanation must proceed from motive to expression, attitude to behaviour and never from behaviour to motive, for that is not what is characteristic of the mystic's life. One goal, the goal of union, is the absolute criterion. It is the one poise, the

one destiny of his being. This is the differentia between the behaviourist and the true psychologist; one seeks for the expression or behaviour, the other for the attitude, the all governing and focussing idea.

For "the identity of symptom does not mean identity of person. Deep oscillations of emotional tone, ecstasies and even hysterical attacks do not necessarily imply the intellectual and moral insufficiency characteristic of Medeline and her class. They may, on the contrary be allied with traits which make the genius.*

V

We shall now discuss the criticisms levelled against the methods of yoga: about its metaphysics we have nothing to do especially because the metaphysics of the Yoga theory are not perhaps acceptable to the Vedantic thinkers. Truly later interpreters of yoga have made it into a system instead of what was called a darsana: a way or method of knowing the real, of experiencing reality of being.

"To characterize Yoga as a system of philosophy or ethics would be misleading. Its more direct analogy is with our manual of religion, for its central purpose, like that of our own books of worship is to teach salvation. But its practical directions are imbedded in more or less fanciful psychology and unnecessary metaphysics."

says Leuba who devotes an entire chapter to the consideration of the Yoga system and its relation to Religious Mysticism. But he fails to observe that some of the tenets of the yoga have as hoary an association with its past, as the later Christian mystics have their own, however, flexible metaphysical theories on which was based their own experiences.

We have the admission of Patanjali even at the very start of his Sutras, that his Yoga sutras are a restatement (anusasana) of the Yoga of the ancients, of the Upanishads and the Vedas. Anusasana is what he speaks of as the attitude of his book. That there is an endeavour on his part to treat the Isvara as merely a governor and the Ideal of world life to whom all things are subordinate because he is free from their influences, may be a theory that is not justifiable from the vedantic or Upanishadic point of view; with this phase of his thought there follows the acceptance of the absolute caintany (mere consciousness or Intelligence) as the real nature of individual Purusha. Consciousness which cannot be annihilated is shrouded by Prakriti and release from the shroud of Prakritic forces is what makes the individual come into his own effulgent consciousness. He will never again be implicated in the shroud of Prakriti and will be free even as the Isvara, resting in his own consciousness. This is the Kevalatva proposed by Patanjali. But in the sense of Vedanta and in a meaningful sense, it means not only the release from the bondage of objects and objective leanings, it also means the utilizing of nature and her forces in a

manner which will lead to Jivanmukti or Isvara type: not the Jivanmukti of mere getting rid of bondage or the attitude of bondage and acting like a man who has renounced life, and its normal activities. In life the attitude of freedom actually realized in him dominates dynamically every incident and every phase of evolutionary ascent and governs them with the inner light which is the light of all. This is 'lordship over the Prakriti and its movements' in the light of the Isvara who is the antaryamin of all beings dwelling in the heart caves of all beings. This is the synthetic acceptance of Yoga which is the poise supreme, the real samanvaya of the external as well as the internal in the Supreme, the Brahman; this is the highest aim of Yoga.

The criticism of fanciful psychology and unnecessary metaphysics is a criticism that will not be justified from the standpoint of Indian thought or even modern thought, because the metaphysical theory is absolutely adequate for any religious consciousness and some basis of procedure which shall avoid great complications of mythical symbolism is what is provided by Patanjali. He avoids the extraordinary proposals of Vedanta of the evolution of elements and merely accepts them to have proceeded from one common substance, the Prakriti and then he avoids the implications of causal connection between the Isvara and the evolution of the world or even its appearance. He takes only those absolutely necessary factors which make for an uninterrupted course of Yogic practice, for the light that comes in freedom is unriddling, dissolving

and vouchsafes direct apprehension of all Reality. Till then metaphysical theories about God and the individual may stand. The minimum of metaphysics is what one finds in Patanjali and not unnecessary complications. As to fanciful psychology we have surely instances of the extraordinary lengths to which conjectural relations can be formulated. In fact it follows the lead of inner introvert experiencing more than observation of outer expressions and the physiological bases. This building up of psychology, though it is open to grave charges of misinterpretation from a physiological and behaviouristic angle, is indeed true to its mystical instinct and purpose. It is the mysticism of Unity of all life that is the mystic's greatest and profoundest metaphysical principle formed out of a greater vision and experience.

In Patanjali in fact there is no metaphysical bearing but only the instruction as to the profoundest depths of being and attainment. God is necessary and only as a spiritual guru is He to be appealed for help on the path of Yoga.

But the criticism of Mr. Leuba is not altogether wrong. But he ventures to state that "an ethical purpose and practice is, nevertheless not logically demanded by the goal of Yoga; for honesty, friendliness etc. are irrelevant to one who seeks utter detachment in isolation. Cultivating friendliness and rejoicing with those who rejoice are demands hardly in agreement with a desire for suppression of personality. This is one

of the incongruities that betray the confusion of thought from which this system suffers".* This criticism far from being right is positively wrong, because all mystics by virtue of their aspiration to alter the circumstances in which they are placed, pass through a moral preparation. The isolation which the Yogi of the Patanjali school demands is the isolation from the bondage of Prakriti,, for the promise always remains that he can become the splendid ever-free Isvara of the Guru free from the bondage of Karma; the acceptance of Kapila is not a fault in Patanjali, because both of them wanted to represent to humanity the acuteness of the stress of environment, habitual actions and emotional disturbances and unethical behaviour on individual personality which contradict the way of harmony and because of their intimate connections with bondage. All bondage is due to uncognized and unconscious and unthought out activity and to lift all actions to the level of consciousness means to inhibit consciously all actions connected with such actions having their play in an autonomous fashion. To break the autonomy of the several habits and nerves and nervous systems and endocrine systems is the true aim of intelligence (Jitendriya). This can be done only through nirodha, restrain or control of all modifications in mind, that is in thought, all movements of habit all autonomic functions of the several organisms. Truly it is the way of regaining control. Once the control has been transferred to the levels of spiritual being, there is samadhi, the trance-state in which all are absorbed into

the fold of spirit and thence function spiritually. This is the highest morality, beyond even the limits of social morality. If reflective action seeking harmony of being is unmoral and has no bearing on the moral practices of honesty and friendliness then one cannot understand the aim of mysticism, of even morality. That the initial aim of Yoga is utter detachment from prakritic influences is an absolute fact and is admitted; but that is the culmination of his entire existence or being is not necessarily involved in his attainment of perfect control or detachment from their leading strings. The isolation which is gained through the Yogic practice is the freedom to be within himself, 'ekanti', and that is not annihilation or becoming a prisoner in his own cave, nor is it the atomic existence which the individual seeks. Such is not the aim of Yoga, which is purely a mystical effort to join the true and the real and the perfect so as to be real, true and perfect. The meaning of cittavritti nirodha is not to be construed as the Path of Nirvana of Buddhist psychology, it is rather this self-establishment within oneself that one seeks. That there may be individuals who seek the release from the physical plane of existence does not involve the statement that those who exist in this world of matter are bound and those who are released from the bodily encasement are free and boundless.

That in trance the body assumes a state of absolute unconsciousness for days together sometimes is not due to the fact that trance constitutes the prime factor in freedom; it is rather the absolute domination of the self

within which is able to deplete or withdraw consciousness from the physical body and its organs and functions. This is the Turiya consciousness - the self itself as it ever is and sees itself to be. In the Upanishad there is a passage which goes to show in the form of a parable how the several organs of the body claimed supremacy and how prana getting out made all of them impotent. Then did they realize that prana was Brahman the real self. Prana is the physical manifestation of active self, the saman as Brihadaranyaka says. Morality being an essential harmonizing principle of life makes for the lucid functions of consciousness or the self, since it would not lead to internal conflicts or external conflicts with either truth or the society. The progress of the Yogi in actual existence is difficult and in the avoidance of all conflict which may make for disharmony with oneself and truth, in harmonizing the self and its movements with the best and the Good, one becomes less and less obsessed by the disharmonious elements of one's life. On the one hand, there is demand for a strict discipline over the external environment and, that is moral action and friendliness and others mentioned under Yama and Niyama, on the other hand, there is complete mastery of the mind which leads to the state of amanaska (Mindlessness) or unmani (above mind) when the mind (manas) does not function with fluctuating movement. Anyone who misunderstands the moral or ethical preparation of the Yogic path has not understood the broader motive and higher altitude of the Yogin's mind.

Mr. Leuba thinks that the entire scheme of Yoga is based on the creation of automatisms and hopes that concentration and relaxation of effort play a capital role in the productions of various automatisms. Such a statement is truly a misunderstanding of the motive underlying the yogic practice. That those who undertake the Yogic practice out of superficial motives may make use of very many automatisms is possible. But neither concentration nor relaxation is out to create automatisms. The relaxation of all effort is undertaken for the sake of transforming the lower levels and making them feel the infusion of a richer consciousness, a noumenal light of supreme scintillative power. The postures of Yoga are integral part of the practice in order to make concentration or attention steady and unflickering and to this end all external strains must be avoided since strain will have its reaction on the system. The dialectical process of attentive consciousness has been very well understood by those ancient Yogis. They knew that every attention is inviting exhaustion to release itself from. Yoga aims at suspension of both this (attention or) concentration or expectancy - neurosis and exhaustion - neurosis, or relaxation.

They instruct not only steadiness of posture, but also moral training of neither enjoying too much nor attachment to anything too much good or bad as ordinarily conceived in the meaning of pleasurable. Their instruction thus consists of Vairagya, freedom from attachment and nirodha, control of mental

activities which lead to attachment.

That the Yogi seeks mere automatisms is pure conjecture on the part of Mr. Leuba. Indeed the very reverse is the case. He seeks consciousness rather than unconsciousness; he seeks not habitual reactions but intelligent and consciously willed or supra - consciously directed actions; he seeks not mere continuity of this quiescence of uniformity, dull, wooden, and binding but seeks full peace, harmony and the Bliss of dynamic attainment of reality. That Mr. Leuba should have styled the methods of Yoga as similar to the savage practices of stimulation only shows the terrible misinterpretation of the real Yoga. Even the Yoga sutras do not take the highest state to consist of intoxication. A study of caitanya and all Bhakti Yogins does reveal the psychic intoxication, which Mr. Leuba says corresponds to the Savages - cult. But the Raja Yogin is not one who is very much anxious to have intoxication that unbalances; rather he prefers the complete mastery of the self and its forces.

Truly it must be said that what Yoga aims is to "conquer oneself", Whilst the aim of Vedanta is to "know oneself". In synthesizing the two ideas of Yoga of the Upanishads is justifying its true character of integral harmony. This is perfect Yoga , not mere ecstatic conversions, nor mere prayer that makes for partial stimulations , partial alterations and partial fulfillments in union. It is not reduction of mental activity, but it is the transcendence of mental activity, a

direct intuition of universal harmony that issues out from concentration and meditation. Trance is not intoxication. Nor is ethical practice mere humanization; on the other hand both trance and ethic make for real and integral uniqueness, Which is at the same time unique universal. Consciousness of the universal is the consciousness of the individual and vice versa. Real morality passes beyond the universals of social ethics and becomes truth expression; truth in action. These criticisms are based on a misinterpretation of the yoga system; secondly the criticisms leveled against yoga morality is merely baseless. Connection between yoga and morals is intrinsic and absolutely determinative of the capacity for undertaking the path of yoga; without Morals there is no mystic achievement. On the whole the philosophies of Patanjali and the Samkhya are absolutely empiricistic mysticism and cannot be utilized to prove the metaphysical theories of Advaita or single soul. In all cases, the realistic pluralistic position has been taken up by Patanjali. Purusha Bahutvam Siddham . The world of matter of prakriti is also real. And there is an Isvara, the moral governor or guru of the universe, the ever-free and the ever -blissful being, lending a helping hand to each and every striving soul. All this is not metaphysics but mere ordinary acceptance. We may even say it is commonsense realism. It seeks to discover the real through svanubhava- self-experience. Towards this end, this amount of hypothesis is sufficient. The Varaha Upanishad speaks about the problem of the relation between the individual Jiva and the Supreme as

a problem that can wait till fruition or fulfillment of perfection. And if we have the instruction into the mysteries of the universal and the individual relationship, it is something that is given after the practice of yoga. It is only when the lower self, the self that is burdened by the stigmata of experiences and karma due to Prakritic bondage, conquers or releases itself from the grasp of these forces of Prakriti and its consequences, that the mind perceives its unique relation to the supreme luminously. Till then, even though the veil is lifted through an answer to prayer or any other pathway, the intimate relation of the universal self and the individual self cannot be fully discovered. It is therefore that in practice this conceptual fight between dualism or spirits or multiplicity of finites or existence of a single self are all misleading and mischievous if not merely misleading.

Now why is morality allowed to control the entire behaviour of the yogi from the very start? The moral preparation is the best cure against misuse of power, which naturally comes to an individual on the path of concentration and citta-vritti nirodha. Conquest over certain aspects of material existence within ourselves means an increased Power over those factors. It means the control over every organ in the body control leads to consciousness of power, over every organ of the body.

In a secondary significance it means control over every element in existence even through belonging to the objective realm. The constitution of the physical body is

of the same substances as the outer world, whose natural product of evolution it is. This possession of power and exercise of them is what is called siddhi. As to the possibility of there being a pure siddhi, yoga says and Samkhya substantiates it, in its statement that the siddhis are facts and they occur through the will of the yogi. There is no absolute non validity about the theory of siddhi which is the appreciation of a profounder law and the right use of the law of nature. It is that knowing of such laws and the ability to utilize them for its own purpose which constitutes a siddhi.

But siddis as such are what the yogi is instructed not to worry about or even asked for. Morality guides the use of the power which accrues to the individual as he develops and this power then becomes not the Neitszchian power that is intolerant and consumes, but the self -disciplined power that works for synthesis and harmony. In one word he is heading towards Godhood (Isvaratva). It is the cosmic consciousness, the coterminality of vision and consciousness with the divine and the ineffable, having its birth in a perfect morality and an aesthetic harmony overflowing with cosmic delight. For all universal acts are indeed moral acts. All harmony is aesthetic; all perfection of being is reality of existence and truth; thus through them the individual lifting himself to the vision of delight, becomes at one with the Divine inalienably and supremely. This is the highest consummation of his entire existence this joyous freedom even of the stars in the firmament of God. But one has to pass through the

fireheat of life and even through the world of soul making gathering the experience and seek spiritual regeneration through the divine. It is this union of the individual and the divine borne from out of an entire sorrow and strain and awaiting and expectation that makes the achievement all the richer and greater and profounder. It has then the lyric of love, the passion of the soul and the symphony of life gathered into its essence. This is Yoga, which is synthesis.

The usual criticism offered against the Yoga practices, even by the orthodox Indian Thinkers, is that it is a dangerous method of mystic practice and that it involves great danger to the physical system. The practice of breath control tones up the system undoubtedly, but the hathayogic practice of stimulation of the centres through uniting prana and apana, which constitutes in their opinion pranayama, is really courting disaster. The primary centre of the body is the Muladhara and along with the Svadhisthana forms the physical system and the piercing through these two centres causes undoubtedly terrible metabolic changes culminating sometimes even in death, or great perversions. But, even as the Varaha Upanishad says, the path has to be followed even to its fullness, even till death claims us for its own, for even through death shall we learn to live integrally. This fearfulness of the inert and the incapacitated is not preferred by some Yogins who feel that mere contemplation of the Essence of Existence, the Divine would make for release. The Bhakti and the Jnana Yogins seek philosophical

contemplation and emotional expression, which latter sometimes tends to great emotional outburst. Pranayama occupies a regular but minor phase in the life of the ordinary individual and one chooses a life of mere study and philosophic speculation or else intense bhakti through the way of prapatti. The aim of an integral life, the integral transformation of the entire psychonic and the physical system, has been abandoned completely in exchange for aery metaphysics and silent or passive dogmatism, or else to a kind of vehement emotionalism that is not grounded in integral purification. And when the practice has been undertaken, we have not an integral transformation but an effort at mere physical development of muscular control in Asanas, or else mere pranayama without significance or purpose. In both cases, it has led to mere formalism or ritualism. Formalism is the complementary phase of materialism, it too is binding and has no purposive outlook which sustains it. It is as much dead of life and movement as matter itself. The bondage of forms and formal elements once they have standardized or habituated themselves in us, acts as a cog in the wheel of spiritual evolution. Indian thought in its practices has come to the level of formalistic inertness, without courage of movement towards great vistas of active union with the highest, the Divine. The mystic outlook, which is essentially dynamic regulation, firm discipline and intense purposiveness towards enlightenment and enlargement of life in and out of us, is the very negation of formalistic practice

and silent or passive dogmatism. Mysticism challenges life and thus evaluates its formalistic movement materialistic attitude and moulds the world in significance. Thus tradition which loses its soul is resurrected into vital and dynamic existence in the mystic consciousness. For to the Yogi and the mystic nothing in this world is material or spiritual, but the significance each person is prepared to give to it and in this quality of attributing significance to even dead dogma consists his turn of mind and spiritual activistic outlook. The Upanishads breathe this daring spirit of absolute mastery over everything and inculcate that life of strenuous practice even till death. For the brave and the courageous is the world of God the great destiny of coitive union with the highest, the spirit that is resident in all, attaining which he is the master of the world. Siddhis as such are merely the intimations of the equality growing steadily within the individual, who knowing that all these are merely taking him to the Divine and not making for perfect union, prefers the perfect to his manifestations and loyally clings to the Goal of Union - Yoga and none other.

There is nothing to say against the possibilities of Siddhis and any one who walks the path of Yoga may expect to get at the siddhis. That the siddhis are improbable and mere arthavada is the opinion of some writers, but in philosophy as in dogmatism we have this scepticism in Indian thought. But the upanishadic position, is that they accept Siddhis as normal to the knower of the Divine and in this they are supported

even by the ancient Upanishads which speak of samya, with the Divine, who is satyasankalpa and satya kama. The Vedanta sutras also speak of the individual as being equal to the Divine in all respects except with regard to agency of the world-creation and sustenance and destruction. The siddhis are further supported by the Samkhya which claims that when buddhi is purified it manifests the powers of anima and others.*

VI

The turiya and its Relation to Evolution

In the first chapter an effort was made to show that the Turiya and the Turiyatita are not states of consciousness as much as the Self itself. The Turiya is the individual self, the Turiyatita is the cosmic self, the divine. The fusion of both is so integral and complete, there resting in each other so overflowing, that there can be distinction between the Turiya and the Turiyatita. They are aspects of how we view the individual. One is the body of the other. The vaster truer consciousness or being is the Divine the satyasya satyam, mahatomahiyana. The turiya is described by the Mandakyopanishad - speaks about the turiya as the highest state, beyond the three states of our pragmatic existence, which bind. The three states of our conscious life, are the deep sleep, the dream and the waking. The functions of these three states are in the deep sleep,

sushupti- the mind is absolutely set in abeyance and the self is merely looking on, or there is mere awareness (prajna) in the second state of consciousness. There we have dream-consciousness full of gorgeous splendour of images string - like phantoms on the state: but there is one order of desire of the Isvara, the maker; this is the stage of imagination. No implicit stage of consciousness reveals the extraordinary part imagination plays in the dream - life - it is full of revelations of combinations of sensual data which are reformed or unformed and synthesized by the logic of desire. In fact in the early period of one's life the wish-fulfillment has a predominant phase in dream-life: and later only we have the compensation playing an almost supreme role in dream-consciousness. Waking consciousness is the meeting ground of the actual field of imagination and fulfillment. Deterred fulfillment seeks its compensation in dream-life; success also seeks its wings in speculative dreams.

But it is also interesting to think of these states of consciousness as merely establishing that continuity of our life with our evolution. These three are merely phases of our biological experience. The deep sleep is the state of our primitive life already undergone which apparently seems to be so alien to our modern existence of our waking life. But an investigation into the study of the unconscious level reveals it to be no mystery as the psychoanalysts seek to make it. The only mystery is the mystery that it is the complete history of our consciousness and its experience written even in blood.

It is the memory that has sunk into ineffectuality, but yet operating through the trait developed by the race, as also the individual, in the forms of instinctive traits common to all individuals and special tendencies peculiar to the individual alone. It is therefore the background of our waking and imaginative life. The dream - consciousness analysed to its source of simplicity is the imaginative level which seeks fresh combinations in actuality, it is the creative factor of our life. The waking is the creative or imaginative phase of our being seeking manifestation conditioned by the deep unconscious. In dream-con-sciousness, the imagination may take the way of perversion of the unconscious or else a straight transfiguration of the unconscious or else it may argue for its continuation. In every case, the dream and the unconscious far from merely vanishing into each other seek that completion or satisfaction of their expression in the waking, the world of experience. The comparison thus means in other words, the unconscious level, is the level of the past, the biological background of our life; the dreaming is the future, the ideational and the imaginative and the waking-consciousness is the present - the meeting of both dream and the unconscious. But considered as a product of the strife between the unconscious universal background, the individuation of the individual must have been due only to his seeking to formulate his environment himself. The imaginative process or the process of associating a distinct activity instead of the routine makes for perfect

individuation. Dream and ideation lead not a little to the culmination of creative activity. That intelligent occasion has got coherent conceptions whilst dream-life does not possess them reveals only that the imagination seeks expression somehow and factors of unconscious make that goal nebulous, in intelligent thought it becomes clear and coherent; the dream is the substitute for creative life of imagination and in the measure that it acts as the stimulus to creative art and formative evolution consists its claim to be called the intimator of futurity. Dream in the intelligent and developed people moves between the unconscious level of biological self and the future of the ideational level and becomes a house of conflicts, compensations and subtle expressions. The provocation of the biological life, undergone in the lower strata of being grip the entire life and coming into conflict with ethical and social norms of a civilized society, seeks escape in symbolism or else in and through a naked expression of the biological instinct. The symbolic activity is the activity of adjustment, which the dream refuses to express, when such an expression is not conducive to development. In all cases the dream is just the period of adjustment and symbolism, a stage when consciousness relieved from the stress of life and its completely binding nature, releases itself to its freedom and sometimes runs riot also on the wake of great repression of content seeking expression in the waking life. Compensation, the play of imagination, symbolism and repressed contents seek their fulfillment in dream. That

the theory that Isvara inflicts these several chariots and other sensations occur, could only mean that what a man deserves that he gets, what a man has by his activities stimulated seek their manifestation in the dream state. That a man suffers for what he does outside in his waking life is merely the theory of compensation in life. But it also means the index to temperament.

Yoga tries to control this dream life as well as the waking life. The causes of dream are imaginative liveliness and associative potencies. In making these associations entirely moral and consciously so, we make the oscillatory movements between waking-consciousness and dream-life merely a continuity and not violent as in the case of immoral and high-tension actions. The bondage to the unconscious elements can be got over when we make the biological collectivity merely non-existent to us, that never shows the least attention to its commandments and potencies. In triumphing over the instinctive life or reorganizing our life in the light of conscious spirituality all the several stages of our life lose their meaning and one becomes free from the wheel of evolutionary reactions. One becomes himself and does not travel into the realms of unconscious or dream, but expresses himself from the turia in the waking. The continuity is made by one leap.

Jung's Unconscious and the Turia:

Jung calls his unconscious the collective history of

Mankind. "The unconscious is continually active creating from its material combinations that serve the needs of the future. It creates subliminal prospective combinations just as does the conscious, only they are markedly superior to the conscious combination both in refinement and extent. The unconscious therefore can also be an unequalled guide for man." But this would mean reducing the level intelligent fulfillment to the instinctive level, however, it may guarantee continuity of history between the individual and the collective society. Yet he thinks that the deep-rooted prejudices the instincts and tendencies of the race preserved in its bosom will be invaluable guides for man seeking intelligent function. For Jung "Individuation dispositions of mankind since an adequate consideration of the peculiarity of the individual is more conducive to a better social achievement, than when the peculiarity is neglected or repressed." Here Jung seems to be lapsing into the view that collective dispositions of mankind is exactly the aspiration of the entire Humanity to its completed height. The collective disposition of mankind is almost a product of social adjustment and its aspiration is however the aspiration for a better kind of world that what was available through the biological history. The aspiration of mankind of the most imaginative people of the world and the most creative spirits is to make man more divine and less animal like. The spiritual aspiration is not identical with the aspiration of biological history, which has sunk into the unconscious below the

threshold of consciousness. But it is true that the true individuality seeks its expression through the intermediary biological history, inhibiting gradually the trait of its course and tortuous experience and limitation. The spirit is born in matter and finds itself. This is the lila of the spirit.

CG.Jung: Two essays in Analytical Psychology pp.162.

Ibid. pp.184.