CHAPTER 5

CONCEPT OF MIND IN SIX SYSTEMS OF

INDIAN PHILOSOPHY AND MODERN PSYCHOLOGY

SERIAL NO.	TITLE	PAGE NO.
5.0	INTRODUCTION	50 – 51
5.1	NATURE OF THE MIND	51
5.2	HOW TO CONTROL THE MIND	52 – 54
5.3	SLEEP AND DREAMS	55
5.3.1	DREAMS AND MENTAL LIFE: PSYCHOANALYSIS	55 – 56
5.3.2	SLEEP	56
5.3.3	LEVELS OF SLEEP	57
5.4	THE ELECTRO ENCEPHALO GRAPH (EEG)	57 – 58
5.5	EYE MOVEMENTS DURING SLEEP	58
5.6	REM and EEG	59
5.7	THE SECOND POSSIBILITY: REPORTS OF EARLIER DREAMS	59
5.7.1	DREAM DURATION	59 – 60
5.8	DREAMS OF THE BLIND	61
5.9	SOME ADDITIONAL HYPOTHESES	61
5.9.1	BODY MOVEMENTS	61 - 62
5.10	HISTORY OF PSYCHOLOGY	62
5.10.1	MIND -BODY PROBLEM ACCORDING TO WESTERN PHILOSOPHERS	62
5.10.2	MIND-BODY PROBLEMS	62 – 63
5.10.3	STREAM OF CONSCIOUSNESS	63 – 65
5.11	SUMMARY	65 - 66

CONCEPT OF MIND IN SIX SYSTEMS OF INDIAN PHILOSOPHY AND MODERN PSYCHOLOGY

5.0 INTRODUCTION

According to Indian psychology mind is a "wheeling power" of the consciousness, the individual self and is associated with the self as a necessary precondition of world experiences. According to the Bhagavadgītā restless mind should be controlled and in Indian mythology, mind is compared to a monkey.

Swami Vivekananda compares this very well. "The first lesson is to sit for sometime and let the mind run on. The mind is bubbling up all the time. It is like that monkey jumping about, let the monkey jump as much as he can: you simply wait and watch, knowledge is power, says the proverb, and that is true, until you know what the mind is doing, you cannot control it. Give it the rein: many hideous thoughts may come in to it: you will be astonished that it was possible for you to think such thoughts. But you will find that each day the mind's vagaries are becoming fewer and less violent, that each day it is becoming calmer. In the first few months you will find that the mind will have a great many thoughts, later you will find that they have somewhat decreased and in a few more months you will find that they are fewer and fewer, until at least the mind will be perfectly under control but we must patiently practice every day" (Vivekananda Swami, 1).

According to *Nyāya vaiśeṣika* philosophy, mind is an instrument of experiences such as happiness, unhappiness and misery. It is an instrument as well as object of experiences. Self is the experiencer. The self binds the body and the mind, get associated with mind, senses, body through which it experiences. The physical body is a primary cause for bondage and sufferings while the mind with its causal body does not gets disassociated with death of a person and accompanies the soul till it attains liberation. The individual self is the basis of consciousness and all experiences and its own consciousness. This self becomes consciousness after it gets united with mind (Prabhavānanda Swāmi, pg. 203).

According to $Samkhy\bar{a}$ philosophy, mind is an organ and an instrument which receives impressions through the five sense organs and presents them to intelligence (buddhi). It also carries the orders of the spirit through the motor organs. Mind becomes a necessary organ, for

both knowledge and action as it is made up of intelligence (*buddhi*) egoism (*ahaṁkāra*) and mind (*manas*). All the three combined together is called internal instrument (*aṅtaḥkaraṇa*). The soul experiences the physical world through five organs of perception and five organs of action (page-218).

According to the great sage Patañjali, *Yoga* is the control of the thought waves in the mind (*Yogaha citta vṛtti nirodhaha* |). *Citta* is mind stuff or mind apparatus according to Swami Vivekananda, *vṛttis* are thought impulses, *nirodhah* is removal. *Yoga* is the cessation of the modifications of the mind.

The mind (citta) is made up of three components, manas, buddhi, and ahamkāra, manas is the recording faculty which receives impressions gathered by the senses from the outside world. Buddhi is the determinate faculty which classifies these impressions and reacts to them

The mind seems to be intelligent and conscious. Yoga philosophy teaches that it is not. It has only a borrowed intelligence. The $\bar{a}tman$ is intelligence itself, is pure consciousness. The mind merely reflects that consciousness and so appears to be conscious.

5.1 NATURE OF THE MIND

When the lake of the mind becomes clear and still, man knows himself as he really is, always was and always will be. He knows that he is the *ātman*. His personality is mistaken belief in himself as a separate, unique individual, disappears. He is only an outer covering, like a coat or a mask, which he can assume or lay aside as he chooses. Such a man is known as free, illumined soul and the true nature of its object. The classic example given in *Yoga* literature is that of a piece of rope which is mistaken for a snake. In this case wrong knowledge will cause us to fear the rope and avoid it or try to kill it.

5.2 HOW TO CONTROL THE MIND

By practicing of *yoga* in the sense, *Āsana*s, *prāṇayama*, *kriya*, we can control the mind, they are controlled by means of practice and non-attachments (PYS I 12).

Practice is the repeated effort to follow the disciplines which give permanent control of the thought waves of the mind (PYS I 13). Practice becomes firmly grounded when it has been cultivated for a long time, uninterruptedly, with earnest devotion. But those fluctuations are never removed; thought impulses are there even for the enlightened one. If there are no impulses, it is just a great impersonal *samādhi* with no awareness of anything. Yes, Patañjali's definition has been misunderstood as describing the state of enlightenment as a state where there are no thoughts at all and you are blank. But what Patañjali is describing is the method, not the goal. Later Patañjali describes the things that spoil one's meditation. In other words, what the fluctuations are.

The distractions are: Ignorance, I-ness, desire, aversion and attachment. (PYS, II 3) It is obvious that the first distraction is ignorance, but interesting that the second distraction is I-ness (*asmitā*, the sense of being someone, ego). Patañjali later defines I-ness like this: I-ness is the merging, as it were, of the power of knowing with the instruments thereof. (PYS, II. 6).

The instruments of knowing are not only the senses, but also the mind and the cognitive faculties. "Merging" of the two is a metaphor, Patañjali writes "as it were". What happens is that the identification mechanism becomes active and parts of the psyche/mind-complex identify with the parts that are perceiving or cognizing. This gives rise to the sense of being an individual, in other words, I-ness "I Am" and "attention" are a pair; actually there are three that arise: I Am (or Me), attention and other. You can't have one without the other two. But all three are saturated with pure, unmanifest awareness which is the Self. Once in the Self, "I Am ", "attention" and "other" remain, but the awareness that permeates them has become Self-aware.

Later "I am, attention and other" become seen as *spanda*, which is the technical term for vibrating, manifesting Śakti. Then one abides in the Self (PYS, I, 3)

So is attention in itself a quality of the mind, just like objects of attention are? The answer is attention is a function of the mind and therefore part of the mind just like objects of attention are. That is why attention in itself is not enough. Just as one-pointed

meditation in itself is not enough, nor is "I am" enough. What is essential is that a pure awareness permeates all three and that it can become Self-aware and watch itself. But what I find more beautiful is that all three can become experienced as Śakti, as a vibration of the Self. This vibration is technically called *spanda*.

So is awareness watching awareness, is $\acute{S}akti$ reflecting on itself? Not quite. Well, ultimately, yes it is, but you should understand that in the progress of deeper and deeper realization, there is at first no sense of $\acute{S}akti$ in awareness watching awareness, there is just pure being. Only much later does one realize pure being is $\acute{S}akti$ and that everything is $\acute{S}akti$ otherwise one merges with the fluctuations (PYS, I 4).

The meaning is that when you are no longer in pure awareness, simultaneously your attention is occupied with fluctuations and you become identified with this and "I am" sets in. The fluctuations are of course "other", but as soon as you have "attention" and "other", "I am" pops up and you identify either with the fluctuations of the mind or with the attention beholding the fluctuations.

You meditate and your mind is full of thoughts, gradually your involvement with the thoughts subsides and suddenly you are in pure awareness. Once you are in pure awareness, it does not matter if there are thoughts in the mind or not, because you are entirely out of them. Some *samādhis* have thoughts, some don't, but in both you are not involved with either of the three: "I am", "attention" or "other".

If you stay in that state of *samādhi*, one of two things may happen: 1) Fluctuations of the mind go away. 2) Fluctuations of the mind go berserk. In either case it is your job to remain uninvolved with the fluctuations. You should stay in pure awareness and remain with self-awareness or pure awareness. If you can remain there, everything is fine, if you can not, however, then Patañjali's fourth *sūtra* becomes true and you get so caught up in the fluctuations that you lose the sense of pure self-aware awareness.

Once awareness is no longer aware of itself, attention sets in, in relation to fluctuations of the mind (other), and you get either caught up in the fluctuations as an observing ego (I am), or you get identified with the fluctuations and actually believe, you in that moment are some thought or feeling (also I am). Patañjali later writes about misery. He first explains that to the

wise man life is misery (II, 15), then he states the following: That misery, which has not yet come, can and should be warded off (II, 16). What is interesting is that the cause of misery and the means to ward off misery are the same as the cause of ignorance and the means to ward off ignorance. The cause of that which is to be warded off is the identification of the seer and the seen (II, 17). Remember that aphorism II, 6 which said: "I-ness is the merging, as it were, of the power of knowing with the instruments thereof", so we now have that ignorance is misery and that it can be warded off by ceasing to identify with impulses and actions as well as with fluctuations in the mind. What happens if you can dissolve this false identification?

This all leads to a deeper understanding of Patañjali's initial definition of *yoga* as "removal of the modifications of the mind". We have now learned that *Yoga* is to ward off identifications between the pure awareness of the Self and the objects of this awareness. We have also learned that *yoga* is to purify the mind so it becomes *sāttvic* and then purify the *sāttvic* mind by permeating it with the Self. We can thus understand that the removal of the fluctuations of the mind is not accomplished by will and subtle force. It is ultimately accomplished by removing identifications and by dissolving the mind into the Self, but in order to accomplish this dissolution, the mind must first be *sāttvic*.

What, then, is a *sāttvic* mind? It is a mind longing for wisdom, and is happy, lucid and healthy. But also it is a mind without fluctuations; thus we come full circle back to Patañjali's initial definition of *yoga* as removal of the fluctuations of the mind. We therefore arrive at: *Yoga* is merging in the Self, removal of identifications and removal of fluctuations of the mind. According to *Mīmāṃsa* philosophy, the aim of the mind is to attain happiness, which is not mixed with sorrow, the philosophy recognizes the independent existance of body, senses, mind, intelligence, will, and self effort has natural attributes. If these attributes or utilized by people by observing the injection of the *Vedas*, then he would enjoy life in the heaven (Prabhāvānanda Swami, pg. 267).

5.3 SLEEP AND DREAMS

5.3.1 DREAMS AND MENTAL LIFE: PSYCHOANALYSIS

In ancient times dreams were commonly regarded as visitations by spirits and ghosts. Dreams have been thought to be the vehicle through which gods and demons speak to men, and they frequently been thought to foretell the future. Thousands of books purporting to interpret dream symbols have been produced. Artemidorus wrote such book, namely Oneirocritics, in the second century CE.

Dreams remained mysterious phenomena until the first major breakthrough in the early twentieth century, when Sigmund Freud published one of his most famous volumes 'The Interpretation of Dreams'. Freud saw dreams as natural products of psychological forces and mechanisms. To him, a dream was produced by conflict between the conscious, controlling forces of rational, civilized thought and the unconscious, primitive forces of man's animal heritage. The former strive to be perpetually denied. During sleep, primitive impulses rise toward awareness and threaten to overwhelm the conscious mind.

In response, the conscious mind resorts to subterfuge. It allows the impulses to enter, but clothes them in symbolic garb so that they will not be too fearful. The purpose of psychoanalysis has been to discover the techniques and devices by which this disguise takes place. Knowledge of this would make it possible to strip away the comparatively meaningless superficialities of dream reports and get at their true meanings.

Later theorises stress, different functions for the dream process. C.S. Hall maintains that dreams are essentially expressive in nature. Through dreams, the person describes what is on his mind and work out fantasy solutions to his problems. Hall feels that dreams use symbols mainly because symbolic images are often more efficient than images of the real thing. For example, the moon may be used to symbolize a variety of conceptions about women. Its monthly phases resemble the menstrual cycle, while its filling from new to full represents the filling of the women during pregnancy. Since the moon is often regarded as inferior to the sun, it may represent the dreamer's belief that women are inferior to men. The moon changes and is therefore fickle, like the dream conceptions of women. The weakness of moonlight represents women's frailty. All these conceptions of women may be condensed into a single symbolic object.

People often forget their dreams. Some claim that they never dream, but it is most likely that nondreamers are just good forgetters, since many of them do report dreams after they have practiced remembering them for a few days. But hardly anyone remembers his entire dream; even frequent dreamer report dreams whose contents they cannot recall. Consequently, the study of dreams has been hampered by the inability of the investigator to obtain all the data he needs. Freud solved the problem in part by studying his own dreams, He knew that his own reports would be subject to some incompleteness and distortion, but felt he could rely on them more than he could on the reports of others.

5.3.2 SLEEP

Physiologically, sleep is controlled primarily by an organization of nerve cells called the reticular activating system (RAS). The critical segment of this system is the reticular formation located in the lower central part of the brain where the nerves of the spinal cord enter. It lies anterior to their part of the hindbrain called the cerebellum and below the organ known as the thalamus. The thalamus relays sensory impulses from the spinal cord to specific receptive centers in the outer layer of the brain, the cerebral cortex. On their way to the thalamus, however, these impulses also influence the reticular formation.

Fibres extend from the reticular formation to the cortex, but, unlike fibres from the thalamus, they do not affect specific cortical centers. Rather, they spread to wide areas of the cortex. Direct, experimental stimulation of the reticular formation of a sleeping or drowsy organism does not produce a specific sensory response but a generalized awakening or arousal.

The fibres that convey impulses through the reticular formation to the cortex constitute the ascending reticular formation to the cortex. There are also fibres that carry impulses from the cerebral cortex back to the reticular formation. These fibres complete the closed neural loop that makes up the whole RAS. Because it controls the general activity level of the cerebral cortex, the reticular activating system determines the general wakefulness or sleepiness of the organism.

When RAS activates the cortex, the organism is alert and responsive to sensory stimuli. When it does not activate the cortex and support incoming sensory impulses, the organism is asleep.

5.3.3 LEVELS OF SLEEP

There are borderline stages between sleeping and waking which are not easy to categorize. Anyone who has struggled to keep himself form falling asleep during a particularly dull lecture, or fought against overwhelming drowsiness while driving on the open highway, will know this. Most people have periods of day dreaming or dozing in which they are neither quite awake nor quite asleep. Even at night, one will sleep either lightly or soundly.

5.4 THE ELECTRO ENCEPHALO GRAPH (EEG)

Physiological research indicates that it is possible to measure various stages of sleep by recording electrical discharges of the brain. Small metal disks sensitive to variations of minute electrical potentials in the body, are attached to the scalp. These variations enormously amplified are fed to a pen-writing device that records them on paper, resulting in an electroencephalogram, a picture of the changes in electrical activity of the brain. Electroencephalographic record may be taken simultaneously from a number of pairs of electrodes placed at different locations on the head.

The electrodes feed into a bank of amplifiers and writing units that record differences in electrical potential between airs of electrodes. When a stimulus produces a change in the pattern of discharges recorded from one pair of electrodes, but not in the patterns recorded form the rest, the examiner infers that only the area to which that pair is sensitive has been affected. He thus studies the functions of the various regions of the brain.

The EEG patterns of subjects who sleep all night in the laboratory reveal four levels of sleep. Each level is distinguishable from the others and from the normal pattern of resting wakefulness.

These show up most clearly when the subject's eyes are closed. When voltage is applied, the pen swings up and down. The distance it swings is proportional to the voltage applied and is a measure of the amplitude or intensity of the electrical discharge from the brain; the rapidity with which the needle on the recording frequency of the discharge being recorded. Since the paper on the recording moves at a constant speed, low-frequency discharge are represented by widely spaced, While high-frequency discharges appear as closely spaced waves. This is

one important difference between stage 1 descending and stage 1 ascending. There are others: for example, rapid eye movements almost never occur in conjunction with stage 1 descending but are common in stage 1 ascending. For the moment, however, we are concerned only with the EEG record, on the basis of which both the descending and ascending phases look very much alike.

The next change that is usually observed is the spontaneous appearance of slow, high amplitude waves and the occurrences of sleep spindles, which look like bundles rapid, close-packed waves. These EEG features characterize stage 2 sleep, most often described as light sleep by subjects who are awakened.

Later stages are more distinguishable on the basis of EEG records than on the basis of reports by awakened subjects. Both stages are characterized by the appearance of delta waves, voltage waves from one to three cycles per second (cps). Although later stages look quite different from earlier on the EEG record, they do not differ much from each other, and subjects awakened during later stages usually report having been in light sleep.

5.5 EYE MOVEMENTS DURING SLEEP

The same apparatus used for amplifying and recording electrical discharges from the brain may be used to measure movements of the eyes. Electrodes are attached at the outer layer thus and sometimes on the supraorbital ridge. These electrodes are sensitive to voltage that appear when the eyeballs move horizontally or vertically when the voltage are amplified and recorded, the resulting **electrooculogram** looks something like an EEG.

Slow eye movements during sleep had been observed as early as 1992. However, in 1953 Eugene Aserinsky and Nathaniel Kleitman, from the Department of physiology of the University of Chicago, reported periods of rapid, jerky eye movements in sleeping subjects. These occurred episodically four times during the night, the later periods appearing at somewhat closer intervals than the earlier ones.

5.6 REM and EEG

Rapid eye movements (REM) have been observed almost exclusively in a single stage of sleep: Stage 1 Ascending, they do not typically appear while the subject is going to sleep or while he is in stage 2, 3, or 4: they occur inlay after he comes to the deeper levels back through stage 1. This does not mean that stage 1 ascending is always characterized by rapid movements, for this stage also contains periods of ocular during which it is virtually indistinguishable from stage 1 descending, it only means, for all practical purposes, REM only appears in stage 1 Asending.

A dream is a period of absorbing through and is usually rather exciting to the dreamer. Insensitivity to external stimulation and the report of deep sleep may therefore be explained as resistance to interruption of thorough processes. Activation of the autonomic nervous system may be explained as a reaction to the excitement of the dream, the wakeful EEG record may reflect the active nature of psychological during the dream. Rosenthal and others have shown that subjects in dream research produce stories only please the examiner.

5.7 THE SECOND POSSIBILITY: REPORTS OF EARLIER DREAMS

Granted the likelihood that subjects report real dreams when awakened from REM sleep, it is possible that they are not reporting dreams actually taking place at the time they are awakened. Perhaps the physiological process associated with rapid eye movements activates a subject's memory so that he does not report a dream he has just experienced, but one had minutes, hours, or even days before. Is there any way to prove conclusively that a dream report represents a mental event of some earlier time? Probably not: but it is possible to amass some rather convincing circumstantial evidence.

5.7.1 DREAM DURATION

In the study reported above, psychologists obtained evidence relating to subject estimates of the durations of their dreams with the actual length of eye movements, periods before awakening, the investigations reasoned that, if dreams and eye movements are concurrent, subject estimates of dream duration and objects measures of REM duration should be correlated. If "real time" and "dream time" are similar, their decisions should be accurate most of the time; if they are only guessing only about one-half of their judgment should be accurate. The data shows that subjects were generally able to choose the correct. One person DN was wrong as often as he was right in judging the longer time interval; that is, he often

judged 15 minutes to be 5 minutes. The investigations interpreted this to mean that DN's dreams in these instances were actually long, but he forgot the early portions and therefore underestimated the amount of time they occupied even if DN regarded as a contrary case.

Some other psychologists also corrected the intensity and direction of eye movements with reported dream content. Subjects were awakened when a specific pattern of eye movements persisted for at least one minute, and were then asked to describe in detail the dream content just before awakening. In general, vertical eye movements were associated with dream action in the vertical plane. Only one instance of pure horizontal movements was observed. Berger and Oswald awakened eight volunteer subjects from REM sleep 103 times during 37 nights. Their procedure produced 89 instances of dream recall.

Berger awakened the subjects. Oswald did see the EEG or eye movements recorded and was not present when the dream reports were obtained. Oswald first classified the dream reports as active or passive.

In a more elaborate study, some psychologists invested the relationship of dreams imagery to eye movement characteristics. Twelve subjects slept a total of 38 nights in the laboratory and reported 121 dreams. Subjects were awakened by one investigator, who sat in another room and sounded a loud buzzer near the subjects head when a distinctive pattern of eye movements appeared on the electrooculogram. As soon as the buzzer sounded, second investigator entered the subject's room and questioned him the contents of his dream. This investigator also obtained the subjects rating of the clarity of his own recollection of the dream.

The second investigator translated the dream records into a predicted series of eye movements. Eye movement records were then compared with these predictions, and the results rated by two judges as good, fair or poor. As might be expected, the percentage of goods, matches is highest for dream that are well recalled by subjects and lowest for dreams that are not clearly recalled. Poor correspondence found for about 26 percent of vaguely described dreams, but good correspondence was found for about a good match with predicted eye movements over one-half the time.

5.8 DREAMS OF THE BLIND

Evidence regarding the correspondence between eye movements and dream contents might also come from studies of the blind. Sighted persons might be expected to follow dream processes with their eyes because dreams are strongly visual, and people who have been blind for a long period of time do not use their eyes in this way: many of them reported their dreams had no visual content.

5.9 SOME ADDITIONAL HYPOTHESES

It should follow that long, continuous dreams are accompanied by a generally low level of body ctivity, while a succession of brief dream episodes would be accompanied by a generally high level of body activity.

5.9.1 BODY MOVEMENTS

To test this hypothesis, Dement and Wolpert collected 204 descriptions of dreams from 16 subjects and analyzed them in several ways. First they selected 46 long and continuous dreams and 31 dreams that contained two or more unrelated fragments. Their purpose was to discover whether gross body movements of sleeper signal changes in dream activity. The results showed that, in general fragmented dream were associated with body movements during sleep, while continuous dreams were associated with the absence of body movements.

Active dreams are associated with vigorous eye movements; while passive are associated with less vigorous activity of the eyes.

Dreams restore psychological equilibrium by permitting limited expression of unconscious impulses. Dreams perform a necessary function, since loss of the opportunity to dream early in the right produced compensatory dreaming later on.

While research has rather clearly established that virtually everyone dreams at least some of the time, data from nearly all the studies show that there are people who report relatively few dreams. Although we know now that mental activities go on throughout sleep, we do not know how many different kinds of mental activities take place during sleep, what functions they serve, how they are related to mental processes or are influenced by the personality of the individual dreamer, by his personal modes of adjustment and adaptation.

Dreams may be regarded as hypothetical constructs which are indexed, albeit imperfectly, by both verbal reports and appropriate physiological measures.

As knowledge increases, it becomes more evident that virtually all physiological processes have psychological significance, and that every psychological process has implications for some aspect of bodily functioning.

5.10 HISTORY OF PSYCHOLOGY

5.10.1 MIND -BODY PROBLEM ACCORDING TO WESTERN PHILOSOPHERS

Ancient philosophers like St. Augustine and St. Thomas believed that there was a complete division between these two aspects of person, that is, mind and body. These philosophers never thought that these two could be related with each other in any significant way. But philosophers of 17th century for the first time pointed out that mind and body were related in a significant way and we get a very vivid glimpse of this concern in the writing of three important continental rational philosophers like Descartes, Leibnitz and Spinoza.

5.10.2 MIND-BODY PROBLEMS

Wundt pointed out that mind and body were parallel but not interacting systems. This was known as psychological parallelism. Thus mind and body, existed side-by-side without making any interaction between them. Therefore, for Wundt, mind did not depend upon body. It could be studied directly. This stand of Wundt have led van Hoorn and Verhave (1980) to classify him as a parallelist whereas Boring (1950) has classified him as dualist. Blumenthal (1980) and Richards (1980) have termed Wundt as an identity theorist, accepting mind and body as two aspects of the same reality. Whatever may be the brand, it is obvious that for Wundt, mind could be studied directly, without showing any dependence upon body.

Perhaps, that was the reason he made distinction between mediatative experience and immediate experience, the former being physical and the latter being mental.

On the whole, Wundt's system was an attempt to spell out the subject matter and method of psychology, basic principles as well as his regarding mind and body issue. In fact, the methods used by Wundt were not original in the sense that they had been borrowed from experimental physiology of Helmholtz and the psychophysics of Weber and Fechner. Regarding mind-body problem, Titchner adopted the position of psychophysical parallelism from Wundt. He believed that mind (or mental activities) and body (the bodily or physical activities) are different from each other. No interaction takes place between them and neither causes the other; however, a change in one is followed by change in other. Thus Titchner, like his teacher Wundt, was a psychophysical parallelist.

William James believed in the existence of both mind and body, and to this extent he was having a position similar to Wundt. But he was an interactionist and not a parallelist like Wundt. He believed that mind and body interact with each other and not that they run simply parallel to each other. In his book the principles of psychological processes of the body, some chapters were exclusively dealt with mental processes. He has made it clear that sometimes mind operated to serve the body and at some other time body took over more automatically, leaving the mind to do some other important works.

In this way, we find that William James psychology was more broad though less experience than that of Wundt and Titchner, specially his emphasis upon pragmatism, that is, upon the view that validation of any knowledge must be done in terms of its values and utilities, has been very influential one and also the one that later led to the foundation of functionalism.

5.10.3 STREAM OF CONSCIOUSNESS

Perhaps the crux of William James psychology is to be found in his stream of consciousness – one of the most important chapters of his book 'The principles of psychology'. What is stream of consciousness? For James, psychology is the study of consciousness as we know it at first hand. In other words, the starting point of psychology is immediately felt experience (not mind or soul which is manifested through consciousness). This is what he meant by the

stream of consciousness. While formulating his view, he opposed the concept of consciousness as expressed by Wundt and Titchner, who had taken it to be a static state that can be analyzed or broken down into several elements.

James explained consciousness by its five major characteristics as under:

- (1). Consciousness is personal. He pointed out that consciousness is personal and individualistic and every thought belongs to someone.
- (2). Consciousness is always changing. This is a vital characteristic which distinguishes him from Wundt. Through the characteristics James wanted to emphasize that we have never exactly same idea or thought twice. No state once gone can ever recur and be identical. This is, in fact, a physical impossibility. Objects can recover no doubt but not thoughts or ideas. Therefore, consciousness is like a constantly flowing stream which sometimes proceeds very rapidly and sometimes very slowly.
- (3). Consciousness is continuous: James pointed out that consciousness is sensibly continuous. There is no break in stream of consciousness although there may be temporary interruptions in continuity as we find in case of sleep. But after sleep Peter is still Peter and Paul is still Paul. They never mix with each other.
- (4). Consciousness deals with objects than itself: he pointed out that thoughts are unitary, no matter how complex they are. The objects may be complex but thoughts produced by those objects still be continuous and of unitary character. Through these characteristics he has stated his dualism between the mind and object it deals with.
- (5) Consciousness is always choosing or selected: at any moment we are bombarded by several stimuli that produce several sensations. We actively choose a few to attend and bring it to consciousness, like wise, perception is also a selective process.

In expressing his view on stream of consciousness, (apart from major characteristics) he also proceeded to explain the purpose or function of consciousness. It has twofold purposes for the organism;

- (1) It makes the human being as a better-adapted organism; it helps the person in making copiousness choice that helps in better person adaptation with the environment.
- (2) Whenever the person is faced with any new problem requiring new adjustment, consciousness, by making appropriate relationship with the nervous system, helps the person a lot.

Watson as well as other behaviorists denied the existence of mind or consciousness; they pointed out – one body and no mind. Watson made it clear that consciousness is never seen, touched, tasted or smelled; it is simply a plain unprovable assumption. Thus Watson was clearly monist. History bears testimony to be the fact that from the time of Aristotle and the ancient Greeks, psychology, in one way or the other, had accepted the dualism of mind was denied its existence. With denial of mind, the mind-body problem remained no longer a problem for behaviorist. All that remained and attracted psychologists was a behaving organism. Watson also made it clear that the brain processes were no longer important for a behaviorist because he considered brain as a mystery box. According to his stand, psychology was concerned only with bodily responses of muscles and glands to stimuli. Thus Watson's behaviorism was a mindless psychology.

Watson's solution of mind-body problem by denial of mind and accepting only the body fitted best to epiphenomenal approach as well as to approach of a complete physical monism. The epiphenomenal approach maintained that consciousness itself had no importance for science and had no causal role to play.

5.11 SUMMARY

In this chapter, sleep and dreams have been covered and analyzed from modern angle through psycho-analysis. According to western thoughts during ancient times, dreams were treated as visits by ghosts and spirits, serving as an instrument between gods and demons. But Sigmund Freud interpreted dream as a conflict between consciousness and un-consciousness mind, later several psychologists such as C G Jung, Erich Framm, Adler and others analysed the consciousness, dream and sub-consciousness, mind of people and propounded their own theories.

Sleep was analyzed through Electro Encephalo Graph (EEG) by neuroscientists and they came out with four levels of sleep called Stage 1 to Stage 4. Rapid Eye Movement (REM) sleep was analyzed along with EEG patterns of the brain and duration of dream, REM sleep, non-REM sleep. It was observed that limited expression of unconscious impulses resulted in necessary functions and also some time leading to compensatory dreams. Now it is understood that all physiological activities have psychological significance leading to physical functioning.

This chapter also brought out the history of psychology regarding mind - body problem according to western philosophers from the times of Boring (1950) to Richards (1980). All have analyzed mind - body problem and they treated this problem either dualistically or non-dualistically. It was William James who treated psychology as study of consciousness or streams of consciousness and rejected the theories of earlier psychologists.

He opined that consciousness is personal, sensibly changing, continuous and dealing with objects other than itself. Through perception, it chooses and it is nothing but a stream of consciousness and helps a person in adapting with new environment and further helps him to cope up with situations and contexts.

This chapter also makes an explorative journey into the concepts of mind as explained in the Indian philosophical traditions. The chapter explains about knowledge domains in the traditions and their distinctive features, different connotations and denotations of mind, the different methods being used in explaining mind. Yet they may not appear to be opposed or conflicting in nature. This sub chapter elaborates on the concepts such as mind (manas) and mind apparatus (citta) in Indian philosophical traditions compared with traditional western psychology, where the primary emphasis is given to the mind. It is explained here that in the Indian philosophical tradition, mind helps in knowing consciousness whereas in the western paradigm, mind becomes the subject as well as the object of knowing. Knowing gives an understanding of the truth and could lead to realization. In the eastern tradition, knowing becomes a being and becoming. This knowledge of the self (ātman) helps the individual in attaining happiness (sukha) and welfare (abhyudaya) in this world, and realization of the supreme reality (Brahman) leading to liberation (mokṣa). Thus knowing and understanding about consciousness become complimentary in both the traditions.

In Indian philosophy, both mind and matter are placed in the same category as they become the objects of knowledge. But in western philosophy both are based on a clear distinction between mind and matter.
