Deep Sleep and Human Consciousness: The Perspective of Hindu Advaita Vedanta

Deep Sleep! It is an everyday, supposedly banal experience, but one which has remained a mystery even to the most advanced neuroscientific research. In this paper, I provide an analysis of deep sleep based on the Hindu religio-philosophical school of Advaita Vedanta, and which centers on the structures of experience or conscious phenomena. From the point of view of Vedanta, deep sleep is an indicator of a dimension of reality not easily revealed by the ordinary waking state. I place the Vedanta perspective in the context of modern consciousness studies and argue that the analysis of sleep indicates that human consciousness is more extensive than individual ego consciousness.

Phenomenology of the State of Deep Sleep

In contrast to the waking state, which consists of thinking and feeling in the presence of external and internal objects, in deep (dreamless) sleep, we are aware of neither external nor internal objects. We do not perceive anything nor are we performing any mental operations. What is peculiar about deep sleep is that even though a person is devoid of perceptions and thoughts during deep sleep, he has an awareness of whether he had a good sleep or not. When in deep sleep, one does not know that one is in deep sleep. But, after he has arisen from sleep and is asked whether he slept well, he is able to answer, for instance, affirmatively that “Yes, I had a good sleep.”

1 Advaita (non-dual) Vedanta is one of the most intellectually influential schools within Hinduism. Sankara (8th-9th CE) is considered the first systematic expositor of Advaita Vedanta. An early text, which links consciousness with the three states of the waking, the dreaming, and deep sleep, is called Mandukya Upanishad (cir. 2nd BCE). Mandukya Upanishad is one of the many Upanishads that form part of the sacred literature of Hinduism. An excerpt of the text of Mandukya Upanishad is given in the Appendix. Sankara wrote extensive commentaries on various Upanishads, including Mandukya.
wonderful sleep,” or that “I slept soundly.” Or, a person is able to say “I knew nothing. I was in such a deep sleep.” The paradox is that though one is not aware that one is in deep sleep when in the state of deep sleep, one knows on waking up that that one had been in deep sleep. For the person could testify if she had a deep sleep or not and distinguish it from a disturbed sleep or a sleep filled with dreams.²

Now the fact that a person has a memory of deep sleep when she wakes up implies that deep sleep is not purely a negative state or a state of unconsciousness simply because no perceptual or mental activity is involved. According to Vedanta, even though the person in deep sleep is not conscious about anything, at some level consciousness must still be functioning which allows one to know that one had been in a state of deep sleep. The consciousness that is present in deep sleep though is of a different character as compared to the usual ego consciousness of the waking state because it does not assume the duality of a conscious subject and its object.

Memory and Consciousness

The above phenomenological analysis of deep sleep suggests that consciousness persists even when all activities of thinking and perception are absent. Now, if one looks at the EEG data for deep sleep, it indicates that some brain activity is going on during deep sleep. This shows that though the subject does not perform any mental or cognitive operations in deep sleep, her brain nevertheless is not quiescent or devoid of activity. The existence of neural activity of the brain

² An objection could be raised that our claim of deep sleep is based on inference; that is, we make a conclusion about deep sleep based on how relaxed we feel after waking up. A closer scrutiny though suggests that we in fact do possess a direct memory or awareness about deep sleep (See Puligandla, 1999). Because, first, when we are asked the question: “how well did you sleep?” we can immediately assert that we had a solid, deep sleep. And, secondly, we can make claims such as “I had a good deep sleep but I still feel tired,” either because the amount of sleep was not enough or the person has been ill.
could either mean that this activity is responsible for the memory that the subject possesses about her deep sleep on waking up, or that this activity itself is the manifestation of the consciousness that is present in deep sleep.

To address this question about the interrelationship of memory, brain and consciousness, I draw upon the work of Edward Kelly, a contemporary neurophysiologist at the University of Virginia. In his recently published work *Irreducible Mind* (2007), he argues, on the basis of a wide variety of experiential evidence, against the view that consciousness is the product of brain processes. One set of data he furnishes concern cases where cognitive and perceptual activities existed even while brain functioning was severely impaired. Such extraordinary cases fall under the category “near-death experiences.”

An example of a near-death experience is the following case:

A cardiac arrest victim was brought into the hospital comatose and cyanotic, and even after restoration of his circulation, he remained in coma and on artificial respiration in the intensive care unit for more than a week. When he regained consciousness and was transferred back to the cardiac care unit, he immediately recognized one of the nurses, saying that this was the person who had removed his dentures during the resuscitation procedures. He said further that he had watched from above the attempts of hospital staff to resuscitate him in the emergency room, and he described correctly and in detail the room and the people working on him, including the cart in which the nurse had put his dentures. The nurse corroborated and verified his account.

At this point, a large number of reports of near-death experiences have been collected by various

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3 Because many such experiences have been found to have occurred in persons who were clinically near death, these types of experiences have come to be termed as “near-death.” But near-death experiences may also occur when patients fear they are dying even if in fact they are not, or when patients are suddenly confronted with death but escape unharmed, as in falls or near-accidents (Kelly, p.372).

4 This case was reported by the Dutch cardiologist Pim Van Lommel (See Kelly, p.390). Lommel has carried out a systematic clinical investigation of such phenomena in a wide variety of hospital patients who survived a cardiac arrest. He has published the results of his study in *Consciousness Beyond Life: The Science of the Near-Death Experience* (HarperOne, 2010).
researchers. In fact examples of such cases are so innumerable and robust that they can no longer be dismissed or ignored. Those who undergo near-death experiences consistently report witnessing very vivid set of experiences which more often than not leave a deep impression on them, bringing a profound change in their outlook on life. These individuals affirm the occurrence of full fledged mental activity, either normal or even enhanced, and also retain a clear memory of their experience. Thus, near-death experiences show that our memory is not exclusively linked with brain activity. Moreover, these experiences indicate that consciousness does not always coincide with brain functions, and the fact that vivid awareness can exist even when the brain is disabled points to the irreducibility of consciousness to brain, at least in terms of brain as conventionally understood. The evidence of near-death experiences lends some

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5 Scientific studies carried out in the past decade suggest that near-death experiences may occur in about 10-20% patients close to death (Kelly, p.371). Kelly and his group at the Division of Perceptual Studies, a unit of the Department of Psychiatry and Neurobehavioral Sciences at the University of Virginia, has collected sufficiently high-quality evidence for the existence of many kinds of extraordinary phenomena, which differ qualitatively from our ordinary waking experiences. Both Kelly and Lommel emphasize the need for broadening our current explanatory frameworks. Many contemporary scientists and philosophers adopt the strategy of rejecting such extraordinary or “paranormal” phenomena simply because they cannot construe a mechanism in terms of presently recognized biological and physical principles. Kelly and Lommel point out that these anomalous experiences and phenomena are inconsistent only with the prevailing physicalist view of reality, and hence the proper course of action consists of employing the relevant evidence for the sake of expanding and deepening our understanding of nature and human personality.

6 Note that according to the current neurophysiological theories, which adopt the view that brain produces consciousness, or that consciousness is merely the subjective concomitant of neurological events, there should be no experience, or mental functioning, or memory formation under the conditions in which near-death experiences occur.

7 It turns out that it is not only in extraordinary situations such as near-death experiences that the dominant assumption in contemporary psychology and neuroscience becomes problematic. There are
support to the Vedantic view, which in the case of deep sleep ties our memory or awareness to the functioning of a special kind of consciousness.

The Consciousness of Sleep

That deep sleep is a particular state of consciousness, which does not reduce merely to brain or physiological activity, is further indicated by the difficulty associated with finding a proper definition of sleep. That is, the answer to the question: why do we sleep at all, is not as straightforward as it might seem as first. The most common answer to this question has been that sleep serves as a form of physiological replenishment necessitated by fatigue. But according to the neuroscientist Francisco Varela, who has also been collaborating with the Dalai Lama, such explanation is not satisfactory because the body consumes more oxygen during sleep than when awake and hence one ends up spending lot of energy in sleep.\(^8\) Also, one does not sleep simply to

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other examples belonging to ordinary experiences which also pose a challenge for the prevailing reductive view of consciousness. For example, the philosopher Thomas Nagel argues that there is an unbridgeable gap between brain processes and conscious experiences which are phenomenological in nature (See Thomas Nagel. The View from Nowhere. New York: Oxford University Press, 1989).

Another example concerns visual perception, in particular the unification of visual perceptual experience (Kelly, p.37-39 & Satprakashananda, p.56-8). When analyzing sensory mechanism in the visual system, the neuroscientists discovered that different visual properties of an object such as its forms, color, and motion in depth are processed individually by largely separate regions or mechanisms within the visual system. The puzzle is how does the stimulus which has been broken down come back together again as a unit of visual experience. According to Kelly, the unification of the stimulus is not achieved anatomically because there are no places or structures in the brain where all the parts of the stimulus are put together. He suggests that perceptual synthesis occurs as the result of an activity of consciousness, whose source lie outside of the brain. We have an example here that indicates that brain processes by themselves are insufficient to generate perceptual experience.

\(^8\) Francisco Varela, An Exploration of Consciousness with the Dalai Lama (Boston: Wisdom
recover from bodily fatigue, for even when one feels lazy or bored one often falls asleep. The
psychologist F.W.H. Myers, a colleague of William James, and who conducted extensive
research on the phenomenon of sleep, explains that it is very much possible to enter prolonged
sleep in any bodily condition, independent of any state of nutrition or of fatigue. ⁹

Though the physiological explanation by itself is inadequate to account for sleep, there is no
doubt that sleep has recuperative quality. One feels very refreshed after a good, sound sleep.
Moreover, as Myers observes, no ordinary waking experience has the same regenerative power
as healthy sleep. He rightly points out that even a short nap is often lot more effective in
restoring one’s energy than hours of lying down. From the point of view of physiology, the
recuperative power of sleep is a puzzling feature of sleep, given that physico-chemical processes
continue to function quite intensively in sleep. Myers postulates that in sleep the organism
reverts to a more primordial state of consciousness for reparative purposes. He argues on the
basis of his own psychical research, where he found that certain processes are enhanced in sleep
as compared to the waking state, that sleep is a particular state of consciousness that comes to the
fore when ordinary waking consciousness is held in abeyance. ¹⁰

Myers’ analysis of sleep points in the direction of the Vedantic phenomenology of sleep.
According to Vedanta, in deep sleep, the individual consciousness is suspended, but a different
type of consciousness is present, and it is referred to as the transcendent non-dual consciousness.
That is, from the point of view of Vedanta, in deep sleep we are resting in this non-dual

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¹⁰ Ibid, p.58, 83.
consciousness, which transcends the ordinary subject-object distinction. In the Vedantic analysis what also indicates the presence of this non-dual consciousness is the quality of joy associated with deep sleep. Deep sleep is generally experienced as sweet and serene. People upon waking up testify to having slept happily and we generally look forward to deep sleep because of the enjoyment and the sense of peace it provides. In Vedanta, the essence of the non-dual consciousness is constituted by bliss. Thus, because we are united with this non-dual consciousness, deep sleep is imbued with joy and contentment.

Concluding Remarks

A positivist model which takes the ordinary awareness as the primary mode of knowledge is limited in scope. Myers, for example, explains that any framework that derives ideas about human mind and consciousness solely on the basis of ordinary waking consciousness is incomplete. Here Myers echoes a concern also articulated by the budding interdisciplinary field of consciousness studies. The researchers within consciousness studies are increasingly emphasizing the importance of incorporating the entire spectra of experiences and modes of awareness for a fuller understanding of human self and consciousness. The above investigation suggests that in deep sleep we are experiencing a mode of consciousness qualitatively different from that of the waking state, and thus points to a broader range of human consciousness than the ordinary ego consciousness.

11 A very well-known Hindu teacher named Aurobindo (d.1950) speaks of ‘Yoga of Sleep,’ which involves learning to become conscious in sleep of this non-dual consciousness. According to him, the more one becomes conscious, the greater will be the recuperative power of sleep (See A.S. Dalal, The Yoga of Sleep and Dreams: Selections from the Works of Sri Aurobindo and the Mother (Pondicherry: Sri Aurobindo Ashram Press, 2004).

References


Appendix

Mandukya Upanishad

“With respect to syllables, OM is this very self; whereas with respect to the constituent phonemes of a syllable, it is as follows…The first constituent phoneme - “a” – is…situated in the waking state…The second constituent phoneme - “u” – is…situated in the state of dream…The third constituent phoneme - “m” – is…situated in the state of deep sleep…The fourth on the other hand, is without constituent phonemes; beyond the reach of ordinary transaction; the cessation of the visible world; auspicious; and unique. Accordingly, the very self is OM.”

OM → Fourth (Transcendent) State

A + U M

Waking Dream Deep Sleep