

Panel Discussion

Monastic graduates on the panel:

- Geshe Tsering Choephel
- Gyaltsen Jampa
- Geshe Thrinley

David Presti (Moderator): I thought we could start out by reconnecting with the questions we left off on having to do with sleep, and consciousness during sleep, and in particular dream states. Several questions were related to what's going on in dreaming, beyond of course brain activity, rapid eye movement, and so forth. Is there significance to the dream state? What can neuroscience say about the dream state? In particular, some of the questions submitted by our audience ask are there things that we can become aware of during dreams, like premonitions, or information about things that haven't happened yet? Is this possible?

P.N. Ravindra: Why do we dream and what is the importance of the functions of dreaming? As far as the dream state is concerned, there are many theories that have been put forth. They have not yet been studied under the framework of neuroscience so they cannot be evaluated or authenticated. One theory is that dreaming is a way of letting out a subconscious will or wish. Another is that the dream state is a stress buster; a way of letting out whatever is being packed into

our subconscious mind. There are subjective reports that claim that precognition and such things come about during dreams, but there isn't any hard evidence to support these claims. To make authoritative claims would be premature.

One thing we can say is that nature has given us a very beautiful mechanism during REM sleep in that our muscle tone is completely lost or diminished. This contrasts with the waking state, when we have good muscle tone and are active. That's why the REM sleep is called the paradoxical sleep: even though our EEG shows that our brain wave is like that of the waking state, our muscles are almost paralyzed. Nature has given us this mechanism, so just enjoy your dream, don't enact your dream. Dream enactment is a disorder where people wake up and enact what they see in their dream. Nature has given us the dream state in order to enjoy our dreams.-

David Presti (Moderator): I like that, "Enjoy your dream." I'd like to make one comment, since there were several references to the idea that dreams might be able to say something about the future. In psychological studies, they call this precognition, or having a mental idea about something that becomes true later that would seem impossible to explain in any kind of easy way. It's a very interesting question. If this is happening, how is it happening? If it is happening, conventional Western physical and biological science has no explanation for it. And yet in some traditions, I suspect in the Buddhist tradition, there is evidence that these things occur, that people get information in dreams about things that haven't yet happened.

There have been some attempts recently by Western scientists to do very careful experimental laboratory studies on this phenomenon of precognition, in an artificial set up in a laboratory where they present stimuli, and respondents make responses to it. The respondents are making judgments that they shouldn't be able to make because they don't have any information yet. They look for statistical correlations and there have been some careful studies recently, one of which was published in a prominent psychological journal by a Dr. Bem from

Cornell University. Also several studies were conducted by a colleague of mine named Dean Radin in the San Francisco area using EEG.

The reactions of the scientific community as to whether this phenomenon is happening or not have been interesting. When this first study was published, the reaction of many people was that this is impossible, this should have never been published, it was a travesty that such a thing should be published, this would violate all the laws of physics and bring down the entire edifice of Western science, and this was in the New York Times. Other studies, based on very good EEG experimentation, have not been accepted for publication yet as far as I know. They were submitted to two important journals in neuroscience, and the journals wouldn't even look at them. They said this couldn't be true, so we're not going to review the paper. It's very interesting how difficult it is to get a good scientific evaluation of these topics that are not easily explicable within the framework that we have. Dream research may eventually encounter these kinds of barriers also.

Sisir Roy: A question for the scholars. In some of the Hindu schools, they say they can change the future in their dreams, that they can foresee that something is going to happen and it is possible for them to change it. Is there such a thing from the Buddhist perspective?

Monastic Graduate: When we talk about sleep in Buddhism we divide it into two levels: we have a subtle level, and a gross level. When we are in a deep sleep we don't have dreams. We only have dreams when we are not in a deep sleep. We also believe that dreams, or signs and signals in dreams, can help to predict future events. Highly realized or special practitioners, and even the average person, can have dreams in which they see signs and signals of future events. By studying these they can predict an event. In order to prevent the fruition of an unwanted event, we sometimes perform rituals or undertaken other action.

Monastic Graduate: In addition to what my friend has said, Buddhism does not consider dreams to be real. We view them as a kind of illusion, or mistaken view. Consequently, we don't pay much

attention to dreams or their content. In the Tantra tradition of Tibetan Buddhism, there is mention of looking at signs in the dream from which you can predict things that may happen in the future. As my friend mentioned, there are rituals that can help prevent the event from taking place. Generally speaking, dreaming is a mistaken state of mind and we do not give much credibility to dream states.

Pema Dorjee: The dream is very important for doctors of Tibetan medicine, and even for Ayurvedic doctors, because dreams indicate and predict many things. We also see dreams as part of an omen, which provides information. When a Tibetan doctor visits a patient they see many omens. When you see somebody crying, or see something burning or broken, this provides an indication about the life of the patient, as do sudden changes of behavior or temperament. In terms of dreams, if a patient reports that in their dream they are naked and riding a buffalo, or donkey, towards the south in the direction of a Lord of Death, this gives the doctor information about the status of the life of the patient. There are also good dreams in which you are praised by people you like very much, such as your parents or colleagues, and then you receive a white scarf or other white items, good gifts, that are precious and pure in nature. This indicates that you will be receiving some kind of good luck. In my practical experience, dreams provide a great deal of information that in many cases is reliable if interpreted properly. Dreams are not superstition.

P.N. Ravindra: Proper recollection of the dream is very important.

Pema Dorjee: The best time for such dreaming is in the pre-dawn or early morning because at that time the central channel will be balanced.

David Presti (Moderator): How close do you think neuroscience is to being able to directly stimulate the brain to produce dream states? And perhaps even modulate or affect those dream states in some way?

P.N. Ravindra: We do not know of any direct evidence that supports the idea that there is a specific area where dreams are generated. We

know in terms of networking. In that case it can be very difficult to bring about assimilated vividness of the dream. I don't know because we do not know of any specific area that will really bring about these dreams. Even for dreams, it's probably a totally integrated networking of the whole brain that brings about this dream state.

Geshe Nyima Tashi: What do you mean by the network? Is it like dreaming of a flower where the visual neurons must be functioning? Or what about dreaming of hearing a beautiful sound? They must be on different networks. When dreaming of different things maybe a different network will be used. How do you mean that we know the network? Is there a common network for the dream?

P.N. Ravindra: No, there is nothing called the common network for the dream. Network in this sense is the subjective feeling a person has when in a dream state. These dreams happen in the early morning because in a normal sleep pattern the REM sleep increases in the second half of the sleep, which is in the early morning phases. During those phases of sleep, fMRI studies have shown that the activation of the amygdala is very high. And when the person has been woken up to report their subjective feelings, they narrate their dream story, and their feelings are emotive in nature. But when you ask about vividness, colors and such things, I don't know, we don't have an answer.

David Presti (Moderator): In terms of actually stimulating the brain to dream, we don't seem to be close. Chemically, there is a particular neurotransmitter called ester-choline, which is involved in the activation of the brain during REM sleep. There are substances that activate the ester-choline receptors, most famously nicotine from the tobacco plant. There are some shamans, especially in South America, where tobacco comes from, that use tobacco to invoke powerful dream states. That's one way of doing it that doesn't necessarily allow for manipulation. A better study of how to generate and manipulate dreams probably comes from Tantric dream yoga practices, where folks cultivate the ability to readily control something about the nature of the dream. Many mystics and many experienced yogis have said

that at some level of practice, there is no distinction between the wake state and the sleep state. That's a very interesting statement, what does that mean? It's a very interesting thing to ponder.

Sisir Roy: A question again for the Buddhist scholars. Until about four or five years ago, we believed that people who were blind from birth did not have visual dreams. But one survey in the United States, not yet published, holds that blind people claim to have visual dreams, very vivid visual dreams, where they describe exactly where they are staying, how their houses have geometrical figures—rooms and doors, etc. Tell me from the Buddhist perspective how blind people have these images?

Monastic Graduate: When we talk about dreams in the Kalachakra (cycles of time) text, there is mention of four essential drops. One of these is responsible for dreams. These drops can move from and to the different parts of our bodies. From the Buddhist point of view, it is possible that blind people can see visual objects in their dreams. Even though a particular individual is blind in this life, since their mental continuum comes from a previous life they can have visual signs or sights in their dream.

Geshe Nyima Tashi: I don't think this is restricted to blind people. People who can see may sometimes have dreams where they see something they have never seen before. The dream has a lot to do with imprint, or in scientific terms, adaptation. In Buddhism, you say the imprint of earlier cosmic imprints, or maybe adaptation.

David Presti (Moderator): This is probably related. There were other questions related to Geshe Nyima's talk about mental consciousness. Could you say more about the sixth sense?

Geshe Nyima Tashi: I have been trying to look into what scientists and Western philosophers are saying about the sixth sense. I don't think they have accepted this, but they describe some beautiful things. There's a sixth sense that is something that you experience which is

unseen by the five senses. There is something you cannot see from the eye, you cannot hear or touch beyond the object of these five senses, and the sixth sense detects that object.

David Presti (Moderator): What does Buddhist philosophy have to say about mental consciousness being a place where all other kinds of information is realized, for example, through dreams?

Geshe Nyima Tashi: According to Buddhist texts, the mental concept, the mental perception, can perceive everything, and not only what the five senses can detect. It has the capacity to know everything.

David Presti (Moderator): Does that mean, for example, that if dreams can somehow sense information that goes beyond what normal senses might be sensing, then the mental consciousness might be involved?

Geshe Nyima Tashi: In Buddhism, sleep is one kind of mental factor, which is considered neither virtuous nor non-virtuous. Before you go to sleep, if your mental state is positive or virtuous, we say that your whole night dream is going to be virtuous. If you go to sleep with anger or hatred, then your whole sleep will be a negative or non-virtuous sleep.

Monastic Graduate: I think this question is for Sisir Roy and Dr. Ravindra. Can we have neurotransmitters that are specifically responsible for different mental states like happiness or sadness?

P.N. Ravindra: Yes, there are various neurotransmitters that are chemicals that are being correlated with the various mental states, including happiness and sadness. For example, it could be dopamine or melatonin. What do Buddhist texts say about non-dream sleep states? Do they have any specific role?

Monastic Graduate: In Buddhist texts, it is said that when we go to sleep all our five sense perceptions cease to exist. When we enter into the sleep state, only our mental consciousness is present; there is no

sensory consciousness. When very highly realized practitioners enter the very deepest level of sleep, they can actually direct that sleep state to examine the nature of emptiness and the nature of phenomena, the real nature of phenomena. The average person experiences different layers of sleep. However, if we are not practitioners we don't realize, or we don't directly perceive, the existence of our consciousness during our sleep state. It becomes kind of dormant and demonstrates that we don't know, or we don't recognize, or we are not aware of our own consciousness at that time.

Monastic Graduate: In Buddhism it is also said that the mental state you are in when you fall asleep, whether positive or negative, will carry forward irrespective of whether you dream or not. If you are in a positive mental state when you go to sleep, your mental continuum remains in a positive state until you awake the next morning.

Sisir Roy: A small question again for the Buddhist scholars. A couple of years ago a scientist discovered fruit flies have a dream like state. What does the Buddhist tradition think about that?

Geshe Nyima Tashi: First, I would like to know how we know that the fruit fly is actually dreaming? However, I think we are not surprised if it does.

David Presti (Moderator): Neuroscience says that the fruit fly has an electrical state that is similar to REM sleep in humans. Since that is correlated with dreams in humans, then maybe the fruit fly is dreaming. Of course, we don't know the mental experience of a fruit fly.

Geshe Nyima Tashi: It seems that the way in which the sign and dream are defined is closely related to culture.