

Brianna H.

New York, New York

What Are Dreams?

Acrylic on canvas, sculpture

My piece gained its inspiration from my personal questions surrounding the idea of dreams, something I have always had a connection and sort of obsession with. I keep a dream journal to help me remember everything I dream about. It leads me to wonder how and why dreams occur and how their significance alters between cultures.

After researching my topic, I decided that I wanted to depict those bizarre scenes. For this project, I decided to create a collection of paintings displayed above a bed. The bed represents the current reality of the dreamer. The paintings each portray a collection of strange scenes and act as windows into the different dreams the dreamer can have. Each surreal painting is supposed to feel slightly off, highlighting that aspect of dreams that doesn't have any structure that makes sense. There is an apparent aspect in each painting that lacks proper structure, even if some of them somewhat fit together.

Through this piece, I hope to make the viewer question the depicted scenes and fill in the blanks in each of the images, creating their own story. I also hope they can picture themselves sleeping in the bed and imagine the kinds of dreams they have.

What Are Dreams?



Brianna H.

The Oxbow School

OS46

Writer's Note: This paper discusses the concept of dreams and their presence in the human experience. It explores what dreams are, what the brain does when one dreams, and how dreams have been interpreted throughout different cultures.

Dreaming is a universal human experience. Even if someone can't remember their dream from the night before, that does not mean they didn't have one. Dreaming, which is caused by mental activity while asleep, is so vivid, complex, strange, and emotional. Since it is impossible to directly study the dreams people have, there is only a limited amount of available information, thus making understanding dreams incredibly difficult. I, personally, have had a strong obsession with the idea of dreams. The thought that I could subconsciously create a movie in my head while asleep astonished me. I would find excitement when I woke up remembering my dreams, and I would run to retell them to the people in my life. The disappointment I felt whenever I was unable to recall a dream led to me writing down everything I remembered in a dream journal, strengthening my memory and giving me a space to track what my mind came up with each night. I wondered why I dreamed, if the dreams had any meaning, and why sometimes the scenes in my dreams appeared in my waking life. This interest brought many questions to me, most of them unable to be answered without doing some research: Why are dreams difficult to study? What happens in the brain when it's dreaming? What possible reasons are there to explain why humans dream? How do the meanings and interpretations of dreams differ between cultures?

Dreams are difficult to study in addition to being hard to remember. They occur during 95% of the rapid eye movement (REM) stage when asleep. Humans cycle through different stages of sleep: alternating between REM and non-rapid eye movement sleep (non-REM/ NREM). During NREM sleep, which occurs before REM and occupies up to 75% of overall time asleep, the

body relaxes and restores itself. At the end of NREM, the body shifts to REM, where the eyes move quickly, but the rest of the body remains very relaxed (The Grand Rehabilitation and Nursing). In order to prevent the sleeper from acting out their dreams and potentially harming themselves, the brain paralyzes the body from head to toe. Humans have four to five REM periods in their sleep time; individual REM periods last anywhere from a few minutes to over an hour and occupy 20% of the nights for young adults. Since dreams occur during the deep sleep, they are longer and most concentrated in the last third of the night. All humans studied during their time asleep have brain activity. In one study, 95% of people awakened during REM reported dreaming, making it generally assumed that everyone dreams in their sleep. If the act of dreaming is not interrupted by awakening, it is rare to be able to recall the events as “the chemical systems that are responsible for recent memory are completely turned off when the brain is activated during sleep” (Hobson 10).

For the past thirty years, the concept of dreaming has been involved in the reorganization of memory, however, only the past five years have produced a strong, clear line of development in research and evidence (Hobson 18). It is suspected that the reason we dream is because of brain activation during sleep, more specifically in the temporal lobe of the brain (mainly in charge of building, imagining, and creating memories; also in charge of processing emotions). The most popular theory about why we dream is that brain activity reorders information, clears out unnecessary memories, updates memories, and adds new experiences to our memory system; proving that brain activity while asleep has a “lifelong developmental role” (Hobson 78). We dream to “satisfy our wishes, file away memories, develop and preserve neural pathways, make sense of neural static, and reflect cognitive development” (123HelpMe 1). Our dreams are emotion-filled because our “sense of psychological reality...is set by the strength of percepts and

feelings as well as by our thoughts about them,” which is why it was expected that the “parts of the brain that generate emotions and related percepts are selectively activated in sleep” (Hobson 5). When we dream, there is a “loss of awareness of self, loss of orientational stability, loss of directed thought, reduction in logical reasoning, and last but not least, poor memory both within and after the dream” (Hobson 5). Dreams are notoriously recognized for their general strangeness and lack of structure, for example, a dream can take place in one place and then instantly jump to a different location (an example of the lack of orientational stability). These are all representations of the cardinal cognitive features of dreaming.

There are different forms of mental activity through dreaming, beyond just producing visual images. The first form is an internal perception of movement. An example used in J. Allen Hobson’s *Dreams: A Very Short Introduction* is the feeling of floating on water after being on a boat. This form occurs on nights following some sort of motor behavior during the day. While there is no visual element, this still counts as a dream because the body hallucinates the feeling that was experienced earlier. The second form also has no hallucinatory or perceptual structure but emotion is apparent in the thinking and cognition of the sleeper. This form is associated with low levels of brain activation in slow-wave sleep also known as NREM sleep. It can be seen in something like stressing over a test all night. There are no visuals, but there is a strong emotional sensation throughout the night.

The last form of sleep is the more well-known, typical REM sleep report, which includes the characteristics of the visual dreams mentioned earlier. These are those bizarre and dramatic animated scenes that appear. These dreams are anywhere from 8 to 10 times as long as the first two forms. They have rich and varied internal percepts: sensorimotor, hallucinatory, auditory, and anti-gravitational/weightless hallucinations (Hobson 9). This would include any sort of feeling,

such as being able to feel the heat of a fire. There is also a delusional acceptance of events as being reality despite their extreme improbability, like having the ability to fly or seeing strange creatures. Additionally, there is a bizarreness that derives from the inconsistency and character incongruity. This can be seen in the jump from location to location or characters that change randomly throughout the dream. These dreams also are high in emotional intensity and have character choices with poor reasoning. The first two forms mentioned derive from past experiences and future concerns of the dreamer, while this form consists of a more complex description of events that never happened and never could have possibly happened. REM can explain the presence of brain activity, but brain activity cannot explain the lack of logical reasoning in dreams: “if brain activation were global in REM sleep, we would expect orientation and cognition to improve, not deteriorate” (Hobson 10).

There are multiple methods of studying and researching dreams. The first is a simple self-report in the home using home-based sleep monitors. This is an inexpensive and personal way to track and inspect dreams. Alternatively, sleep labs can be conducted, which “increase recall and the naturalism of the dream recalled” (Hobson 10). For example, it is easier to see something like pleasant dreams, which are easier to sleep through while unpleasant dreams awaken the dreamer and tilt the scales used toward negative emotion. The downsides to this method are that it is expensive to obtain and it represents mostly younger individuals exclusively since students at universities are the main demographic being tested by these labs.

There are many interesting facts and myths about dreaming, as well as many theories surrounding them. Sigmund Freud believed that dreams only occurred the instant before awakening, which isn't true, as mentioned earlier. Many people believe that dreams occur in black and white; however, dreams are in color. Some people remember their dreams in black and white

simply due to poor memory. Dream recall is possible from as early as two years of age. This means babies, too, can dream, just not to the extent of adults due to their lack of language in addition to their developing consciousness. Dreams similar to those experienced by adults have been seen to begin at around age three, and become more interesting and complex by age seven. The same kind of brain activity that is seen in humans is, in fact, seen in all mammals. This information causes the debate about whether animals can dream or not, depending on whether the animal has consciousness. Many scientists believe they do dream in a limited form, unlike the complex form humans dream in (Hobson, 51). Another common question people have is about how blind people dream. People who are blind at birth have no visual imagery at any time (including dreaming) because their “visual systems never had the necessary interaction with the perceptual world to develop perception or the encoding of visual images. Thus, when their brains are activated during sleep, they are unable to call up images because there are no encoded images present” (Hobson 105). Those who weren’t born blind and have brains with acquired blindness have developed perceptual capacities, so they can “create images when their brains are automatically activated during sleep. In fact, dreaming is the time when people with acquired blindness see most clearly” (Hobson 105).

Studying dreams has only recently become serious because the analysis of dreams had failed to become a science until recent years. Scientists previously focused on the content of dreams and assumed there was a robust algorithm that presented deeper meanings and messages of dreams disguised by symbols, metaphors, and sensory terms (Hobson 16); there was too much of a focus on psychoanalysis, which was difficult to study and gave little to no useful information to explain the phenomenon.

But people have always sought meanings in their dreams and the importance placed on dreaming and dream analysis differ between different cultures. As stated by Dorthy Eggan, dreams can explain the values of a culture because they “can be considered both a projection of the personality and a reflection of the culture.” (Grunebaum and Caillois 271). Greeks believed dreams to be the “distorted read-out of a sick body” (Hobson 16). Both Pagan and Judaeo-Christians believed dreams to be encoded messages about the future sent by a higher power God. They thought that “God communicated his intentions via certain prophets to his human subjects... Religious reformers such as Emmanuel Swedenburg were able to meet God’s angels in dreams and he thereby received instructions about founding the Church of the New Jerusalem” (Hobson xiii). The entire story of Daniel 5:12 in the Bible, serves as “proof” of God’s “revelation in dreams and visions... God here speaks to Daniel, as he has spoken before to the other prophets in the Bible” (Mol 19). In the story, the wise men were unable to explain the dream because it was unnatural and had nothing in common with humans; the supernatural power was only given to Daniel. The heavy presence of dreams in religion has “obviously contributed impressively to the relativization of man’s rational autonomy, and submission to powers beyond his conscious awareness. After all, humans discovered soon enough that they could not in any way affect their dreams and visions” (Mol 21). Since humans knew that they had no autonomy over the events that occurred in their dreams, they went on to explain it by believing only a higher power possessed the ability to control human dreaming: “the fact that the dreamer has no control over this reconciliation corresponds with God’s superior authority and order, pardoning and forgiving” (Mol 22). Dreams were, and sometimes still are, seen as prophetic and able to foretell the future, even though there is no scientific evidence in favor of this theory and considerable scientific evidence against it. People might believe that dreaming about a sick loved one dying might be a foretelling

of the future, but people who are concerned about a traumatic event like this will dream about that loved one more than would otherwise be the case (Hobson, 18).

In native religions, dreams were closely related to Gods and higher powers. In Australia, the dreaming of aborigines was the center of their system of meaning, best being described as primeval order. Additionally, The French missionaries to the Canadian Indians in the seventeenth century regarded Native dreams as their main obstacle to conversion efforts. They wrote about Native dreams as the gods of the country and the seal on tradition, legality, and authority. They complained in their letters to France that Native dreams were “so powerful that they determined all major decisions, such as travel, hunting, attacking, defending, curing, etc. In both of these instances, dreams were closely linked to central meaning systems that formed the core of motivation” (Mol 21).

In the Ojibwa (Native North American) culture, they viewed dreams as an actual self-expression and personal necessity. Their culture centered around having a “positive and necessary factor in the maintenance of the sociocultural system that gives meaning to their lives” (Grunebaum and Caillois 271). Their group mindset offered a direct understanding of their attitude toward dreams. “Dream imagery [was] interpreted as bringing the individual into direct face-to-face contact with other-than-human persons and becomes linked with the motivation of individuals, traditional values, and social behavior” (Grunebaum and Caillois 280).

The representation of dreams emerges from even the earliest narrative history in China. It is represented and explained as a “way to structure events and impose order on the human experience” (Stroumsa 17). The representation of dreams in these early Chinese historical texts was motivated by the “need to interpret and define causes and consequences,” or a need for order

and control (Stroumsa 17). Dreams are known for their lack of structure, as stated earlier, therefore giving them meaning through symbolism reduces the lack of control and understanding.

In Haiti, dreams and communication had great importance in the validation of the native belief system to the point where the reality of the dream is placed on the same plane as that of the waking experience (Bourguignon 268). "Among the peasants of Haiti, dreams may [have been] classifie[d] as 'things I see at night,' or.. supernatural visitations" (Bourguignon 262). Predominantly children classified dreams as "things I see at night" (Bourguignon 262), mainly children who suffered from experiencing nightmares throughout the night. They reported seeing animals, figures, and demons called "Baka" and "Sombi" in their nightmares. Other types of dreams are dreams with visitations from the dead and gods that conveyed a message to the dreamer. Dreams become a vehicle of communication between the gods, the dead, and the living: "If the words spoken by the sleeper are not understood by those who hear them, it is said that the god who manifested himself spoke Langai, the esoteric language spoken and understood only by the gods and the vodun priests" (Bourguignon 264). To the dreamer, the essential point in the dream is the message from the gods and the ability to communicate with them (Bourguignon 266).

The conversation on dreams has always been present, even if the topic differs from culture to culture. Dreams have inspired art, religious movements, scientific theories, etc. Early Western artists used dreams to represent a prophetic inspiration in their work. Modern surrealist artists express dreams "through their wild paintings [representing] that dreaming was a more authentic state of consciousness than waking" (Hobson xiii). Artists often produced work that attempted to answer the question of where the mind goes when asleep. While dreams have always been difficult to study and understand, they still offer something interesting to the understanding of the human

experience, thus proving that continuing and furthering the study of dreams is important to understanding us as a species.

Works Cited

Bourguignon, Erika. *Dreams and Dream Interpretation in Haiti*. No. 2, vol. Vol. 56, Wiley, 1954,

www.jstor.org/stable/664363?read-now=1&seq=1.

Grunebaum, G. E. Von, and Roger Caillois, editors. *The Dream and Human Societies*. Berkley and Los Angeles, University of California Press, 1966,

books.google.com/books?hl=en&lr=&id=hNzuDwAAQBAJ&oi=fnd&pg=PA267&dq=dream+analysis+through+different+cultures&ots=EfPp9TxLco&sig=CiIUFLuL6AygPYlnRLwXUe7-UT0#v=onepage&q=dream%20analysis%20through%20different%20cultures&f=false.

Hobson, J. Allan. *Dreaming: A Very Short Introduction*. Oxford University Press, 2011,

www.pdfdrive.com/dreaming-a-very-short-introduction-very-short-introductions-e187882682.html.

Mol, Hans. *Calvin for the Third Millennium*. University Printing Services, ANU, ANU Press, 2008, www.jstor.org/stable/j.ctt24h3nv.1.

“The Purpose of Dreaming While Asleep.” 123HelpMe, pp. 1–3,

<https://www.123helpme.com/essay/The-Purpose-of-Dreaming-While-Asleep-232862>.

The Grand Rehabilitation and Nursing. “Sleep Paralysis: What It Is, Why It Happens, What To

Do.” Pawling, 30 Apr. 2018, <https://thegrandhealthcare.com/pawling/sleep-paralysis-rem-sleep>.

Stroumsa, Guy. *Dream Cultures: Explorations in the Comparative History of Dreaming*. Edited

by David Shulman, Oxford, New York, Oxford University Press, Inc, 1999, [viewer-ebSCOhost-](#)

com.riverdale.idm.oclc.org/EbscoViewerService/ebook?an=151334&callbackUrl=https%3a%2f%2fdiscovery.ebsco.com&db=e000xna&format=EB&proflid=eds&lpid=&ppid=&lang=en&location=&isPLink=False&requestContext=.

Tuarez, Jaimar. "What Part Of The Brain Do Dreams Come From?" NeuroTray, 22 Feb. 2021,

<https://neurotray.com/what-part-of-the-brain-do-dreams-come-from/#:%7E:text=Dreams%20form%20in%20the%20temporal,between%20sleeping%20and%20being%20conscious.>