

Dreams and Visions



Ode to a Nightingale

John Keats - 1795-1821

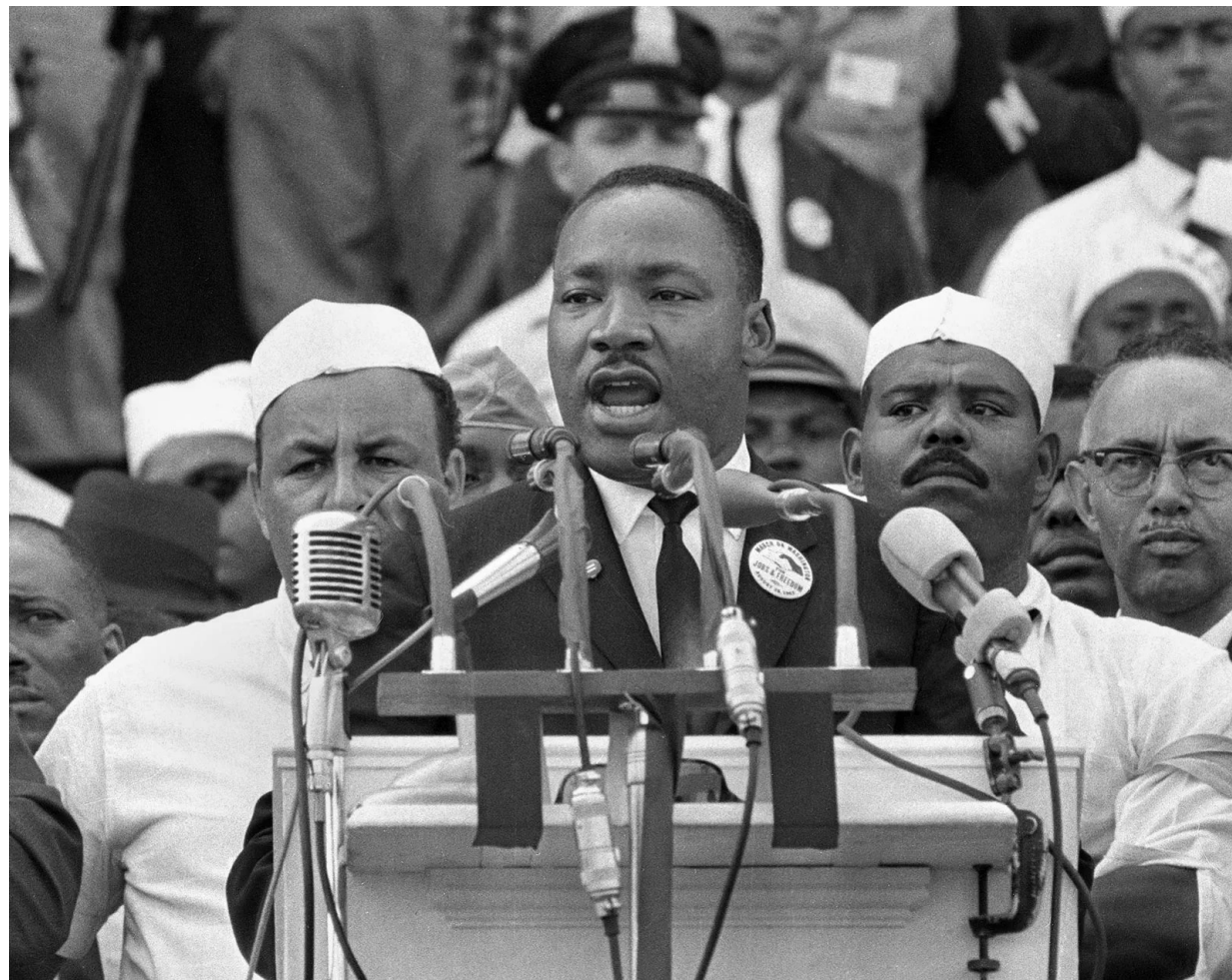
1.

My heart aches, and a drowsy numbness pains
My sense, as though of hemlock I had drunk,
Or emptied some dull opiate to the drains
One minute past, and Lethe-wards had sunk:
'Tis not through envy of thy happy lot,
But being too happy in thine happiness,—
That thou, light-winged Dryad of the trees,
In some melodious plot
Of beechen green, and shadows numberless,
Singest of summer in full-throated ease.



Forlorn! the very word is like a bell
To toil me back from thee to my sole self!
Adieu! the fancy cannot cheat so well
As she is fam'd to do, deceiving elf.
Adieu! adieu! thy plaintive anthem fades
Past the near meadows, over the still stream,
Up the hill-side; and now 'tis buried deep
In the next valley-glades:
Was it a vision, or a waking dream?
Fled is that music:—Do I wake or sleep?

I have a dream...



What is a “dream”

- a form of thinking that occurs under minimal brain direction, external stimuli are blocked, and the part of the brain that recognizes self shuts down
- a form of experience that we believed we experience through our senses;
- something memorable;
- have some interpretation of experience by self.



What is a “vision”?

- Awake, conscious.
- Can be voluntary thought or intuitive.
- Can be visionary in portent.
- Daydream?

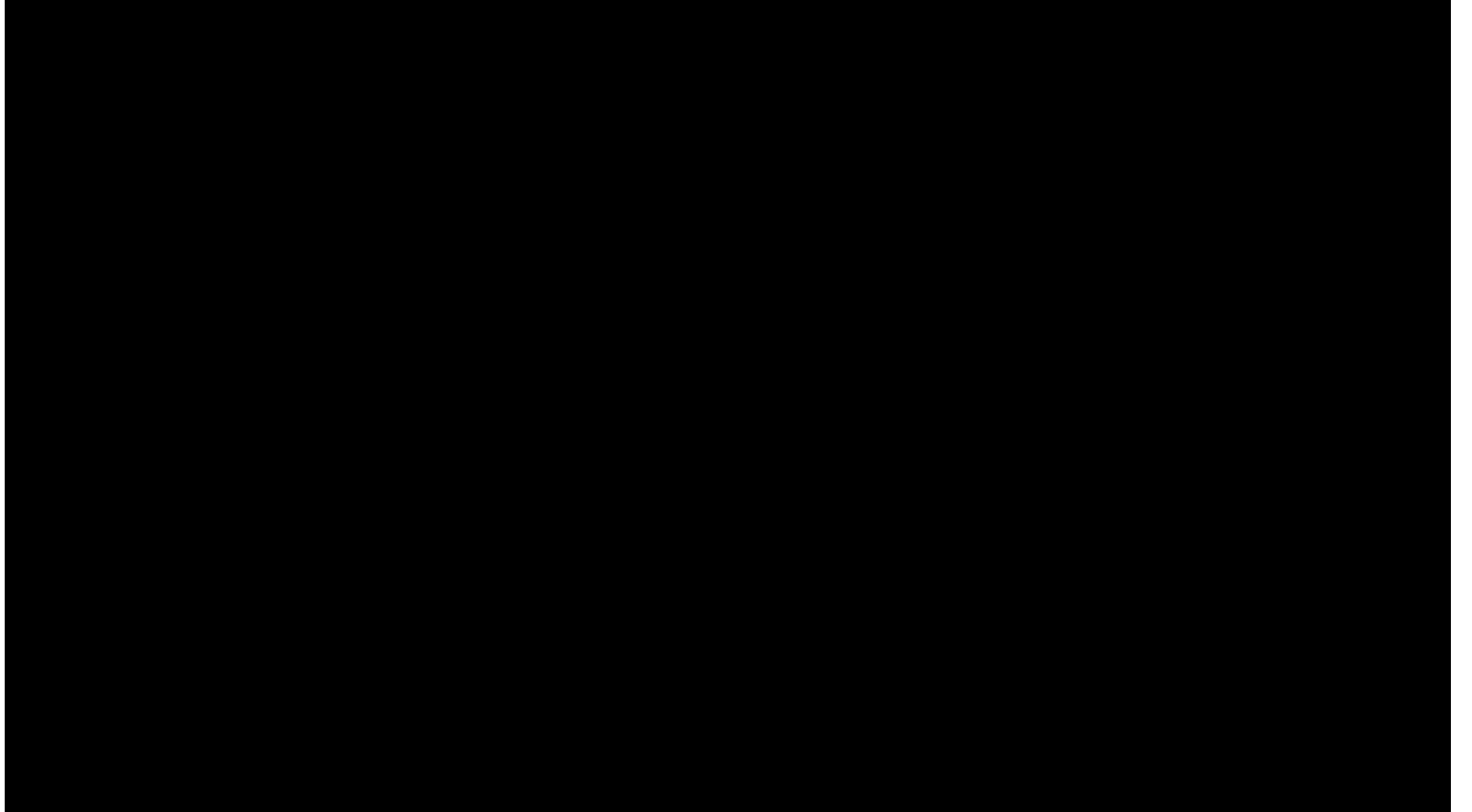


Is there any
real science
about
dreaming?

Oneirology ([/ˌɒniˈrɒlədʒi/](#);

from [Greek](#) [ὄνειρον](#), *oneiron*, "dream";
and [-λογία](#), [-logia](#), "the study of")

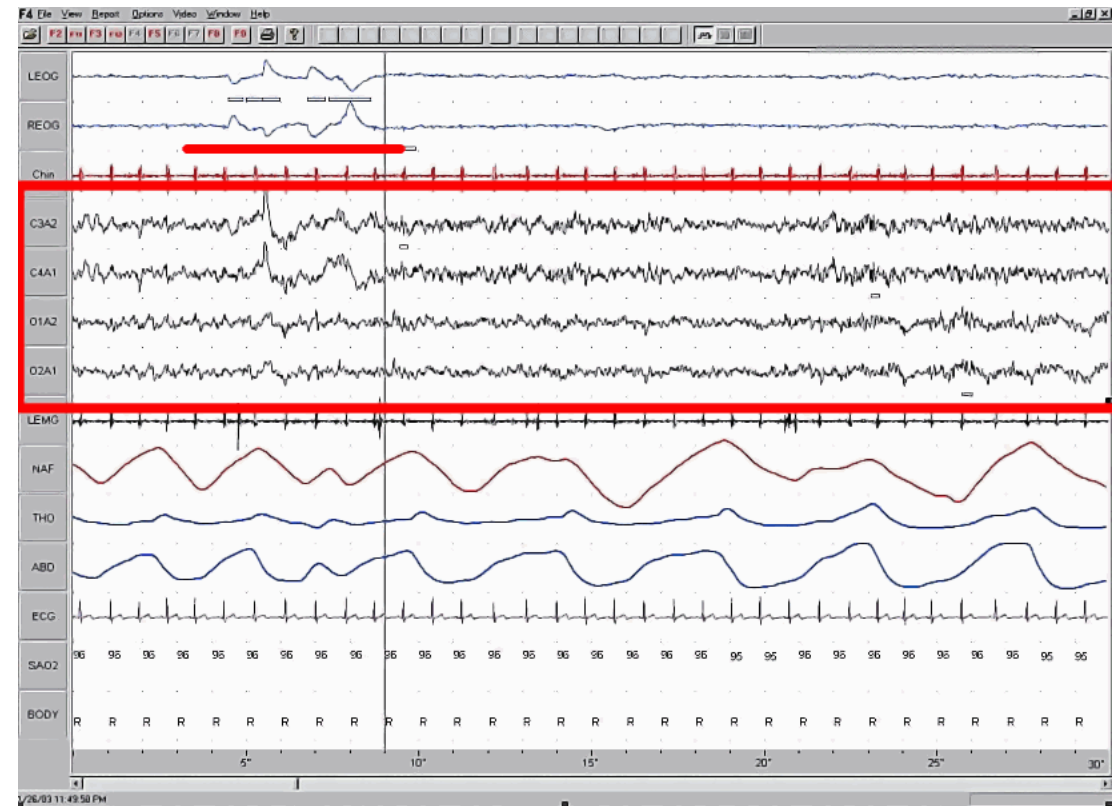
is the scientific study of [dreams](#).



What is a dream, science definition

Memories and experience

- Participant-nonremembered dreams during NREM are normally more mundane in comparison.
- During a typical lifespan, a human spends a total of about six years dreaming (which is about two hours each night).^[1]
- Most dreams last only 5 to 20 minutes.^[6]



- During REM sleep, the release of certain neurotransmitters is completely suppressed.
- As a result, motor neurons are not stimulated, a condition known as REM atonia. This prevents dreams from resulting in dangerous movements of the body.

Events during nonREM sleep

- Night terrors
- Bed wetting
- Sleep walking
- Restless Leg Syndrome



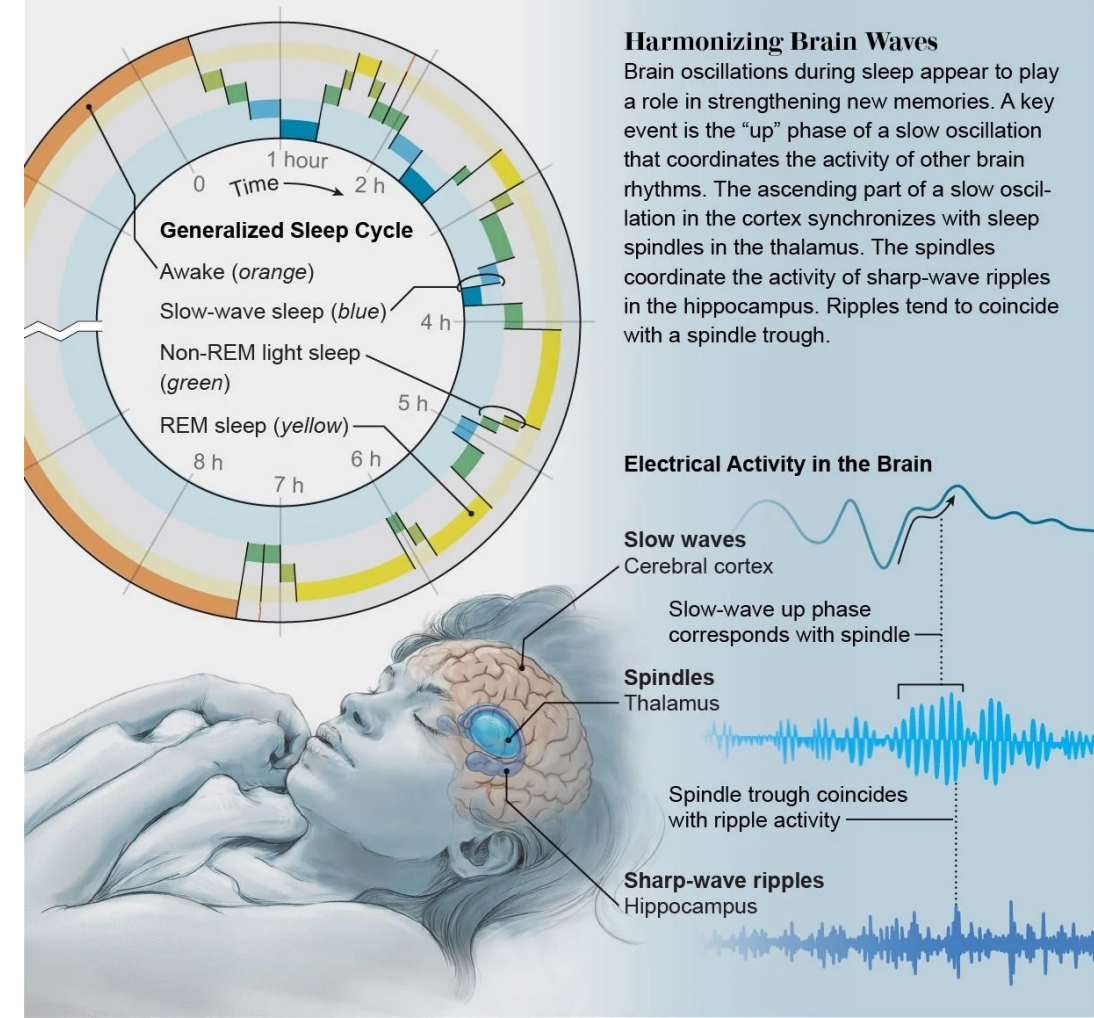
Brain washing, the good kind.

- Laura Lewis of Boston University
- CSF flow through the brain
- the same slow waves that coordinate memory consolidation drive oscillations in blood flow and CSF in the brain.
- Non-REM sleep, deep cycle

A Symphony in Two Movements

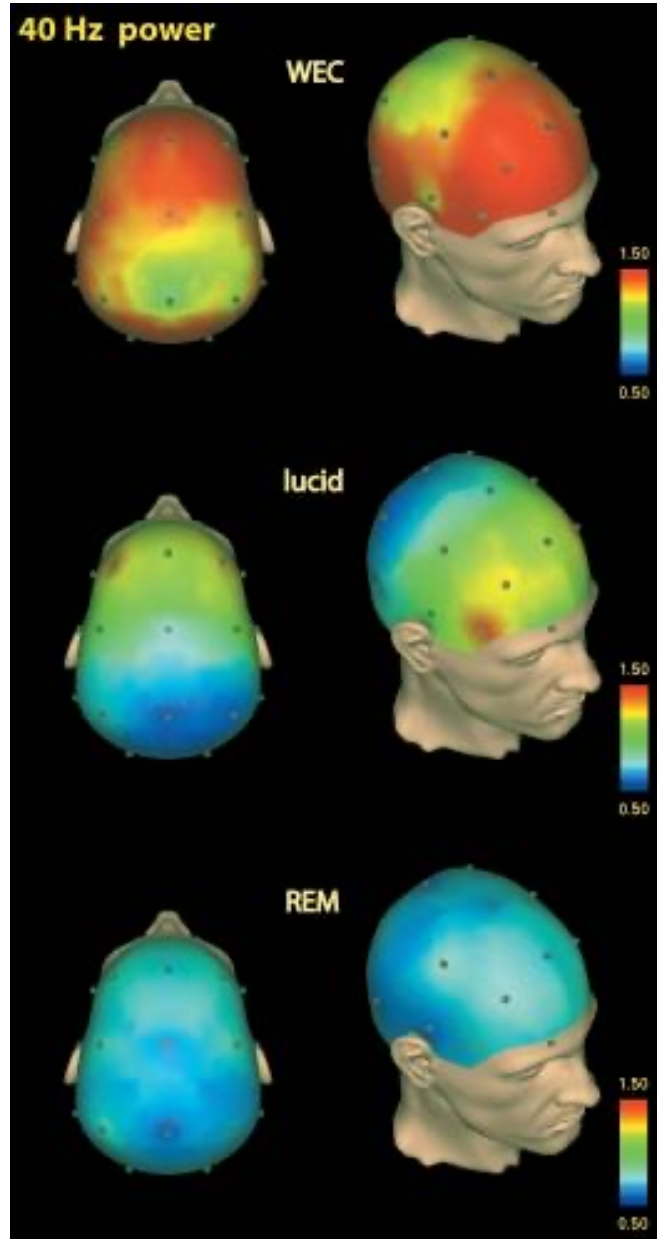
Dramatic differences characterize two key sleep phases. The slow waves of deep sleep dominate the early part of the night. During slow-wave sleep, some memories spontaneously reactivate. Interventions that promote this process can ensure that memories are retained. Rapid eye movement (REM) sleep prevails in the latter part of a night's slumber, but how it interacts with memory remains controversial.

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Lucid Dreaming





Regular Dreams

- **Commonplace bizarreness in dreaming**
- Certain kinds of bizarre cognitions, such as disjunctive cognitions and interobjects are common

Can one of our sense affect our dreams?

- One aspect of dreaming studied is the capability to externally influence the contents of dreams with various stimuli.
- One such successful connection was made to the olfactory.
- Research has shown that the introduction of a positive smelling stimulus (roses) induced positive dreams while negative smelling stimulus (rotten eggs) induced negative dreams.

Regular dreams, part 2 (authentic dreams)

Regular Dreams, Part 3 (illusionary dreaming)

The New Sandman

- All sleep aids work in essentially the same way, by boosting production of a neurotransmitter known as GABA.
- GABA helps to quiet down the activity of neurons in our brains, and it's an important part of our sleep cycles.
- Almost every drug that makes you drowsy, from barbiturates to benzos to valerian root to alcohol, utilizes this chemical.
- low levels of GABA have also been linked to insomnia and anxiety.
- “Sleeping pills do not provide natural sleep, can damage health, and increase the risk of life-threatening diseases.”



Nightmares

- In children nightmares directly correlate with the stress in children's lives.
- Sleep apnea, not enough O₂, healthy people have more nightmares than sleep apnea patients.
- Another study, patients with obstructive airways disease and asthma (OAD), iOAD subjects with asthma reported approximately 3 times as many nightmares as controls or OAD subjects without asthma.
- The evolutionary purpose of nightmares then could be a mechanism to awaken a person who is in danger.

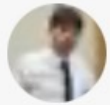


Front. Psychol., 04 April 2014

Sec. Consciousness Research

Volume 5 - 2014 | <https://doi.org/10.3389/fpsyg.2014.00255>

Was it a vision or a waking dream?



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A commentary on

Disrupting posterior cingulate connectivity disconnects consciousness from the external environment

by Herbet, G., Lafargue, G., de Champfleury, N. M., Moritz-Gasser, S., le Bars, E., Bonnetblanc, F., et al. (2014). *Neuropsychologia* 56C, 239–244. doi:

10.1016/j.neuropsychologia.2014.04.022

End-of-Life Dreams and Visions: A Qualitative Perspective From Hospice Patients


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Abstract

End-of-life dreams and visions (ELDVs) are well documented throughout history and across cultures with impact on the dying person and their loved ones having profound meaning. Published studies on ELDVs are primarily based on surveys or interviews with clinicians or families of dead persons. This study uniquely examined patient dreams and visions from their personal perspective. This article reports the qualitative findings from dreams and visions of 63 hospice patients. Inductive content analysis was used to examine the content and subjective significance of ELDVs. Six categories emerged: comforting presence, preparing to go, watching or engaging with the deceased, loved ones waiting, distressing experiences, and unfinished business.

Figure 1

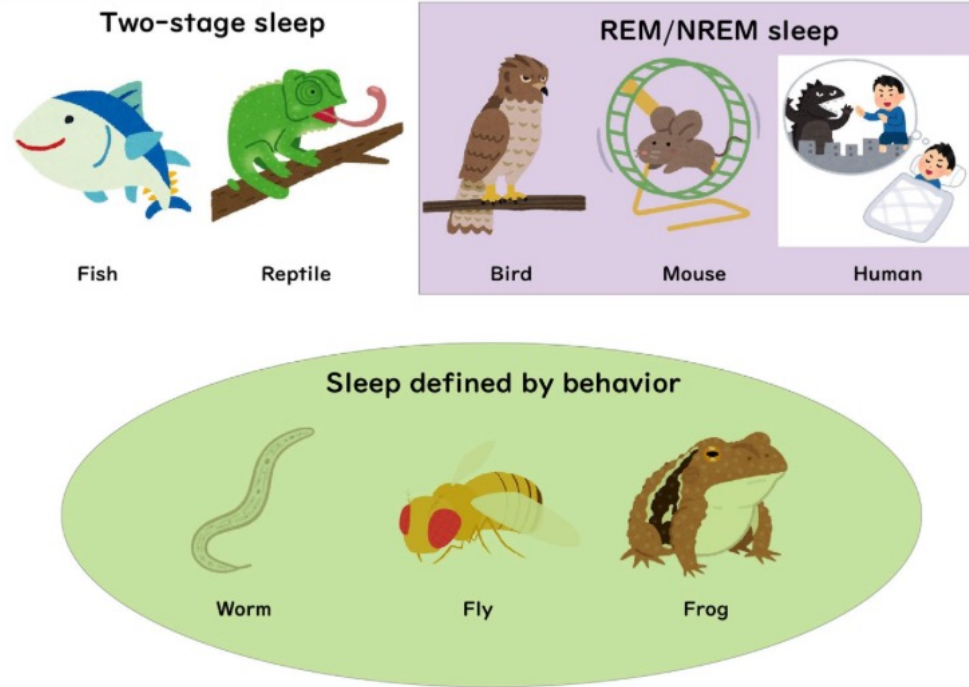
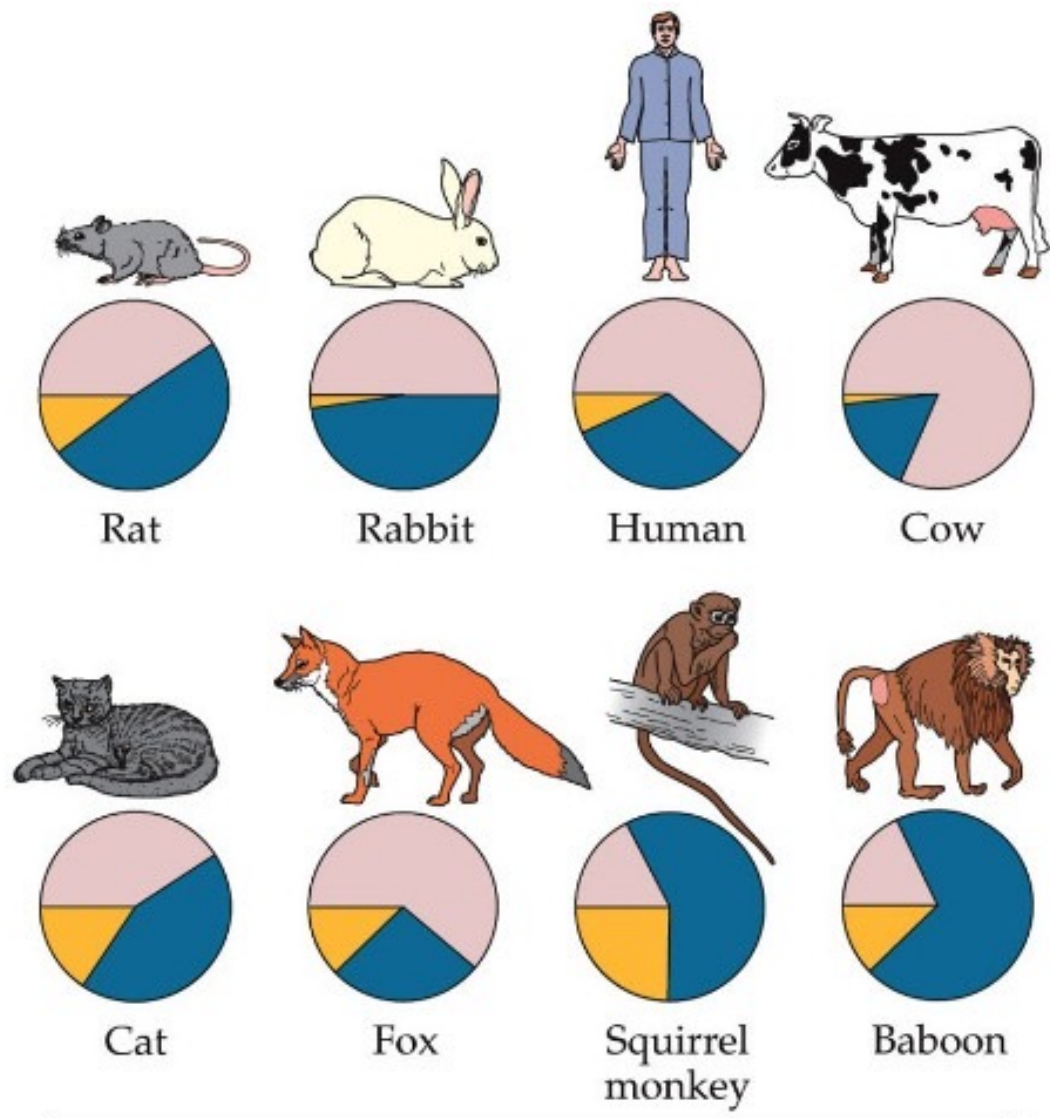
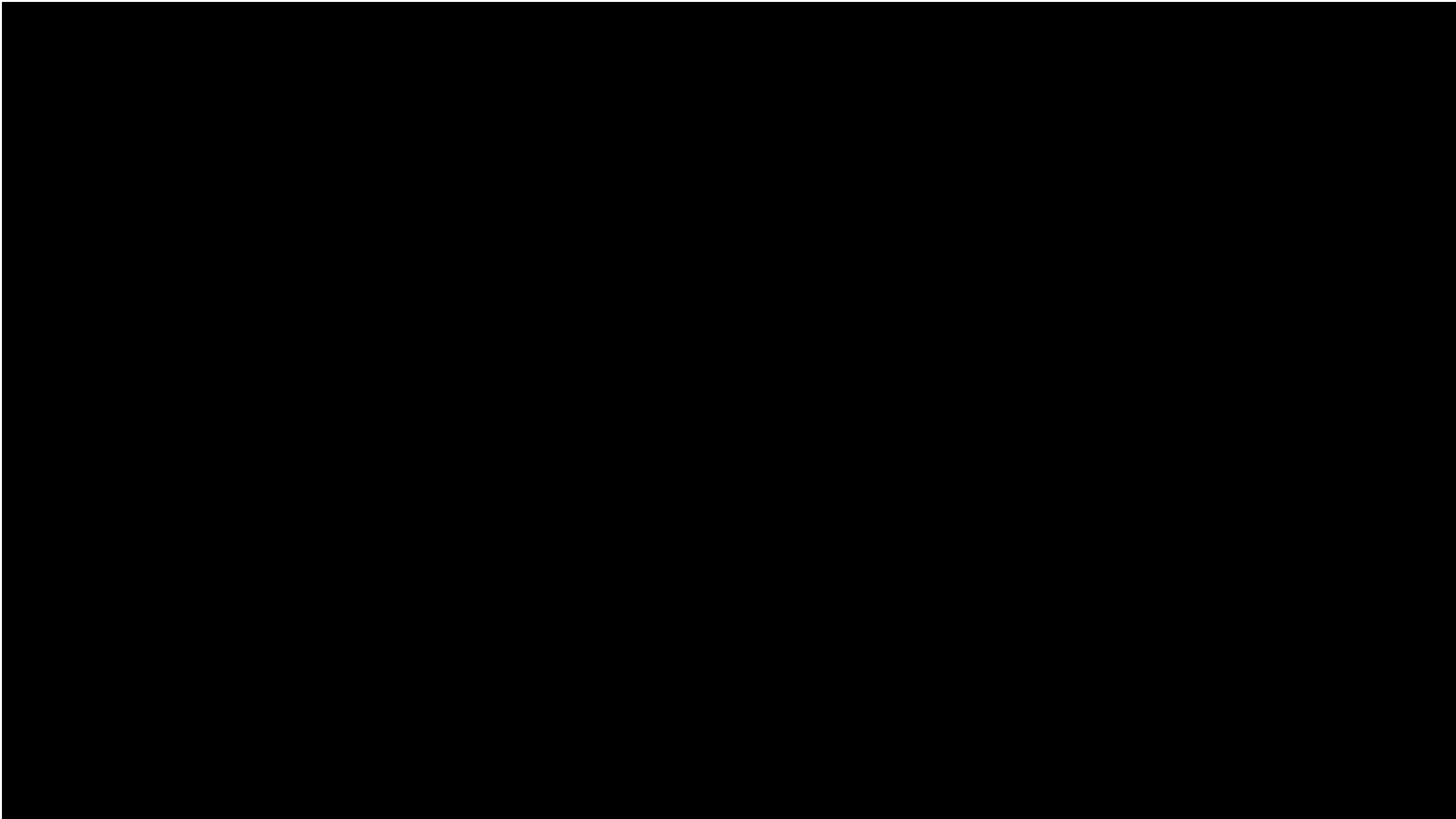


FIGURE 1. Sleep in various species. REM/NREM sleep states in mammals and birds are based on analysis of EEG/EMG recordings. Recent neuronal recording studies in fish and reptiles suggested the existence of two distinct states of sleep. Sleep states in other species including frogs, flies and worms have been measured using behavioral criteria.







Big dreams: An

EXPORT Add To My List

[Bulkeley, Kelly](#) [Hartmann, E](#)

Citation

Bulkeley, K., & Hartmann, E. (2006). Big dreams and word searches. *Dreaming*, 21(3), 15

Abstract

The authors provide empirical data on big dreams. Reported here are the characteristics of big dreams gathered from the same two sets of dreams analyzed by a novel combination of de Castle's (1966) content analysis and the same two sets of dreams. Big dreams are distinguished by more intense imagery, more nature references, more physical aggression, more family characters, more fantastic/imaginary beings, more magical happenings, and less high-order cognition and less connection to ordinary daily surroundings.

(PsycINFO Database Record (c) 2016 APA, all rights reserved)

- big dreams are distinguished by
- a tendency toward “primal” qualities of form and content:
 - more intense imagery, more nature references,
 - more physical aggression,
 - more family characters,
 - more fantastic/imaginary beings,
 - more magical happenings,
 - along with less high-order cognition and less connection to ordinary daily surroundings.

s, and word searches.

Dreaming

Journal TOC

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Related Content

Revision of the good fortune scale: A new tool for the study of "big dreams." Bulkeley, Kelly, 2006

Who dreams the big dreams?

- Everyone
- Low socio economic status
- Marginalized communities
- Creative minds.



Scientific Dreams: Mendeleev's dream of the periodic table

Орбиты элементов, ~~сгруппированные~~ ^{группированные} ~~по~~ ^{по} ~~атомному весу~~ ^{атомному весу} (Ходяков),
 Д. Менделеева.

	Fr = 50	Zr = 90	? = 180
	V = 51	Nb = 94	Sn = 182
	Cr = 52	Mo = 96	W = 186
	Mn = 55	Rh = 104	Pt = 197,4
	Fe = 56	Ro = 104	Ir = 196
	Ni = Co = 59	Pd = 106,6	Os = 199
H = 1	? = 8	? = 22	Cu = 62,4
He	Be = 9,4	Mg = 24	Zn = 65,2
	B = 11	Al = 22,4	? = 68
			Ag = 108
			Hg = 200
			Cd = 112
			Ni = 116
			La = 197,5?
			Sn = 118
			Pb = 122
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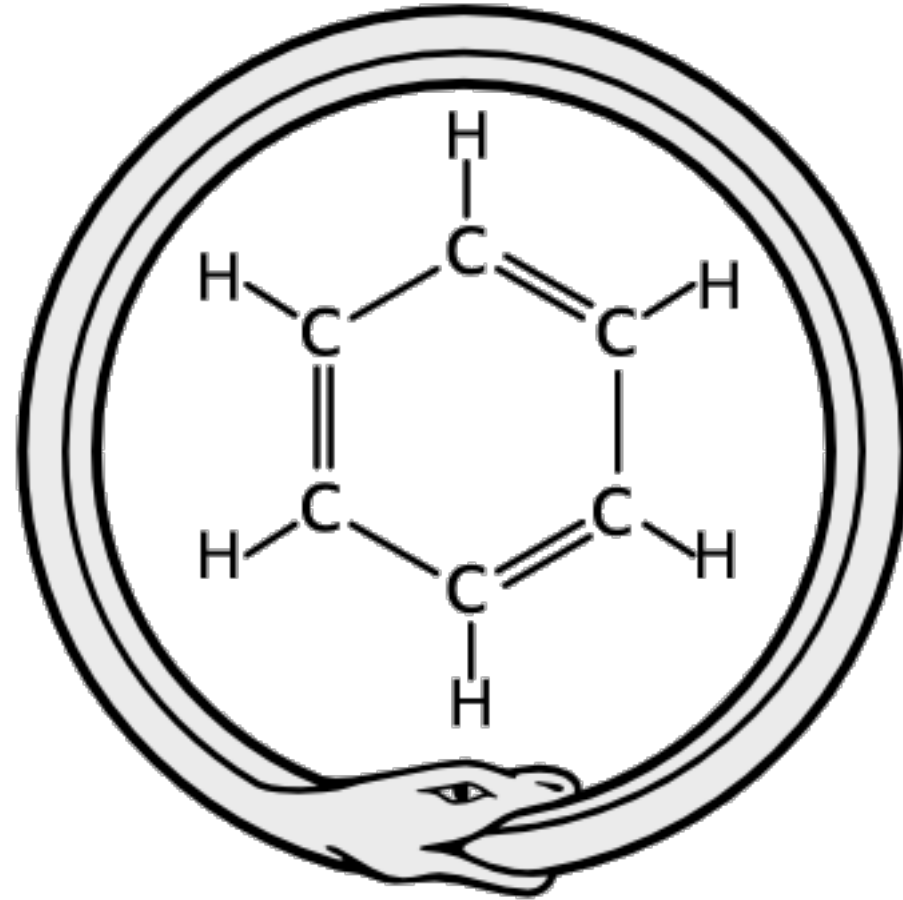
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Scientific Dreams: The symbol of the ourobus and the discovery of the structure of benzene

- Kekulé says that he had a reverie or daydream where he saw a snake seizing its own tail and this was the inspiration for discovery of the ring structure of benzene. The snake eating its own tail is a religious and mythological symbol of many ancient cultures, known as the Ourobos.



Dreams and Visions in Scripture



- English word "visions" and its singular form
 - 86 times in OT KJV
 - 17 times in NT.
- English words 'dreams' or 'dream'
 - 87 times in OT
 - 8 times in NT.

Distinction is not always clear, vision, dream, vision at night.

- indistinct line of demarcation between these dreams and visions in the biblical account
- This is particularly true when visionary experience is detailed to have occurred during the night (e.g., Gen. 46.2; Job 4.13; 20.8; 33.15; Isa. 29.7; Dan. 2.19; 7.2, 7, 13; Mic. 3.6),
- some scholars have tended to treat these 'night visions' as 'dreams', even without textual support.
- equation of dreams with prophetic visions is actually quite rare in the Hebrew Bible, occurring only three times in the prose of the MT (Num. 12.6-8; Jer. 23.25-28; Dan. 7.1).

<i>Dream Episode</i>	<i>Content</i>	<i>Dream Type</i>
Gen. 20.3-7	Abimelech's dream about Sarah and Abraham	Message dream
Gen. 28.10-22	Jacob's dream of the ladder	Message dream + symbolic dream
Gen. 31.10-13	Jacob's dream of the goats	Message dream
Gen. 31.24	Laban's dream	Message dream
Gen. 37.5-7	Joseph's dream of the wheat sheaves	Symbolic dream
Gen. 37.9	Joseph's dream of the celestial objects	Symbolic dream
Gen. 40.9-15	Dream of Pharaoh's cupbearer	Symbolic dream
Gen. 40.16-19	Dream of Pharaoh's baker	Symbolic dream
Gen. 41.1-4	Pharaoh's dream of the seven sleek and fat cows	Symbolic dream
Gen. 41.5-8	Pharaoh's dream of the seven fat and withered ears of grain	Symbolic dream
Judg. 7.13-14	A Midianite's dream predicting Gideon's victory	Symbolic dream
1 Kgs 3.5-15	Solomon's dream and request for wisdom	Message dream
Dan. 2.31-35	Nebuchadnezzar's dream of the great statue	Symbolic dream
Dan. 4.1-18	Nebuchadnezzar's dream of the tree felled by the watcher	Symbolic dream

- the patriarchal dreams tend to be auditory rather than visual, and their message is clear to discern.
- On the other hand, the dreams in the Joseph narrative, as in Judg. 7.13-15, require interpretation in order to be properly understood.
- We can thus divide between the dreams of the patriarchal saga (message dreams) and the dreams of the Joseph story (symbolic dreams).

Do allegedly prophetic dreams delude people into accepting the irrational claims of diviners, astrologers, and soothsayers?

In his 2008 book *The God Delusion*, Richard Dawkins proposed a “general theory of religion as an accidental by-product—a *misfiring of something useful*.”¹ Putting his theory in psychological terms, Dawkins said that religious beliefs and practices may be explained as the results of malfunctioning “modules” of cognitive processing in the brain. These modules are normally directed toward useful activities, but when something goes wrong they can spin off in strange and pointless directions, with little or no connection to their originally valuable functions.² This seems to be the case when people have hallucinatory visions and hyper-realistic dreams that allegedly predict things to come. Religions take advantage of these cognitive misfirings to persuade people that prophetic dreams and other divinatory practices can provide accurate information about the future, particularly if the dreams come from authoritative experts like priests or shamans.

Initial Response

Big dreams can prompt intense activation of the brain/mind processes devoted to visual imagination and creative forethought.

Some forms of illness may prompt strange dreams and nightmares, but that does not mean all dreaming is pathological. As we have seen, dreaming

People in religions all over the world have looked to dreams for glimpses of the future, seeking information beyond what is given by the ordinary senses. Whether the prophetic power is attributed to the gods, the travels of the dreamer's soul, or some other spiritual force, there is a nearly universal belief that dreams offer a means of expanding the individual's range of temporal perception and gaining knowledge about potentially harmful or beneficial events in the future. Although often compared to other divinatory practices like astrology, crystal gazing, reading entrails, and so forth, prophetic dreaming is different in having a well-understood naturalistic foundation in the workings of the sleeping mind. This foundation has a long evolutionary history in our species that predates the appearance of religious teachings, authorities, and traditions. Religions may indeed manipulate and abuse people's beliefs about their prophetic dream experiences, but the experiences themselves emerge from deeply rooted capacities in the human psyche.