

G h o s t s



Are Ghosts Real?

BY: ERIKA W. SMITH

LAST UPDATED [SEPTEMBER 18, 2019, 3:45 PM](#)

As we creep closer to Halloween, you're probably beginning to think about planning your costume, decorating your home, and stocking up on seasonal candy. Maybe you're adding some horror movies to your Netflix queue, or even planning a visit to a "haunted" site. Indulging in ghost stories can be one of the most entertaining parts of Halloween — but is there any evidence that ghosts might be, you know, real?

If you believe in ghosts, you're not alone. A 2013 Harris Poll found that 43% of Americans do. Additionally, a 2009 Pew Research poll found that 29% of Americans say they've felt as if they've been in touch with someone who has died, and 18% say they've been in the presence of a ghost. A belief in ghosts is certainly not new: folklore about ghosts dates back thousands of years and is present in relics of ancient Mesopotamian (3500 B.C.E. - 400 C.E.) and ancient Egyptian (3150 B.C.E. - 332 B.C.E.) culture.

Despite decades of testing, there is no scientific proof of the existence of ghosts. Part of that is because no one can agree on what a ghost is, exactly. Are they material? Or invisible? Are they human souls? Or some kind of energy? As LiveScience's Benjamin Radford writes, "With so many

basic contradictory theories — and so little science brought to bear on the topic — it's not surprising that despite the efforts of thousands of ghost hunters on television and elsewhere for decades, not a single piece of hard evidence of ghosts has been found.” That’s right: there is no scientific evidence that ghosts exist. The methods that ghost hunters use on TV — such as capturing ambient noises or electric voice phenomena (EVP) — have often been described as “pseudoscience.”

Over the past few centuries, scientists have suggested many different explanations for why so many people believe they have seen ghosts. Here are some of them:

Variations in the electromagnetic field

Ghost hunters use a tool called an electromagnetic field (EMF) meter to apparently detect ghosts. Normally, these tools are used to identify problems with power lines, electrical wiring, and electric appliances. Electromagnetic fields are everywhere, in various forms.

Some scientists say that our perceptions of ghosts may have something to do with electromagnetic fields. In the 1980s, neuroscientist Michael Persinger hypothesized that excessive magnetic stimulation of the brain led to "out-of-body experiences." According to *Nature*, Persinger had people wear helmets that targeted their temporal lobes with weak magnetic fields, and found that 80% of people felt "an unexplained presence in the room."

Variations in infrasound

Infrasound are sounds below the range of hearing. Some animals, including elephants, can hear it, but we can't. However, studies have indicated that humans feel *some* effects of infrasound, including nausea, disorientation, and "general unpleasantness." In one 1998 scientific paper, engineer Vic Tandy investigated his own experiences in a supposedly "haunted lab." While working there, he and others experienced feelings of distress and depression, cold shivers, heard sounds seeming to come from unexpected places, and Tandy even saw an apparition of a figure.

Investigating, Tandy found that he "and his colleagues were sharing their lab with a low frequency standing wave" caused by a new fan in the extraction system. Tandy concluded, "a 19hz standing air wave may under certain conditions create sensory phenomena suggestive of a ghost."

Other scientists have conducted similar experiments, with similar conclusions. In one study, psychologist Richard Wiseman arranged for people to attend two concerts: one that featured infrasound, and one that didn't. Twenty-two percent of audience members in the infrasound concert reported "feeling uneasy or sorrowful, getting chills down the spine or nervous feelings of revulsion or fear," according to NBC.

Carbon monoxide poisoning

In a popular TED Talk, journalist Carrie Poppy tells the story of being "haunted." She felt like she was being watched, felt a pressure on her chest, heard "whooshing" sounds, and cried every night. Then, she posted about her experience on a forum for ghost skeptics... who told her it sounded like she had carbon monoxide poisoning. She called the gas company. They were right. And Poppy isn't alone. Several other "haunted houses" have been discovered to be the site of a carbon monoxide leak.

Sleep paralysis

Some scientists say ghosts are likely the result of sleep paralysis. This occurs when there's a disconnect between the body and mind when you're going into or out of REM sleep. The result is a feeling of paralysis and "waking dreams," often nightmares.

"Some people have visions where they feel something is trying to strangle or choke them or they have a sense of impending doom," Dr. Priyanka Yadav, a sleep specialist at the Somerset Medical Sleep for Life Center in Hillsborough, N.J., told NBC. "They'll often see someone coming into their room and they're not able to move or talk or scream or do anything." Scientists say this is the reason ghosts usually "haunt" at night — they're really just dreams.

Toxic mold

Many "haunted houses" are creepy and old... and may be home to dangerous mold. One study found that mycotoxins — toxins produced by certain fungi — can lead to delirium, dementia, pain syndromes, movement disorders, and balance or coordination disorders.

“I’ve had an interest in ghost stories and paranormal exploration and shows and other things for a long time,” researcher Shane Rogers told Mental Floss. “Back in grad school watching these shows I thought, ‘Jeez, some of these places they’re going into are pretty dingy and moldy. I wonder if there’s some kind of a connection.’”

Schizophrenia

One 1994 study found a correlation between belief in the paranormal and the MMPI's Schizophrenia Scale — but only for men. Scientists have speculated that "ghosts" may be hallucinations caused by schizophrenia or other mental illness.

Dementia

Many patients with dementia have reported seeing ghosts, and hallucinations are one symptom of dementia. "I get hallucinations where I think there are ghosts living in our garden," one man with dementia told BuzzFeed.

It's so common that there's a term for it: Nearing Death Awareness. “Those who are dying and seem to be in and out of this world and the ‘next’ one often find their deceased loved ones present, and they communicate with them. In many cases, the predeceased loved ones seem [to the dying person] to be aiding them in their ‘transition’ to the next world,” Rebecca Valla, a psychiatrist in Winston-Salem, N.C., told *the Washington Post*.

Imagination

If you're hearing about a ghost from a young kid, scientists say it's likely just their imagination. "Children are hard-wired to learn through imaginative and pretend play, and therefore they can slip between reality and fantasy much more easily than adults," Aleta G. Angelosante, PhD, a child and adolescent psychiatrist at NYU Langone, previously told Refinery29. "While an adult might dismiss something they see quickly out of the corner of their eye as 'nothing' or have a reality-based explanation, children might insist they saw a ghost or a fairy or some other creature."

"Blind spots" in our vision

If you've ever seen something spooky out of the corner of your eye, then turned to see nothing there, you know that sometimes our peripheral vision just isn't that accurate. As *Psychology Today* explains, each eye has a blind spot about 18 degrees to either side. Our brain compensates for what our peripheral vision can't see, "[making] educated guesses about what we're looking at, and its editing is highly biased by expectations, history, context, and desires." The problem is, sometimes these guesses are wrong, and we think we see things that aren't really there — and some scientists say that "ghosts" can be explained by these wrong guesses.

NEW ARTICLE

Why We Should Believe in Ghosts

By Tok Thompson

31st October 2018

Telling tales of ghouls and spectres can have a surprising benefit by encouraging people to change the way they behave.

Halloween is a time when ghosts and spooky decorations are on public display, reminding us of the realm of the dead. But could they also be instructing us in important lessons on how to lead moral lives?

The origins of modern-day Halloween date back to 'samhain', a Celtic celebration for the beginning of the dark half of the year, it was widely believed, the realm between the living and the dead overlapped and ghosts could be commonly encountered.

In 601 AD, to help his drive to convert northern Europe to Christianity, Pope Gregory I directed missionaries **not to stop pagan celebrations**, but rather to Christianise them.

Accordingly, over time, the celebrations of samhain became All Souls' Day and All Saint's Day, when speaking with the dead was considered religiously appropriate. All Saint's Day was also known as All Hallows' Day and the night before became All Hallows' Evening, or '**Hallowe'en**'. Not only did the pagan beliefs around spirits of the dead continue, but they also became part of many of early church practices.

Lucrative belief

Pope Gregory I himself **suggested that people seeing ghosts should say masses** for them. The dead, in this view, might require help from the living to make their journey towards Heaven.

During the Middle Ages, beliefs about souls trapped in purgatory led to the church's increasing practice of selling indulgences – payments to the church to reduce penalties for sins. The **widespread belief in ghosts** turned the sale of indulgences into a lucrative practice for the church.

It was such beliefs that contributed to the Reformation, the division of Christianity into Protestantism and Catholicism led by German theologian Martin Luther. Indeed, Luther's 95 Theses, nailed to the All Saints Church in Wittenburg on 31 October 1517, was largely a protest against the selling of indulgences.



<Ghost stories are common in folklore in countries like Japan and often have a strong moral message

Subsequently, ghosts became identified with 'Catholic superstitions' in Protestant countries.

Debates, however, continued about the existence of ghosts and people increasingly **turned to science** to deal with the issue. By the 19th Century, Spiritualism, a new movement which claimed that the dead could converse with the living, was fast becoming mainstream, and featured popular techniques such as seances, the ouija board, spirit photography and the like.

Although Spiritualism faded in cultural importance after World War One, many of its approaches **can be seen in the 'ghost hunters' of today**, who often seek to prove the existence of ghosts using scientific techniques.

In Taiwan, for example, about 90% of people report seeing ghosts

These beliefs are not just part of the Christian world. Most, **although not all**, societies have a concept of 'ghosts'. In Taiwan, for example, about **90% of people report seeing ghosts**.

Along with many Asian countries such as Japan, Korea, China and Vietnam, Taiwan celebrates a **Ghost Month**, which includes a central **Ghost Day**, when ghosts are believed to freely roam the world of the living. These festivals and beliefs are often tied to the Buddhist story of the **Urabon Sutra**, where Buddha instructs a young priest on how to help his mother whom he sees suffering as a 'hungry ghost'.



<A month long festival is held in Taiwan where the gates of the underworld are believed to open so the dead can return to the land of the living.

As in many traditions, Taiwanese ghosts are seen either as 'friendly' or 'unfriendly'. The friendly ghosts are commonly ancestral or familial and are welcomed into the home during the ghost festival. The unfriendly ghosts are those that are angry or 'hungry' and haunt the living.

Moral reminder

As a mythology scholar at the University of Southern California who has studied and taught ghost stories for many years, I have found that ghosts generally 'haunt' for good reasons. These could range from unsolved murders, lack of proper funerals, forced suicides, preventable tragedies and other ethical failures.

Ghosts, in this light, are often seeking justice from beyond the grave. They could make such demands from individuals, or from societies as a whole. For example, in the US, sightings have been reported of African-American slaves and murdered Native Americans. Scholar **Elizabeth Tucker**, from Binghamton State University of New York, details many of these **reported sightings on university campuses**, often tied to sordid aspects of the campus's past.

Sightings are often a reminder that ethical lapses can carry a heavy spiritual burden

In this way, ghosts reveal the shadow side of ethics. Their sightings are often a reminder that ethics and morality transcend our lives and that ethical lapses can carry a heavy spiritual burden.

Yet ghost stories are also hopeful. In suggesting a life after death, they offer a chance to be in contact with those that have passed and therefore a chance for redemption – a way to atone for past wrongs.

This Halloween, along with the shrieks and shtick, you may want to take a few minutes to appreciate the role of ghosts in our haunted pasts and how they guide us to lead moral and ethical lives.