



Subjective Paranormal Experiences and Psychology

SPEs, as stated before, are difficult to prove as paranormal due to what psychology has discovered about our capacity to process information and enter altered states of consciousness. When looking at an SPE account, the following well researched psychological effects need to be considered first.

Pareidolia: Seeing Meaning in Random Patterns (or Madonna of the Grilled Cheese Phenomenon)



Ingrained in our brains and cognitive processing is the tendency to find meaning in random patterns. This natural tendency is known as pareidolia and occurs in both our visual and auditory processes. For instance, our brain will naturally see facial features in random patterns of static, smoke, and reflections. This type of visual pareidolia is innate and has to do with our genetic disposition since infancy to detect and discriminate between different faces. Skeptics often use pareidolia to debunk photos of what appear to be ghosts in mist or windows, and they are not incorrect in doing so. Static photos and personal experiences can easily create the appearance of a face in

the dark, a trail of smoke, or other random patterns. If you need to prove it to yourself, go stare at some tree bark. Within a minute, most people will find a pattern that resembles facial features.

Pareidolia can also occur with auditory stimulus and is one of the more difficult psychologically based issues with EVP and the interpretation of its contents. If you are a fan of ghost-hunting shows, you may have noticed that the supposed EVP makes little sense until someone tells you what the EVP is saying. As if by magic, you can usually hear exactly what the person claims they heard. This is part of the brain's tendency to make sense of language. Although we are not often aware of it, we tend to take random noise and process it as language. The result is the interpretation of random noise as a ghostly statement, even when EVP quality is poor.

Hypnagogic Episodes and Night Hag



Another uncommonly known, but researched psychological condition is referred to as a Hypnagogic-Hypnopompic Episode (HE). HE occurs in the initial stages of sleep and can happen by various estimates of 10 to 20% of the population (this rate is higher in countries such as Mexico, which studies suggest have an HE rate closer to 40%). Essentially, humans in the initial stages of sleep can experience full hallucinatory episodes that contain visual, auditory, and tactile (i.e., touch) features.



Worse, most people will believe that they are fully awake during an HE. In truth, both the dream state and waking state are occurring at the same time. Unfortunately, for most people who have them, many HE episodes are indistinguishable from the normal waking state. It is also the case that many HE contain adverse or fearful content.

HE can often serve as a viable explanation for a nighttime-visitation type haunting experience and is difficult to rule out unless the paranormal experience was witnessed by more than one person (which can still have problems, as explained below) (Cheyne & Girard, 2004; Cheyne & Girard, 2007; Cheyne, Newby-Clark, & Rueffer, 1999).

Contagion and Suggestion Effects

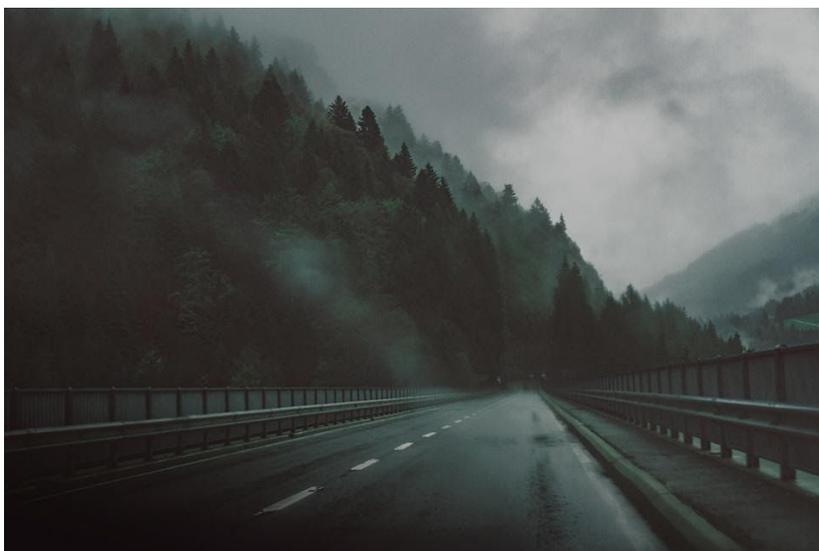


As mentioned before, human beings are much more suggestible than the public generally realizes. Research in contagion has previously shown that up to $\frac{1}{3}$ of people will show psychosomatic (i.e., mentally-produced physical symptoms) due to a research assistant pretending to have a particular flu or virus (Lorber, Mazzoni, & Kirch, 2007). Simple verbal suggestion has been shown to alter memories in approximately $\frac{1}{3}$ of participants in research studies. The truth is that we as

humans are very suggestible, particularly to people we trust. Thus, conversation between witnesses of a paranormal event can sometimes create false memories and beliefs, and even physical experiences to the body that may be psychologically induced.

Case in point, research by Lange and Houran (1997) have demonstrated that degrees of fear can produce a state of hypervigilance (i.e., a highly sensitive state where people pay attention to minute details in their environment), which in turn can feed into noticing small regular noises or events, and subsequently interpreting them as a haunting. These researchers have also found that individuals who are aware that they are entering a “haunted environment” produce significantly more accounts of paranormal activity compared to those who are not aware that a location was labeled as haunted (Lange et al., 1996). We note in both of these cases that all the phenomena reported in these studies were subjective and contained no overt external phenomena (AKA Macro PK, or an apparition).

Memory Error



Work by Elizabeth Loftus, and subsequently other researchers, dealt memory a devastating blow. We would all like to believe that our memories of events are foolproof and kept accurately on file in our heads. Unfortunately, this is not the case. An abundant amount of empirical research from cognitive psychology shows that both recent information



and past information can unconsciously intrude on a memory and replace various details of the event. Formally called *retroactive and proactive memory interference*, simple interactions with people, or something as simple as a single written question, can alter our memory of an event without our knowledge that the memory has been changed. Loftus showed in one particular study that $\frac{1}{4}$ of participants would remember seeing objects or buildings in a film they watched just because a single question asked about the object. The key point is that the object was not in the film. However, participants now clearly remembered it being there (Loftus & Ketcham, 1992).

Interpretation and Confirmation Bias



Finally, we need to be aware of our own belief systems and how we interpret the world through our beliefs. As we stated before, confirmation bias is a universal human phenomena, and we all have tendencies to remember and endorse information that supports our existing beliefs. Taken in conjunction with the factors we have described above, both memory and recall can be affected by what we want to believe and not necessarily what happened.

For instance, Wiseman et al., (2002) conducted a study of Hampton Court Palace by walking participants through the purportedly haunted location and then assessing their experiences. Approximately $\frac{1}{2}$ of 600 participants noted some form of experience that they believed was

paranormal. However, examination of these events showed that people who believed in the paranormal were significantly more likely to report experiences. Sensations included dizziness, smells, a sense of a presence, and intense emotion.