

# WHY DO SOME BRAINS ENJOY FEAR?

Allegra Ringo

## INTERVIEW

This time of year, thrillseekers can enjoy horror movies, haunted houses, and prices so low it's scary. But if fear is a natural survival response to a danger, why would we seek out that feeling?

Dr. Margee Kerr is the staff sociologist at ScareHouse, a haunted house in Pittsburgh that takes all year to plan. She also teaches at two universities. She is the only person I've ever heard referred to as a "scare specialist." Dr. Kerr is an expert in the field of fear. I spoke with her about what fear is, and why some of us enjoy it so much.

### **Q. Why do some people like the feeling of being scared, while others don't?**

---

Not everyone enjoys being afraid. I don't think it's a stretch to say that no one wants to experience a life-threatening situation. But there are a lot of us who really enjoy the experience. First, the natural high from the fight-or-flight response can feel great. There is strong evidence that this is about our brain chemistry. Research from David Zald shows that people have different chemical responses to thrills. One of the main hormones released during scary and thrilling activities is dopamine. It turns out some people may get a greater kick from this dopamine response than others do. Basically, some people's brains lack what Zald describes as "brakes" on the dopamine release in the brain. It means these people are going to enjoy thrilling, scary, and risky situations while others won't.

Lots of people also enjoy scary situations because they leave the people with a sense of confidence. Think about the last time you made it through a scary movie or a haunted house. You might have thought, "Yes! I did it!" So it can boost your self-esteem. But again, self-scaring isn't for everyone. There are lots of reasons someone may not enjoy

scary situations. I've talked to some people who will never set foot in a haunted house because they went to a haunt at a young age and were traumatized. I always advise parents to check out the content and rating of a haunted attraction before bringing a child. The chemicals released during fight-or-flight can work to build strong "flashbulb memories" of scary experiences. If you're too young to know the monsters are fake, it can be something you'll never forget, in a bad way.

### **Q. What happens in our brains when we're scared? Is it different when we're scared "in a fun way" than when we're actually afraid?**

---

To really enjoy a scary situation, we have to know we're in a safe environment. It's all about causing the amazing fight-or-flight response and the flood of adrenaline, endorphins, and dopamine. But the triggers have to come in a safe space. Haunted houses are great at this. They deliver a startle scare by triggering one of our senses with different sounds, air blasts, or even smells. These senses are tied to our fear response. They activate the physical reaction, but our brain has time to process the fact that these are not "real" threats. Our brain is lightning-fast at processing threat. I've seen the process thousands of times from behind the walls in ScareHouse. Someone screams and jumps and then immediately starts laughing and smiling. It's amazing to observe. I'm really interested to see where our limits are. When and how do we really know or feel we're safe?

### **Q. What qualities do "scary things" share across cultures? Or does it vary widely?**

---

One of the most interesting things about studying fear is looking at social ideas of fear and learned fears versus those fears that appear to be more deep-rooted. When we look across time and across the world, we find that people can become afraid of anything. Through learned fear (connecting a neutral experience with a negative result), we can link pretty much anything to a fear response. Baby Albert is the example of

this. Researchers experimenting with the fear response in the 1920s made the poor child afraid of white rabbits. So we know that we can be taught to fear. This means our socialization and the society in which we are raised are going to have a lot to do with what we find scary.

Each culture has its own superhero monsters—the South American Chupacabra, the Loch Ness Monster, Japan’s Yōkai, and Alps (nightmare creatures) in German culture. But they all have a number of qualities in common. Monsters break the general laws of nature in some way. They have either returned from the afterlife (ghosts, demons, spirits) or they are some kind of nonhuman or semi-human creature. Things that break the laws of nature are terrifying. Really anything that makes no sense at all or that looks unlike anything we’ve seen can be scary.

Another shared quality of monsters everywhere is their blurred relationship with death and the body. Humans are obsessed with death. We simply have a hard time imagining what happens when we die. Therefore, each culture has created its own version of the living dead, whether they be zombies, vampires, re-awakened corpses, or ghosts. We want to imagine a life that goes on after we die. Or better yet, figure out a way to live forever. Again, though, that would break the laws of nature and is therefore terrifying. So while the shapes and names of monsters are different, the inspirations behind their designs appear across the globe.

### **Q. What are some early examples of people scaring themselves on purpose?**

---

Humans have been scaring themselves and each other since the birth of the species. Early people used methods such as jumping off cliffs and popping out of dark caves to startle each other. We’ve done this for many different reasons—to build group unity, to prepare kids for life in the scary world, and to control behavior. But it’s only really in the last few centuries that scaring ourselves for fun (and profit) has become a highly popular experience.

My favorite example of an early discovery of the joys of self-scaring is found in the history of roller coasters. The Russian Ice Slides began as long sleigh rides down a snowy mountain in the mid-17th century. Much like they do today, riders would sit in sleds and speed down the mountain. The mountain sometimes included additional man-made bumps to make the ride a little more exciting. The Russian Ice Slides became more sophisticated throughout the 18th century, with wooden beams and man-made mountains of ice. Eventually, instead of ice and sleds, tracks and carriages were built to carry screaming riders across the "Russian Mountains." Even more exciting terror came when creators decided to paint scary scenes on the walls. These shocked and thrilled riders as they passed by. The experiences came to be known as "Dark Rides." People were terrified, but they loved them.

We haven't enjoyed only physical thrills. Ghost stories were told around the campfire long before we had summer camps. The Graveyard Poets of the 18th century wrote of spiders, bats, and skulls. They paved the road for the Gothic novels of the 19th century. These types of stories continue to deliver intrigue, exhilaration, and a jolt of excitement to our lives.

The 19th century also brought the beginnings of the haunted attraction industry. Sideshows or "freak shows," and the museums and houses of "oddities" have existed since the mid-1800s. Maybe the most notable is Barnum's American Museum, operated by P. T. Barnum. Barnum was best known for being half of the Ringling Brothers and Barnum and Bailey Circus. His museum contained things like monkey bodies with fish tails attached, and other characters meant to frighten and startle. As with modern haunts, customers lined up to challenge themselves to enter the freak shows and face the scary scenes and abnormalities. The haunted attraction industry has come a long way from fish tails and plastic bats. Modern haunts include Hollywood-quality sets and a crazy amount of modern technology, all designed to scare us silly.

There's a common belief that if you meet somebody for the first time in a fearful situation, you'll feel more attached to that person than you would if you'd met in a low-stress situation.

### **Q. Is that true?**

---

One reason people love Halloween is because it produces strong emotional responses. Those responses can build stronger relationships and memories. When we're happy, or afraid, we're releasing powerful hormones, like oxytocin, that work to make these moments stick in our brain. So we're going to remember the people we're with. If it was a good experience, then we'll remember them fondly and feel close to them, more than if we were to meet them during some unexciting event. Shelley Taylor discussed this in her article "Tend and Befriend: Biobehavioral Bases of Affiliation Under Stress." She shows that we do build a special closeness with those we are with when we're in an excited state. That can be a really good thing. We're social and emotional beings. We need each other in times of stress. It makes sense that our bodies have evolved to draw us to people we're with when afraid. So yes, take your date to a haunted house or for a ride on a roller coaster. It'll be a night you'll never forget.