

Blog

From AAH! to HAA! When Fear Becomes Funny

A new study from the Recreational Fear Lab illuminates the fine line separating humor and fear

Marc Hye-Knudsen • 13 June 2024



On the surface, fear and humor seem like polar opposite states of mind. Fear is negative, humor is positive; fear is stressful, humor is palliative; fear is serious, humor is... the opposite. The two are such seemingly opposed states of mind that we should hardly ever expect them to interact.

Yet, throughout our lives, they continually do just that. From playing peekaboo with our parents as infants, through scaring play mates for fun when we are children, to laughing after jump scares when watching horror films as adults.

In [a new paper](#) out in the journal *Evolutionary Psychology*, Jens Kjeldgaard-Christiansen, Brian Boutwell, Mathias Clasen, and I offer an explanation to this phenomenon. We synthesize neurobiological, psychological, and evolutionary research on humor and fear, arguing that the two are deeply connected.

We also review five real-world examples of humor and fear intersecting, presenting evidence in favor of our account along the way. The article is [freely available on the journal's website](#), so you can go and read it in full now. Here, I'll give you a quick breakdown of the paper's most important points.

The argument

Evolutionarily, the purpose of fear is to set us into a state of action-readiness to deal with a potential threat. For this reason, it involves a cascade of stress hormones that activate our sympathetic nervous system, preparing us to flee or fight.

Neurochemically, humor does the opposite. Humorous amusement involves dopamine, associated with rewarding experiences, and endogenous opioids, which have a pleasantly soothing and palliative effect. Whereas fear stresses us out, humor cheers us up and calms us down.

While fear and humor are neurochemically each other's opposites, their evolutionary histories are intertwined. [Since Darwin](#), we've known that the evolutionary origins of humor reside in play, a medium through which animals benignly explore situations and practice strategies, such as fight or flight, which would normally be accompanied by fear.

In play, animals play around with violating each other's physical boundaries through playful fighting, wrestling, chasing, and the like. The key to all of these playful physical violations is that they are benign—no one is actually in danger during a play fight, hence it is fun instead of fear-inducing. By playing around with these things, animals learn how to deal with them in a risk-free setting, such that they are prepared for them when they actually have to fight or flee.

Cognitively, humor retains the structure of play. A [wealth of evidence](#) suggests that humor relies on violations. While play consists in purely physical violations, humor can take the form off all kinds of violations, such as the interpersonal violations of [teasing](#), the linguistic norm violations of [puns and wordplay](#), or the social norm violations of [embarrassment humor](#).

Yet, for such violations to strike us as humorous instead of upsetting, they ultimately have to be appraised as benign—that is, something we don't have to worry about. Humor, then, requires two mental judgements: 1) that something is a violation, 2) that it is ultimately benign. This is called the "benign violation theory" of humor, currently [the most well-attested](#) theory of how humor works.

Scary situations constitute a violation. Hence, anything that scares us can be rendered humorous if it is ultimately appraised as benign. The antagonistic relationship between humor and fear in terms of their neurochemistry and physiology in turn makes humor ideal for managing fear in many circumstances.

In our paper, we review of bunch of ways in which scary things can be rendered benignly humorous. Specifically, we focus on five real-world examples of humor and fear intersecting in this way.

Case #1: Peekaboo

In many cultures across the world, one of the first games that parents play with their children is peekaboo. Peekaboo has four basic steps: initial contact (e.g., the parent establishes eye contact with the infant), disappearance (e.g., the parent covers their face with their hands), reappearance (e.g., the parent removes their hands), and reestablishment of contact (e.g., the parent re-establishes eye contact, says “peekaboo!”, and laughs together with the infant).



Figure 1 Picture sequence of a mother demonstrating the four stages of peekaboo with her one-year-old child: initial contact, disappearance, reappearance, and reestablishment of contact.

Peekaboo can be startling and scary to very young infants, but they gradually learn to find it benignly humorous. This is helped along by the game’s repetitiveness, such that the infant comes to know what to expect, but parents also include many cues of benignity in the routine. Beyond smiling and laughing, parents—across cultures—modulate their voice in the same predictable way, speaking softly with a high and variable pitch that infants find soothing.

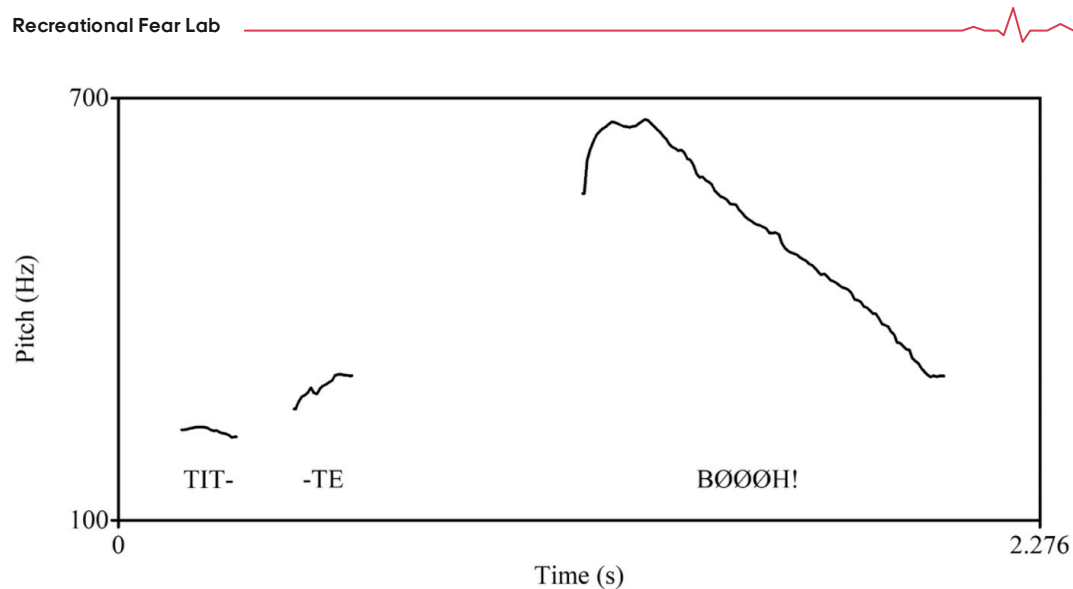


Figure 2 A figure demonstrating the high and variable pitch of a mother performing the Danish peekaboo vocalization “titte-bøh!”

Peekaboo is the first recreational fear activity that many people engage in, setting the stage for later, more elaborate engagement with **recreational fear**.

Case #2: Scare pranks

Another thing that people seem to find humorous across many cultures is scaring others for fun, such as through **scare pranks** ▶. Scare pranks consist of a prankster scaring a victim for the sake of their own amusement, typically by triggering the victim’s startle response.

For instance, the prankster may hide in a room and then jump out to startle the victim once they enter. While the prankster can find the scare prank benignly humorous immediately, the victim needs to go through a process of cognitive reappraisal to find humor in the prank.



Figure 3 Freeze-frames from a 2016 video ▶ of a simple scare prank by the YouTuber David Dobrik. The victim's primary appraisal of threat initially elicits a fearful startle (second frame). This is followed by a reassessment and a secondary appraisal of benignity (third frame), which finally elicits humor (fourth frame).

Most scare pranks are simple and harmless. The viral online versions tend to be much more extreme to compensate for viewers' psychological distance to their victims. In a content analysis of the 100 most popular scare prank videos on YouTube, we found that all pranksters spiced up their scare pranks by using various scare tactics, such as dressing up like a monster, to get a bigger reaction from victims.

Yet, even for these extreme scare pranks, a majority of videos featured a victim who themselves found the scare prank benignly humorous in hindsight, further underscoring the association between humor and fear.

Case #3: Laughter after jump scares

Anyone who has watched a horror film with others or walked through a haunted house with their friends knows that particularly impactful jump scares during such activities are often followed by bouts of laughter. Reviewing the data from a [previous Recreational Fear Lab haunted house study](#), we find that between 74–77% of guests laughed or smiled after a jump scare.

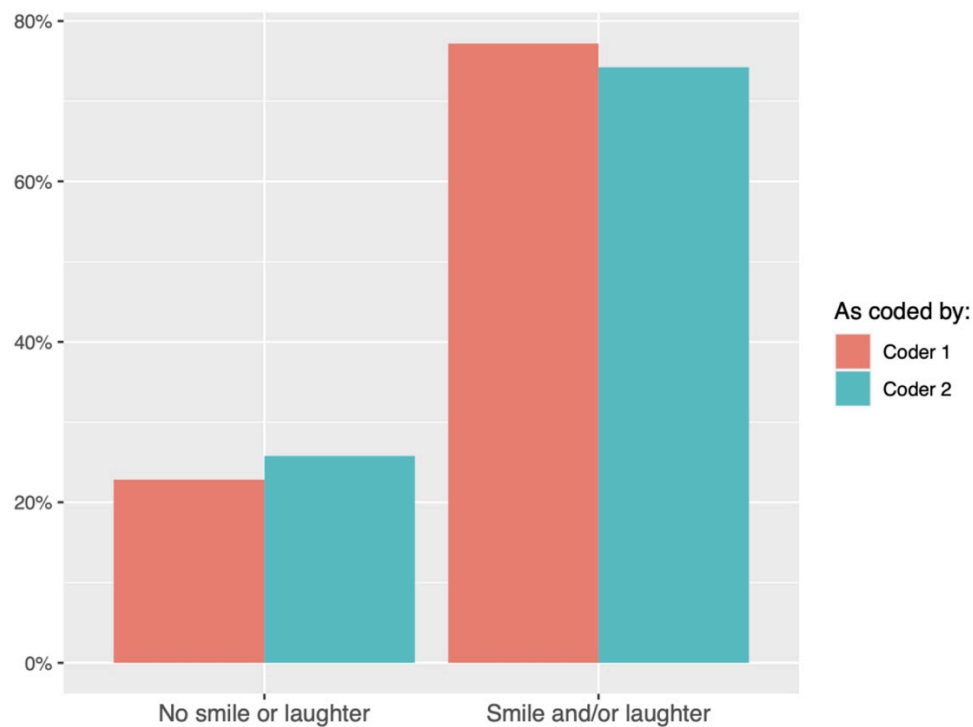


Figure 4 Bar chart showing how often participants at a haunted house attraction ($n = 113$) either smiled and/or laughed after a jump scare. Data taken with permission from Andersen et al. (2020). Two independent coders reviewed security camera footage from three different locations with jump scares at the haunted house, noting participants' reactions after each.

Horror media, such as a horror film or a haunted house attraction, are designed to immerse audiences in their narrative worlds to increase their fear responses to depicted events. However, the startle responses elicited by jump scares tend to pull audiences out of the narrative worlds of the horror media, freeing them up to find their own fear and their startle responses benignly humorous.

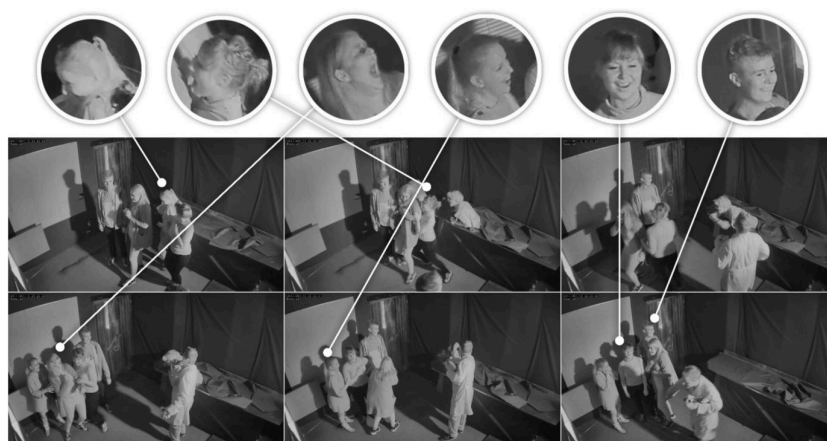


Figure 5 Freeze-frames from surveillance-camera footage from a research study at Dystopia Haunted House in Vejle, Denmark (Andersen et al., 2020). After being startled by a zombie jumping out at them (frame 2), the guests display fear and flee (frame 3). However, as they regain composure, each of them finds humor in the situation and laughs (frames 4–6).

As the volunteers at the haunted house like to put it, “First they scream, then they laugh.”

Case #4: Horror-comedy

The genre of horror-comedy demonstrates that some things, such as monsters, can be scary in one context, funny in another. Artists achieve this through **manipulating audiences’ sense of psychological distance** to depicted events.

Psychological distance has three relevant dimensions here: social distance (how relatable and sympathetic are the affected characters?), hypothetical distance (how realistic is it?), and spatial distance (how far away do the depicted events seem by way of shot-scale?).



Figure 6 *The same event, an encounter with Frankenstein's Monster, is scary in the original 1931 Frankenstein film (left) but benignly humorous in the 1948 horror-comedy Abbott and Costello Meet Frankenstein (right).*

A horror comedy like *Abbott and Costello Meet Frankenstein* presents the monster with the psychological distance conducive to comedy, as opposed to how he is presented in the original *Frankenstein* film. In Abbott and Costello's version, the characters affected are unrelatable and unsympathetic (providing social distance), the film involves comically farcical acting and self-aware meta-commentary (hypothetical distance), and the monster is shot with longer shot-scales (spatial distance).

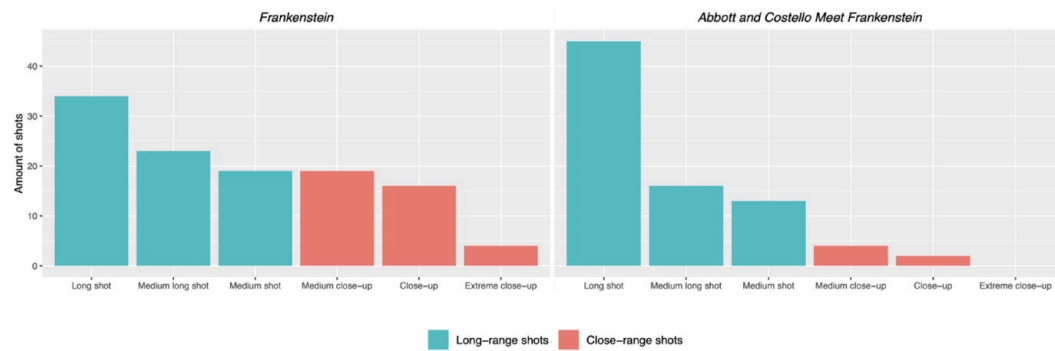


Figure 7 While a horror film like *Frankenstein* can induce fear in audiences by lowering spatial distance, depicting its monster with close-range shots, *Abbott and Costello Meet Frankenstein* opts for the spatial distance conducive to finding the monster benignly humorous.

The result is that the monster, in Abbot and Costello's depiction, is benignly humorous as opposed to legitimately scary to audiences.

Case #5: Coping

Finally, people can use humor to cope with fear. Taking a distant perspective to the things that scare us allows us to transform them into benign sources of humorous amusement, which can be used as a way to regulate our fear response.

In a previous [Recreational Fear Lab haunted house study](#), 131 participants at a haunted house tried to minimize their own fear response. In post-haunt interviews, 19.1 percent of these described using humor for this purpose. Analyzing their accounts of using humor in this way, we find that they describe using both cognitive tactics (reframing), behavioral tactics (deliberately smiling and laughing), and social tactics (joking with others).

Type	Exemplary descriptions from research participants
Cognitive	"I tried to think of it as humorous... I think I tried to imagine that it was a little bit silly what they were doing"
Behavioral	"I just smiled the whole way through"
Social	"We just laughed a little and made funny comments to each other while we walked through"

Self-described tactics employed by guests as a haunted house when using humor as a coping strategy against fear. Data taken from [Clasen et al. 2019](#).

The takeaway

Our cases all demonstrate how contextual cues, cognitive reframing, and psychological distance can be used to render things that would otherwise scare us benignly humorous. Becoming aware of this can help us harness the power of humor as a tool for regulating fear. This can be part of the process of finding **the sweet spot** of fear during recreational fear activities. But it can also be part of a therapeutic practice.

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