

## Blog

# What Titans Tell Us About Horror's Appeal

Guest blog post by Edgar Dubourg

Edgar Dubourg • 29 February 2024

In the vast universe of horror, not all monsters grip our psychology with equal strength. Picture, if you will, a horror movie where the chief terror is a creature with the appearance... of a table. It is unlikely to send shivers down anyone's spine, but why? Similarly, *Attack of the Killer Tomatoes!* presents a concept where tomatoes turn malevolent, aiming to instill fear. Despite its attempt to blend horror elements, the movie's premise of threatening tomatoes fundamentally struggles to evoke the intended terror. This brings us to ponder: in a genre filled with mythical beasts and undead horrors, why do some monsters stir our fears, while others, despite their menacing intentions, fail to leave a lasting impact? Why do titans, zombies, and the like dominate our stories, while the idea of 'table monsters' or killer tomatoes fall flat? Why do specific monsters capture our fascination more intensely than others? I have a hypothesis on this matter that, I believe, hasn't been thoroughly investigated yet, which I'll discuss throughout this post.

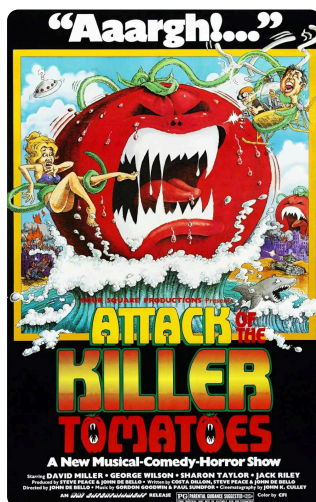


Figure 1

First, imagine a world where fear operates on a single system, crafted by evolution to steer us clear from danger. In such a world, you'd expect the deadliest predators (and monsters) to be the most fascinating, especially for those with a knack for morbid curiosity. After all, what's more thrilling for the securely placed thrill-

seeker than learning about the greatest threats? Yet, our fear system doesn't quite follow this logic. If it did, we might see horror movies starring cigarettes as the main villain—a jest, of course, but it highlights a deep inconsistency.

This idea becomes even more apparent when we look at animal threats. Statistically, dogs kill more humans each year than the more feared tigers, lions, spiders, or sharks. Yet, our most common fears and the monsters that populate our stories don't align neatly with these statistics. This discrepancy suggests that a singular fear system, calculating the deadliness of a threat to dictate our interests, falls short of capturing the complexity of what truly fascinates us. Our fascination with monsters in horror seems to tap into something deeper than just a survival calculation.

These discrepancies in fact highlight a mismatch in our fear system: it is not updated to modern threats like dogs, cigarettes or cars. This points to our fear mechanisms being shaped by past environments rather than present realities.

This observation is particularly striking in the context of fictional narratives. Imagine living within the big walls of Eldia, as depicted in *Attack on Titan*. You're in a society where the presence of Titans is a constant threat—enormous, humanoid giants that not only tower over humans but exhibit a horrifying hunger for them. These Titans, often seen walking in groups, possess not just a terrifying size but also exposed flesh, and sometimes, unmistakably malicious intentions toward humanity. Even if you had the knowledge that, say, mosquitoes are statistically more lethal in this imaginary world you inhabit... it's the Titans that would likely dominate your fears.



Figure 2

Together with Valentin Thouzeau, Nicolas Baumard, and other colleagues, we've developed a broad cognitive hypothesis about fiction's appeal that might explain why certain fictional threats, like Titans, captivate us more than others. This

hypothesis revolves around the modularity of fears: the idea that we have multiple fear systems, each evolved for specific survival purposes as *cognitive adaptations*. Here they are:

**Fear of Predators:** The fear of predators is deeply ingrained in the human psyche, stemming from our ancestors' need to survive encounters with predators such as large, carnivorous animals. This fear system is specialized in recognizing visual and auditory cues that signal an immediate physical threat, such as the sight of sharp teeth, the sound of growling, or the silhouette of a large predator lurking in the shadows. The evolutionary rationale for this fear is straightforward: those who successfully avoided predators had a higher chance of survival and, consequently, of passing on their genes. This fear has been shaping human behavior for millions of years, since the time our primate ancestors lived in environments where large predators were a constant threat. An intuitive example of this fear at work can be seen in our instinctive reaction to snakes or spiders, which, despite posing little real danger to most people today, still trigger a deep-seated fear response in many.

**Fear of Aggressors:** The fear of aggressors, specifically organisms that resemble humans but harbor hostile intentions, is rooted in our social evolution. Early humans lived in complex social groups where the ability to discern friend from foe was crucial for survival. This fear system focuses on behavioral cues, such as facial expressions, imminent attack behaviors, or tone of voice, to detect potential threats from within the community. The evolutionary rationale here is based on the avoidance of potentially lethal conflicts. Recognizing a disguised threat in a seemingly benign interaction could mean the difference between life and death, leading to a heightened state of alertness and preparedness for social manipulation or aggression.

**Disgust:** Disgust as a fear response targets potential sources of infection, decay, or contamination. Its proper domain includes spoiled food, bodily fluids, and signs of disease, such as lesions or unusual skin discolorations. This response emerged as a protective mechanism to prevent the ingestion of harmful substances and the spread of infectious diseases, which were significant mortality factors before the advent of modern hygiene and medicine. Disgust's evolutionary roots can be traced back to early hominids and even non-human ancestors. The visceral reaction to disgust, including nausea and the urge to withdraw, is an intuitive reminder of its purpose: to keep us safe from invisible threats that could compromise our health.

**Fear of Coalitions:** The fear of coalitions is tied to our ancestors' need to navigate the complex social landscapes of early human societies. This fear system is attuned to the dynamics of group interactions, alerting us to the presence of alliances that could pose a threat to our own status, resources, or safety. The evolutionary rationale behind this fear stems from the competitive nature of human social groups, where being outnumbered or outmaneuvered could result in loss of status, resources, or even life. This fear likely developed during our evolution as social

primates, where understanding and navigating social hierarchies were essential for survival and reproduction. An example of this fear in action is the anxiety some may feel when facing a united front of colleagues, a modern manifestation of an ancient survival mechanism.

Understanding these fear mechanisms through an evolutionary lens allowed us to compartmentalize the human mind more effectively, highlighting how specific inputs—such as sharp teeth for predators, aggressive postures for aggressors, signs of decay for disgust, and group strategies for coalitions—trigger distinct fear responses.

But why does understanding the modularity of the fear system help us comprehend the compelling nature of Titans or other monsters? To fully grasp this, we need to introduce a second hypothesis: Steven Pinker’s “cheesecake hypothesis.” This hypothesis suggests that just as cheesecake is designed to appeal to our innate preferences for sweet and fatty foods—combining ingredients in a way that’s irresistibly appealing—fiction can craft scenarios and creatures that combine elements in ways that nature never does.



Figure 3

By leveraging the idea that the human fear system is modular—evolved to respond to specific threats like predators, disease, and aggressive coalitions—alongside the cheesecake hypothesis, we can see why Titans are so uniquely fascinating and horrifying: Titans, with their grotesque appearances, massive size, and humanoid forms, simultaneously trigger *multiple* fear modules at once! They are big predators on a scale we never encounter in nature, they often bear signs of disease or decay (through their grotesque and sometimes mutilated appearances), they exhibit aggressive behavior typical of human enemies, and they attack in groups. Just as a cheesecake combines sugar, fat, and texture to create a superstimulus that’s more appealing than its individual components alone, Titans combine elements that trigger our fear modules in a superstimulus of terror. This combination of fear triggers is more compelling and terrifying than any single stimulus alone.

**Figure 4**

Together, these hypotheses—the modularity of fear and the idea that stimuli combining multiple terrifying elements are more compelling—offer a comprehensive explanation for why Titans captivate our imaginations. But this hypothesis can explain more. Take, for example, the Xenomorphs from the *Alien* franchise. These creatures are the epitome of predatory fear with their stealth, speed, and lethal abilities, designed to hunt and kill with terrifying efficiency. They also invoke disgust with their grotesque, biomechanical appearance and their method of reproduction, which involves violating the human body in a deeply disturbing way. The relentless nature of their hunt and the way they infiltrate human spaces echo the fear of aggressive coalitions, albeit in a form that is singular yet feels coordinated through the hive mind. In *The Walking Dead*, zombies (or walkers) also encapsulate several of these fears simultaneously. They represent the predator, constantly hunting the living; they are the aggressor, with their sheer numbers acting as a hostile coalition threatening to overwhelm survivors at any moment. Moreover, their appearance and the manner in which they spread infection, through bites and scratches, directly tap into our fear of disease and evoke a strong sense of disgust. It is particularly telling that, towards the series' end, both characters and spectators feel a heightened sense of fear towards the walkers, marking a new pinnacle of terror. Why this intensified fear? Walkers begin to exhibit behaviors that suggest intentionality, such as using tools or strategically breaking barriers. This perceived intent to harm activates our fear of deliberate aggression, adding a new layer of fear atop the existing ones of predation, disgust, and coalition. This evolution in the walkers' behavior represents a new step in fear because it compounds on the three other fear modules that were already engaged. Another vivid example is found in Stephen King's *It*, where the creature Pennywise embodies multiple fears, because it takes both forms of an aggressor and a predator, stalking and preying on the children of Derry with its sharp teeth and claws and menacing demeanor. By activating more than one fear module, these fictional monsters engage our psyche on multiple levels, making them memorably terrifying and compellingly horrific.



Figure 5

Our exploration into the appeal of certain monsters in fiction leads to a prediction: monsters that activate more than one fear module are more attractive to horror fans (those with a high level of morbid curiosity). This hypothesis remains to be rigorously tested and compared against other hypotheses aiming to answer the same question: why do some fictional monsters achieve greater cultural success?

To wrap up, let me say that the fascination we have with these complex creatures of fiction highlights just how creative the human mind is. It can create situations that tap into our deepest fears in ways reality just can't. In real life, threats tend to poke at one or two of our fear responses at most, but they're nothing compared to the intricate web of fears that fiction can elicit. Take a lion—it might set off alarms for our fear of predators, but it doesn't have the sinister motives we often assign to villains with human traits. Or consider a virus, which might disgust us or make us afraid of getting sick, yet it lacks the immediate, physical danger posed by a predator. Fiction breaks free from these constraints, dialing up the features (think sharper claws or deadlier diseases) and, maybe more importantly, *mixing* these features (combining the traits of a hunter with those of a disease) all in one formidable foe. It is, I believe, this ability to mix and match elements of fear that captivates us, proving just how good creators are at crafting a singularly intense—albeit fictional—emotional experience.

*This guest blog post is written by friend & collaborator of the lab, **Edgar Dubourg**. Edgar studies fiction using insights from both the natural sciences (behavioral ecology, evolutionary psychology, cognitive neuroscience) and the humanities (literary theory, literary history, cultural studies). He is interested in how cognitive adaptations and adaptive sources of variability impact both the universality and the variability of cultural preferences for stories.*

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