

# Why modern horror stories house stone age monsters

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## Darwin and Dracula

SUPERNATURAL HORROR FICTION is fiction designed to scare and disturb its audience, using supernatural props. The paradox of the genre – why do people enjoy the stuff? – is usually explained by recourse to Freud, but Darwinian psychology, with the aid of cognitive science, is better suited for the purpose.

Horror fiction appears to be a pleasure-and-revulsion technology, one that activates or exploits adaptive threat-avoidance mechanisms (notably fear and disgust). And since fear is universal, we might expect tales of fear to be the same. (Of course, reducing the horror story to fear is like reducing chili con carne to capsaicin – yet fear is a defining element of the genre.)

Horror stories simulate dangerous situations and give us a vicarious taste of being hunted prey without the danger that is normally the cause of fear. Horror stories set our threat detection systems on high alert, keeping us on the edge of the seat while we scan the fictional environment for predatory monsters.

The monsters of horror fiction often resemble ancestral predators, presumably because we are wired to react quickly, unconsciously and effectively to such threats. In Timothy Ketelaar's words, "[horror's] supernatural monsters are depicted as little more than solitary ambush predators dressed up in culturally contrived monster attire" (2004, p. 740).

## We see dead people

*The cognitive study of religion explains the widespread belief in ghosts, and why ghost-stories apparently never die. By extension, it explains why even hardened skeptics can get a thrill out of supernatural horror, since the well-told horror tale keeps our ADD on red alert.*

GHOSTS ARE EVERYWHERE. They are natural by-products of human cognitive architecture (J. L. Barrett, 2004), and they are found in all cultures (Atran & Norenzayan, 2004).

Our built-in HADD, or hyperactive agency detection device (J. L. Barrett, 2004), constantly, unconsciously and hyperactively scans the environment for agents (e.g. animals). Yet this tool is a veritable spook generator. As J. L. Barrett observes, "When hearing a bump in the night, our first impulse is to wonder *who* caused the noise and not *what* caused the noise" (ibid., p. 31).

The universal success of ghosts is explained by the concept of MCI, or "minimally counterintuitive" agent (ibid., p. 22). The MCI agent violates one or a few of our unconscious ideas about the world, and is thus very memorable and easy to transmit. Like most other monsters, which are merely "tweaked" animals, ghosts are "taxonomic anomalies" (Atran & Norenzayan, 2004, p. 715) which violate our intuitive ontology.

## Peek-a-BOO

*The impulse to actively seek out horror stories may be a variant of exploration or play, a way to hone survival skills.*

AS ANY PARENT knows, toddlers love games that are just a little bit scary and thrilling. Peek-a-boo, here comes daddy the monster, hide-and-seek, catch, etc. Many such games involve hiding, chasing, and surprising – even scaring. It would appear that our love of "safe thrills" is a natural instinct.

In their paper on mammalian play, Špinka, Newberry and Bekoff suggest that play is "training for the unexpected" (2001, p. 141). They suggest that play has adaptive value and that it serves to give its participants locomotor versatility and emotional flexibility. Play is a way to rehearse real-life dangers without any serious risk.

While motor systems are (usually) disengaged when we read, watch or listen to horror stories, we are emotionally involved and may thus fine-tune our emotional responses (and maybe perceptual skills).

As Isaac Marks and Randolph Nesse put it: "Millions flock to be thrilled by horror movies, the big wheel, tightrope walkers, and the like. Perhaps this is a form of play behavior, like so many other enjoyable games that help us deal better with real problems when the time comes" (1994, p. 259).



We stay alert and alive in the vanished forests of the world ...  
E. O. Wilson (*Biophilia*)

## Homo Timidus

*Monsters are non-randomly distributed and pretty disgusting.*

IT IS WELL-DOCUMENTED that fear is "more easily linked to certain cues than to others" (Marks & Nesse, 1994, p. 248; see also Öhman & Mineka, 2001), and that these cues are usually ones that constituted threats in the environment of evolutionary adaptedness. A child might fearlessly attempt to squeeze a fork into an electrical outlet, while at the very least keeping its distance when seeing a dangerous animal in a zoo.

The "prepared learning" (Öhman & Mineka, 2001) seen in the ease with which children acquire fear of e.g. snakes and spiders gives a "nonrandom distribution of fears" (Marks & Nesse, 1994, p. 255). It would seem that tellers of horror stories instinctively know this, since so many monsters resemble ancient threats. And as horror movie director John Carpenter has noted, "What scares me is what scares you. We're all afraid of the same things. That's why horror is such a powerful genre" (quoted in McCarty & McLaughlin, 2003).

STEVEN PINKER HAS suggested that art is a kind of "pleasure technology," one that presses our "pleasure buttons," just like cheesecake or pornography (1999, 525). Contemporary horror fiction might be a sort of pleasure technology in reverse, a kind of rotten meat for the mind. It seems that from horror fiction, we get pleasure via fear, anxiety and revulsion.

So many monsters of horror fiction are disgusting as well as threatening; indeed, their very yuckiness is threatening. Paul Rozin and colleagues have identified the major disgust elicitors (Rozin, Haidt & McCauley, 1999), all of which occur frequently in horror stories, including animals, bodily secretions, violations of the body, and death. Valerie Curtis and Adam Biran (2001) see disgust as an adaptive mechanism, as a kind of "intuitive microbiology" to protect us against disease. In this view, many horror monsters are disgusting because they look like disease carriers (slimy, mutilated, more or less animal, more or less dead, etc.).

The allure of disgusting and threatening monsters may partly lie in the intellectual kick we get out of "cheating the system," of activating the fear and disgust systems artificially.

## Universal Monster

*Quantitative cross-cultural literary study might expose a Universal Monster lurking in the depths of our minds, a monster stemming from the East African savanna rather than contemporary Western society.*

MOST HORROR SCHOLARSHIP focuses on the cultural contingency of the monster (e.g. Skal, 2001), yet arguably the most salient feature of the genre is its constants.

Quantitative, cross-cultural and cross-temporal analysis of horror literature may inform evolutionary psychology by providing catalogues

of universal fears. In analyzing a large corpus of scary stories, we would expect to find antagonists (monsters) which threaten human fitness. And in an evolutionary perspective, we would expect to find ancestral threats, e.g. dangerous or threatening animals (including humans). Enlightened by cognitive studies of religion, we might expect these animals to be "tweaked" for maximum interest. And based on existing horror scholarship (notably Carroll, 1990) we would expect the antagonists to be dangerous and disgusting.

An admittedly preliminary and superficial (qualitative) study supports these predictions. Horror stories from

around the world evince an abundance of dangerous and disgusting animals or animal-like creatures (often composite creatures, e.g. werewolves) and ghosts. The Universal Monster is probably a set of characteristics pertaining to predator animals (e.g. average mammalian size, eyes, sharp teeth, claws), rather than any one clearly defined animal. As H. C. Barrett notes, "To date, no evidence for evolved perceptual templates for true predators on humans has been found" (2005, p. 207). At any rate, Barrett's "fast-moving mammalian predators" (ibid., p. 201) are ubiquitous in horror fiction.

## Return of the repressed

*Psychoanalytic horror study claims an often unwarranted crypto-sexual dimension to the genre, and disengages "horror fear" from "real fear."*

IN THE FREUDIAN view of horror fiction, often derived from Freud's classic "The Uncanny" (1955/1919), the fear or anxiety that horror elicits is a necessary price for watching dramas of the repressed played out in disguise, not an end or even pleasurable in itself, as I argue. This is radically stated by one hard-line Freudian critic: "The sensual reaction of horror is not the related to the anxiety we feel when faced with a real or imagined danger; on the contrary, it is an erotic anxiety connected with our forbidden fantasies" (Schubart, 1993, p. 74, my trans.).

In my opinion, the dramas that are played out in horror fictions are more "ancestral" than psychosexual; they are dramas of survival.

## Fight or flight

*We have evolved machinery for threat detection and handling, which is exploited by horror fiction. A biochemical payoff is probably involved in our attraction to the genre.*

THE FEAR RESPONSE is a quick and dirty one (LeDoux, 1996) and largely immune to higher-level cognitive control (Öhman & Mineka, 2001). We tend to react strongly and fearfully to even minimal cues of perceived danger, since a false positive is less costly than a false negative (Marks & Nesse, 1994). The detection of a threat prompts the fight-or-flight response; depending on the threat, an animal can choose to fight, take flight, or freeze. The release of epinephrine (or adrenaline), a stress hormone chemically similar to amphetamine, sets the body in a state of emergency, prioritizing some biological functions over others. The "reward chemical" dopamine is also released by aversive stimuli, and so horror may be a way to enjoy the benefits of dopamine release without the dangers required in nature. And just like eating chili peppers stimulates the release of endorphin, an opiate biochemical compound, so might consuming horror fiction give us a natural "high."

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Land of the Dead (2005)  
Universal Pictures

## Credits

The central monster is created by Patrick Leis ([www.patrickleis.dk](http://www.patrickleis.dk)) and is featured on Dennis Jürgensen's horror tetralogy *Relief* (Tellerup, 1993), from which I have borrowed the expression "Homo Timidus."

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Van Helsing (2004)  
Universal Pictures