

What Are You So Scared About?:

Understanding the False Fear Response to Horror Films

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When a horror movie delivers a scare to an audience member, it is able to achieve something that is entirely illogical; it has made someone scared of something that poses no threat. So what is the logic behind a horror film? What aspects make a horror movie, something that can pose no physical threat, scary? In order to solve this question, many different aspects of filmmaking in horror will be looked at, including filmmaking techniques, psychological manipulation through storytelling, and the exploration of certain cultural elements in horror films that contextualize the fears a society has. By analyzing the different aspects of horror, we can understand how and why a movie is able to override the rational side of a viewer's brain and make them scared. We can then understand why these aspects cause the body to have a physical reaction to the false threat, and why some people respond more intensely to horror than others.

The goal of any movie is to elicit some sort of emotional response in the audience observing the film, and this is no different for horror movies. However, instead of a joy or sadness response, the horror movie aims to cause an observer to feel some sort of fear -- whether that be an immediate physical fear or longer-lasting psychological distress. Scaring people may sound simple, however it is actually a pretty complex process, as the film must be logical enough for the audience to buy into, allowing them to become immersed in the movie. Therefore, in order to override the logical side of an audience member's brain, horror films must construct scripts that are horrific in their content, and use film techniques and sound design in order to bring these horrors to life.

In order to achieve the goal of scaring an audience, many horror film creators use techniques specific to horror films in order to build suspense, dread, discomfort, and finally deliver the scare. These techniques encompass all aspects of film, utilizing visual, auditory and

editing effects in order to create suspense in a scene that may seemingly have none on paper.

One of the most famous horror directors, Alfred Hitchcock, had many signature film techniques that he used in multiple films in order to create suspense. One of the most prominent techniques used was Hitchcock's inclination to use the camera as a set of voyeuristic eyes rather than using it to show what is happening. For example, in *Psycho*, Hitchcock uses the camera to force the viewer into Norman Bates's point-of-view when he watches Marion Crane undress. Putting the audience in this position not only reminds them of the fact that they, as movie watchers, are voyeurs, but also puts them into the headspace of Norman Bates and reveals information to the audience that the main character, Marion, doesn't know. This helps to build the suspense that Hitchcock is famous for, using a technique known as the Kuleshov Effect, where audiences will derive more meaning from two sequential shots than they would from one lone shot.¹ The technique was developed by Lev Kuleshov, who was experimenting with juxtapositioning and shot assembly.² "In his experiment, Kuleshov cut an actor with shots of three different subjects: a hot plate of soup, a girl in a coffin, and a pretty woman lying in a couch. The footage of the actor was the same expressionless gaze. Yet the audience raved his performance, saying first he looked hungry, then sad, then lustful."³ This technique has been used by many filmmakers of all genres since its creation, and is a staple in basic cinematography.

One of the most important visual effects that a horror movie must use in order to create suspense in a scene is the lighting. Lighting in horror films can be done in many different ways, but there are some similarities in the techniques used by many horror filmmakers. For example,

¹ Gabriel Moura, "The Kuleshov Experiment." Elements of Cinema, <http://www.elementsofcinema.com/editing/kuleshov-effect.html>.

² Ibid.

³ Ibid.

low-key and chiaroscuro lighting are typically the types of lighting that a horror film is using. These lighting styles tend to be more dramatic and cause more shadows than their high-key counterpart. They can also help a horror filmmaker control who or what the audience is seeing in a scene, which in turn causes tension and suspense in the audience. One of the most common and effective lighting techniques is called uplighting, where a character's face is lit from below, rather than straight-on. The shadows that uplighting creates on the face heavily distort facial features and causes the audience discomfort because humans are accustomed to sunlight, which shines from above onto the face.⁴ Uplighting is the reversal of the sun's light and completely unnatural, which tends to make the audience feel unnerved. A few examples of films where uplighting is used particularly well are *Frankenstein*, *Battle Royale*, and *The Blair Witch Project*. Another lighting technique that can be used to create tension is backlighting. Backlighting allows a character, typically the perpetrator of whatever horrific act is occurring, to act without revealing his/her/its identity. This causes tension for the viewer because the object in silhouette is unknown, and therefore a threat. A few movies that use backlighting and the silhouette to their advantage are *Lights Out* and *A Nightmare on Elm's Street*.

The colors that are used in a horror film can also be important to building suspense and establishing themes that relate to the film's plot. Red, for example, is a staple color used in many varieties of horror films because it tends to remind one of the obvious; blood.⁵ In addition, red can be used in a variety of ways to emphasize certain themes in film. *Suspiria* was a film that utilized the color red throughout the entirety of the film to subtly foreshadow the blood that

⁴ V Renée, "Horror Lighting 101: How to Use Uplighting in Fresh, New Ways to Scare Your Audience." No Film School, October 27, 2018,

<https://nofilmschool.com/2018/10/horror-lighting-101-how-use-uplighting-fresh-new-ways-scare-your-audience>.

⁵ V Renée, "5 Lighting Techniques You Can Use on Your Next Horror Film." No Film School, 26 Apr. 2018, <http://nofilmschool.com/2018/04/5-lighting-techniques-you-can-use-your-next-horror-film>.

would be spilled in the Tanz Dance Academy. *Suspria*'s director, Dario Argento, used a "garishly psychedelic color palette, which mixes all this red with electric greens and blues and jagged black-and-white Expressionist patterns."⁶ This color palette is actually inspired by the bold colors in Walt Disney's *Snow White and the Seven Dwarfs*, and is important to developing the dreamlike and surreal atmosphere that helps to build to *Suspria*'s aesthetic.⁷ Another film that used color as a stylistic choice is *Green Room*, which used the color green heavily throughout the film. Part of the reason green was used so heavily throughout the film is because it emphasizes the band's (The Ain't Rights) entrapment in the greenroom of the club they perform at, since they are repeatedly forced back into this location when they are attacked by a variety of neo-Nazis throughout the film. In addition, the stylistic green filter used tends to cast a sickly and nauseating glow over the cast and scenery, helping to make the greenroom the Ain't Rights are trapped in more claustrophobic and unnerving.

While visual techniques can certainly cause tension and build suspense in the audience, sound is a particularly powerful fear-building tool that horror filmmakers use. Horror films use a mix of diegetic and nondiegetic sound in order to create suspense in the audience. There are certain sounds that trigger fear responses in almost all humans, such as animal distress calls or screams, as these sounds tend to cause the audience to feel as though there is an immediate threat.⁸ In addition to these sounds, horror directors may choose to use infrasound in their pieces in order to automatically create a feeling of fear and discomfort in audience. Infrasound is a long

⁶ Aja Romano, "How *Suspria* Turns the Color Red into a Plot Point." Vox, November 09, 2018, <https://www.vox.com/culture/2018/11/7/18056244/suspria-red-meaning-aesthetic-luca-guadagnino-dario-argento>.

⁷ David E. Williams, "Flashback: *Suspria*." An International Publication of the ASC, February 25, 2019, <https://ascmag.com/articles/suspria-terror-in-technicolor>.

⁸ Daniel T. Blumstein et al. "Do Film Soundtracks Contain Nonlinear Analogues to Influence Emotion?" PubMed Central, Last modified May 26, 2010, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3001365/>.

sound wave that has a frequency under 20 Hz, which is below the range of what humans can hear.⁹ Though infrasound is not noticeably detectable, there have been a few studies that have shown the effects infrasound can have on those who are experiencing it, even if they are unaware of its presence. A study done by British scientists in 2003 exposed 750 people to the effects of infrasound by including it in certain musical pieces during a concert.¹⁰ The results of this study were that 22% of the audience members reported that they experienced something unusual when they listened to songs that included infrasound, even though they were not told which songs included these sounds.¹¹ The unusual experiences the audience members claimed they had felt included: “feeling uneasy or sorrowful, getting chills down the spine or nervous feelings of revulsion or fear.”¹² The reactions that people have to these sounds combined with the fact that they are hard to consciously detect makes them a perfect mode of creating a feeling of unease in an audience member, especially because these sounds can often make one feel as though they are experiencing something paranormal.¹³ For this reason, infrasound-like low-frequency sounds were rumored to be used in *Paranormal Activity* in order to make the audience feel as though the home was haunted.¹⁴ A similar, yet not quite infrasound level, type of noise that instills the same sort of unease in the audience are the ambient sounds that are experienced in the movie *Eraserhead*. By using infrasound, sound designers and horror directors manipulate the human

⁹ Kate Ramsayer, "Infrasonic Symphony." *Science News* 165, no. 2 (January 10, 2004): 26, http://www.phschool.com/science/science_news/articles/infrasonic_symphony.html.

¹⁰ Patricia Reaney Reuters, "The Fear of 'Haunted' Houses Explained." ABC News, September 8, 2003, <http://www.abc.net.au/science/articles/2003/09/08/941414.htm?site=scie&topic=latest>.

¹¹ Reaney Reuters, "Haunted Houses Explained."

¹² The Associated Press. "Infrasound Linked to Spooky Effects." NBC News, September 07, 2003, http://www.nbcnews.com/id/3077192/ns/technology_and_science-science/t/infrasound-linked-spooky-effects/.

¹³ Reaney Reuters, "Haunted Houses Explained."

¹⁴ Justin Morrow, "The Science of Silence: Disquieting Uses of Infrasound in Movies." No Film School, June 21, 2017, <https://nofilmschool.com/2017/06/disquieting-uses-infrasound>.

body in order to create the feeling of unease and dread that is needed in order to begin overriding the brain's logical side, making audiences easier to scare.

The score of a film is an absolutely essential part of building suspense in the majority of horror films, the exception to this being films that fall in the "found footage" genre. Film scores, such as the one from *Halloween*, can evoke fear in the audience as soon as the first, terrifying note is played. Horror film score composers have a lot of tricks up their sleeves when it comes to manipulating the audience's emotions. Aside from their usage of low-frequency sounds similar to the frequency of infrasound wavelengths, those who compose film scores tend to use non-traditional instruments in order to create a horrific soundscape. These soundscapes can include the screams of humans and animals in order to trigger primal fear and distress responses in our brain unconsciously.¹⁵ A study done on human responses to nonlinear sounds in film soundtracks determined that "nonlinearities...seem to be broadly evocative in vertebrates and their analogues can be used to influence human emotions."¹⁶ This means that horror movie composers can use all kinds of nonlinear noise, screams, unusual instrumentation and unusual harmonies to elicit a natural reaction of fear.¹⁷ The study cited the soundtracks for *The Exorcist* and *The Shining* as soundtracks that had some of these nonlinearities specifically.¹⁸

These film techniques all become particularly powerful when they are used in conjunction with a technique called a jump-scare. The jump-scare is a technique that is used in horror films across all genres, and has even been used in other types of films, such as dramas or comedies. This type of technique tends to cause some of the more physical reactions to horror

¹⁵ Blumstein, "Nonlinear Analogues."

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

than other types of scares. This is because the nature of the jump-scare allows it to prey on an evolutionary reaction that exists in many different species; the startle response. According to psychophysicologist Christian Grillon, sudden sound, light, and touch can cause a startle response, and this response can be over 100 percent stronger in those who are already in a state of heightened anxiety.¹⁹ The jump-scare typically uses a few different aspects of film in tandem in order to create an optimal scare, including fast editing, disturbing visuals, and loud sounds. However, creating a jump-scare that works may be more difficult than it seems, as the audience will likely be on high-alert for such scares during the duration of the horror film. Horror screenwriter C. Robert Cargill likened jump-scares to magic, as both use misdirection in order to trick their audiences.²⁰ This comparison is furthered by the breakdown of the jumpscare into three parts, described by Michael Caine's character in *The Prestige*: the pledge, where the audience is introduced to an unusual object or situation, the turn, where the immediate threat of the object or situation is removed or diffused, and the prestige, when the actual scare occurs.²¹ An example of a jump-scare that follows this methodology is the jump-scare in the movie *Insidious*, when a character named Lorraine discusses a dream she had about a dark figure. In the scene, the "pledge" or scare is expected to occur in a flashback of Lorraine's dream as she describes it to the other characters, but the scare actually occurs after a quiet moment in the movie, the "turn." The scare, or "prestige," itself is jarring, as the demon appears in stark, red contrast to the blue tones in the scene and is accompanied by a loud screech and jarring music.

¹⁹ Ben Guarino, "How Jumps Scares Actually Work." Inverse, October 28, 2015, <https://www.inverse.com/article/7531-the-unexpected-physiology-of-jump-scares>.

²⁰ Bryan Bishop, "'Why Won't You Die?!' The Art of the Jump Scare." The Verge, October 31, 2012. <https://www.theverge.com/2012/10/31/3574592/art-of-the-jump-scare-horror-movies>.

²¹ Jack Nugent, "Why Jump Scares Suck." Now You See It, Youtube, August 23, 2016, https://www.youtube.com/watch?v=nXEF1lcW-oQ&ab_channel=NowYouSeeIt.

This method is effective for startling audiences because it allows for the proper build-up of anxiety to cause a strong physical startle response to the scare.

While filmmaking techniques are certainly enough to cause a scare in the audience, there is another aspect that is at play in every horror film that preys on a deeper kind of fear. This aspect is the psychological manipulation that is used in the script and concept of a horror film to unnerve and frighten the audience. These devices are important for both intriguing and disturbing an audience member and will determine whether a movie sticks with a viewer long after the movie has ended. These devices can be very explicit in horror films and prey on conscious fears, such as isolation or the unknown. Alternatively, some psychological manipulation that a film uses can be aimed at unnerving viewers unconsciously. These types of films can cause audience members to feel nervous or “creeped out” because of their concepts or plot points rather than through the implementation of a specific phobia into the script.

In order to understand how horror movies exploit specific fears and phobias, it is important to acknowledge the difference between innate fears and learned fears, as filmmakers utilize both types of fear in their films. Innate fears are fears that are born into every human being regardless of any geographical, cultural, or societal differences.²² These fears are the fear of falling and the fear of loud noises, and both have been exploited in several horror films. The fear of loud noises tends to be the innate fear that horror filmmakers choose to exploit more often in films, as these loud noises are typically used in conjunction with a jump-scare. Almost all horror films use loud noises to cause a scare, but a few particularly good examples of this technique are used in *Carrie* during the film’s final jump-scare when Carrie’s hand reaches from

²² Kounang, “The Science Behind Fear.”

her grave, and in *The Ring* during a scene when a terrorized girl's corpse is shown very briefly. The reason loud noises work as a scare tactic consistently is because it activates a reflex hard-wired into the human body called the acoustic startle response, which will immediately send the body into fight-or-flight mode when activated.²³ The fear of falling is not as easily exploited by horror films, as this is typically a fear that is activated only when one is physically on the precipice of a tall and precarious structure.²⁴ Certain films, such as *Vertigo* and *Gravity*, are able to evoke this fear to a certain extent, although it is nowhere close to the hair-raising experience one actually has when standing on the edge of a cliff.²⁵

Learned fears are fears that are developed at a young age as a result of an individual's unique responses to its environment.²⁶ These fears are developed in a child as they observe cues from their parents, and are based more on association than they are instinct.²⁷ Certain learned fears, such as a fear of snakes, spiders, or clowns, may be so common simply because humans are predisposed to fear certain things more than others.²⁸ This type of fear is also a powerful tool for horror filmmakers to use in order to disturb the audience. For example, the film *It* is a movie that exploits a common phobia, the fear of clowns, in order to cause the audience discomfort even before they step into the theater. Those who are already suffering from coulrophobia would probably find a movie like *It* very disturbing simply because it confirms a phobia that already exists in the viewer; evil clowns will kill them. The phobia causes an association to develop

²³ Inge M. Knudson et al, "Elevated Acoustic Startle Responses in Humans: Relationship to Reduced Loudness Discomfort Level, but Not Self-Report of Hyperacusis." PubMed Central, National Center for Biotechnology Information, June 2016, www.ncbi.nlm.nih.gov/pmc/articles/PMC4854822/.

²⁴ Child Study Center, "Research." Rutgers University, www.childstudycenter-rutgers.com/research.

²⁵ Child Study Center, "Research."

²⁶ Kounang, "The Science Behind Fear."

²⁷ Child Study Center, "Research."

²⁸ Kounang, "The Science Behind Fear."

between a certain object and a feeling of being threatened, which causes the body to enter into fight-or-flight mode when confronted with said object.²⁹ A few examples of films that have used these common phobias in their scripts are *Snakes on a Plane* (ophidiophobia), *Jaws* (galeophobia), and *As Above, So Below* (claustrophobia). One of the most common and complex fears that horror movies exploit in many different fashions is the fear of isolation. This fear is explored by many different types of horror films, ranging from suspense thrillers such as Hitchcock's *Rear Window*, to surrealist artistic films such as Lynch's *Eraserhead*.³⁰ The reason that isolation is so deeply terrifying to many people is because humans are hard-wired to be social creatures, so much so that the lack of any social interaction for an extended period of time can cause the brain to completely unravel.³¹ Prolonged periods of isolation can cause one to begin experiencing extreme emotions, inhibit their mental functions, distort their perception, and cause them to hallucinate.³² Films that feature this particularly theme prominently tend to explore isolation as it relates to a mental collapse or loss of control, such as in *Eraserhead* when an isolated and humiliated Henry kills his own baby in order to free himself.

Horror films, due to their graphic nature, are particularly good places to explore mental illness. Many horror films in both past and modern filmmaking have used creatures and ghouls to represent physical manifestations of mental illness in one of the main characters. *The Babadook* is a particularly good example of this, as the Babadook itself represents the grief that the main character, Amelia, is suffering from after the death of her husband Oskar. The Babadook drives

²⁹ Kounang, "The Science Behind Fear."

³⁰ Carl Royer et al, *The Spectacle of Isolation in Horror Films: Dark Parades*. (New York: The Haworth Press, 2005), chap. 5.

³¹ Michael Bond, "How Extreme Isolation Warps the Mind." Future, BBC, 14 May 2014, www.bbc.com/future/story/20140514-how-extreme-isolation-warps-minds.

³² Bond, "How Extreme Isolation Warps the Mind."

Amelia so insane that she very nearly kills Sam, her son. The Babadook is a beast that cannot be eliminated; just dealt with. The end of the film shows the Babadook being kept under control in the basement, making a clear connection to Amelia's grief and her ability to keep it under control at the end of the film. Another horror film that uses a creature as a manifestation of mental illness is the film *Lights Out*. In this film, the main antagonist, a ghostly light-sensitive creature called Diana, is a very clear allegory to depression. In this film, Diana is attached to the character Sophie, the mother of both of the film's protagonists, and kills anyone who attempts to help Sophie "get better." The terror and death that Diana inflicts upon those around Sophie is representative of how depression isolates people off from the support systems they have, and traps them alone with their depression. Unfortunately, this film ends on a rather bitter note, with Sophie taking her own life in order to get rid of Diana. There are other films that use mental illness as a plot device, such as *A Tale of Two Sisters*, which looks at dissociative identity disorder, and *They Look Like People*, which deals with schizophrenia. The reason that these films cause fear or discomfort in a viewer is because people may associate certain mental illnesses, such as schizophrenia, with dangerous behavior.³³ In addition to this, films such as *A Tale of Two Sisters* and *They Look Like People* tend to use a style of non-linear storytelling that confuses the audience, and makes one unsure of what is real and what is not. This uncertainty and confusion causes one to have a feeling that is known as "the uncanny," the uneasy feeling one has when confronted with something uncomfortably strange.³⁴

³³ N. J. Reavley et al., "Beliefs about Dangerousness of People with Mental Health Problems: The Role of Media Reports and Personal Exposure to Threat or Harm." *Social Psychiatry and Psychiatric Epidemiology*. April 5, 2016. <https://www.ncbi.nlm.nih.gov/pubmed/27048265>.

³⁴ Dictionary.com "Uncanny." 2019. Accessed April 15, 2019. <https://www.dictionary.com/browse/uncanny>.

One of the more common approaches toward dissecting horror to contextualize what we are scared of, and why, deals with Freud's theory of "the uncanny." According to Freud, the uncanny "is that class of the terrifying which leads back to something long known to us, once very familiar."³⁵ The uncanny "ought to have been kept concealed but...has nevertheless come to light."³⁶ His description of the uncanny deals a lot with his other theories relating to the Oedipal fear of castration that boys fear in relation to their father, which extends to other organs, such as the eyes.³⁷ The dread and anxiety one feels as a child when they fear castration is the same sort of dread and anxiety one is presented with when they witness something that falls into the category of the uncanny. For Freud, a good example of the uncanny exists in the story of the Sand-man, a creature who steals the eyes of children, and causes a man named Nathaniel to go mad when he believes he is being hunted by it.³⁸ The concept of the "double," for example, is a concept that would fall into the category of uncanny. One particularly disturbing example of the "double," or doppelganger, is depicted in a film called *Annihilation*, in which the main character faces a creature that is steadily growing more and more like her and mirrors her every move. Freud explains that the "double" produces an uncanny feeling because it is "a creation dating back to a very early mental stage."³⁹ When confronted with the "double" in maturity, it is no longer a preservation of one's ego and instead "has become a vision of terror."⁴⁰ In a similar fashion, any concept or object that reminds people of their repressed primal desires or fears is subject to being considered "uncanny," and can cause anxiety and a feeling of dread. Examples of other concepts

³⁵ Sigmund Freud et al., *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, (London: Hogarth Press, 2001), 220 https://uncanny.la.utexas.edu/wp-content/uploads/2016/04/freud-uncanny_001.pdf.

³⁶ Freud, *Standard Edition*, 241.

³⁷ Ibid, 227-240

³⁸ Ibid, 227-230

³⁹ Ibid, 236

⁴⁰ Ibid, 236

that may cause the viewer to feel an uncanny effect are: repeated numbers, strange coincidences, the envious evil eye, and confrontation with death or dead bodies.⁴¹

There are many who reject Freud's approach as applying to all horror films, as his theory tends to focus on psychoanalytic observations rather than cognitive science.⁴² Another reason that scholars may dismiss some of Freud's theory of the uncanny is because Freud "offered a 'deep' explanation of the uncanny as grounded more in primitive and allegedly universal human motivations. But Freud neglected the very phenomenon he purported to be studying, namely an *aesthetic* one."⁴³ Additionally, Freud never explains why people may find pleasure in experiencing horror and the uncanny, which would leave the entire horror genre and its avid fans relatively unexplained.⁴⁴ Immanuel Kant, however, did explore this phenomenon as it relates to aesthetics in his discussion of the 'sublime.' The sublime is an experience, such as a violent storm or tall building, that people are unable to process completely, and leaves them feeling overwhelmed.⁴⁵ In Kant's view, one may feel fearful when presented with the sublime because it is unfathomable, but they may also experience pleasure because of this same unfathomableness.⁴⁶ This seems to fall more in line with the rationale behind the horror genre, as horror films present the audience with something unfathomably terrifying, and yet many are still drawn to watch more.

⁴¹ Freud, *Standard Edition*, 237-241

⁴² Cynthia Freeland, "Explaining the Uncanny in The Double Life of Véronique." *Horror Film and Psychoanalysis*, 2004, 89-104.

⁴³ Freeland, "Explaining the Uncanny," 89.

⁴⁴ Freeland, "Explaining the Uncanny," 89.

⁴⁵ Douglas Burnham, "Immanuel Kant: Aesthetics." *Internet Encyclopedia of Philosophy*, www.iep.utm.edu/kantaest/#SH2c.

⁴⁶ Faruqee, Anoka. "The Kantian Sublime: Why Care?" 2009, <http://anokafaruqee.com/the-kantian-sublime-why-care/>

Building on the Freudian approach to horror is Barbara Creed's concept of the monstrous feminine, which deals with the role of a woman in horror; simultaneously as a victim and as monstrous when in association with her motherhood or sexuality. Creed's theory also relies on Julia Kristeva's work regarding the "abject," which is "the place where meaning collapses."⁴⁷ The abject is the reaction to a confrontation with our repressed primal nature, the one that existed before we entered the symbolic order. This reaction can be triggered by seeing corpses, bodily wastes, or gore. In addition, an individual can experience abjection when they first begin breaking away from their mother, as illustrated in this passage: "The abject confronts us, on the other hand, and this time within our personal archeology, with our earliest attempts to release the hold of maternal entity even before existing outside of her."⁴⁸ It is from this theory, that the mother also exists as a primitive and rejected object, that Creed's theory of the monstrous feminine originates from.

The monstrous feminine can be seen in many films and has many different types of manifestations depending on whether she is an entity connected to her sexuality or her motherhood. One version of the monstrous feminine that is monstrous based on her sexuality is known as "the witch." Creed's concept of "the witch" connects her power to her sexuality, her closeness to nature and also to her menstrual cycle. "The witch" is evil because she represents a breakdown of the traditional patriarchal order and exists only to use her "evil powers to wreak destruction on the community."⁴⁹ *The Witch* is a period piece that explores this connection

⁴⁷ Julia Kristeva, *Powers of Horror: An Essay on Abjection*, trans Leon S. Roudiez. (New York: Columbia University Press, 1982), 2,

<http://users.clas.ufl.edu/burt/touchyfeelingsmaliciousobjects/Kristevapowersofhorrorabjection.pdf>

⁴⁸ Kristeva, *Powers of Horror*, 13

⁴⁹ Barbara Creed, *The Monstrous-Feminine: Film, Feminism, Psychoanalysis*. (London: Routledge, 1993), 283, <http://ieas-szeged.hu/downtherabbithole/wp-content/uploads/2018/02/Barbara-Creed-The-Monstrous-Feminine-2007.pdf>

between monstrosity, nature and sexuality. In *The Witch*, the witches are deeply connected to the forest adjacent to the family's home, and even lure characters into the forest to kill them. Caleb, the son, gets lost in the forest, and one of the witches seduces him to his death with her kiss, even though he looks terrified as he approaches her. When Caleb begins to die, he screams of sin and spits up a bloodied apple, an obvious reference to the story of Adam and Eve. In the end, when Thomasin, the family's only surviving daughter, becomes a witch herself, she joins a group of naked women chanting around a fire. As far as connecting "the witch" to her menstrual cycle, Creed discusses both *Carrie* and *The Exorcist*, as these films have a direct connection between menstrual blood and the manifestation of evil powers.⁵⁰ In *Carrie*, Carrie is humiliated by the other girls at her school when she has her first period, as they begin to pelt the panicking Carrie with tampons and ridicule her. It is only after her first menstrual cycle that she begins to manifest her powers of telekinesis. These powers are inherently connected with her menstruation, and also with her sexuality, which has been severely repressed by Carrie's own mother. In the end, Carrie's telekinetic powers have deadly consequences for those that wrong her, and she destroys her entire high school during prom. "Like the witches of other horror films, Carrie has become a figure of monumental destruction sparing no one in her fury."⁵¹

Norman Bates is a victim to another of the manifestations of monstrous feminine that is made monstrous in connection to her motherhood, this being the "castrating mother." The "castrating mother" is portrayed as the castrator rather than the father, and is dominant, threatening, and possessive over her child. She is typically displayed as psychotic in the films she appears in, such as *Carrie*, *Friday the 13th*, or *Psycho*. In *Psycho*, Norman Bates was, in

⁵⁰ Creed, *The Monstrous-Feminine*, 287-288

⁵¹ Creed, *The Monstrous-Feminine*, 302

some way, emasculated by his mother during his childhood and this restricted him sexually, or 'castrated' him. This results in Norman's inability to deal with the sexual feelings he was having for Marion Crane, and ends in her death, as he is unable to coexist with these such thoughts. Through her abuse, Norman's mother has effectively "castrated" him, making it impossible for him to experience a normal sexual attraction and relationship, even after her death. Additionally, Norman's desire to become his mother, as shown in the scene where he is captured in his mother's clothes, is motivated by his fear of castration, as becoming his mother would make him the castrator rather than the castrated.⁵²

The techniques, themes, and elements of horror films discussed thus far all work together to put the audience into a heightened state of anxiety and finally deliver a scare. When looking at the science behind fear, it is interesting to see how horror filmmakers manipulate the instinctive reactions of human beings through these techniques. In order to properly explore why viewers get scared in response to a horror film, it is important to make a distinction between the generalized anxiety that comes from something deemed "creepy" and the actual, physical scare that comes from a perceived threat, typically at the hands of a jump-scare or a loud audio cue. Horror filmmakers tend to incorporate these two different versions of fear in order to both build anxiety in a viewer and make it easier to give them a good scare once they present the "threat."

Horror films are very good at building anxiety, or giving one a feeling known as "the creeps." Most people have experienced the sort of discomfort that comes from being in an unfamiliar area or coming into contact with a creepy person or creature. When one is feeling "creeped out," they are experiencing a physical response to the uncertainty of threat from a

⁵² Creed, *The Monstrous-Feminine*, 506

creepy stimulus, which both causes anxiety and tends to make one hyper-focus on whatever object is causing them discomfort.⁵³ When meeting a creepy person, for example, a feeling of uneasiness can be triggered when said creepy person is unable to respond correctly to nonverbal cues, otherwise known as mirroring.⁵⁴ A 2012 study done on how humans respond to mimicry found that interacting with someone who is perceived as “creepy” actually gives those responding to this person the chills, and causes them to believe the room is actually colder than it is.⁵⁵ The reason that this happens is because the feeling triggered by creepy stimuli is generated in the region of the brain that also controls goosebumps and regulates trust.⁵⁶ The emotions that one feels when creeped out in a real situation can also translate over to horror films, causing the same sort of feeling of being on edge and anxious. A film that captures the feeling of being “creeped out” particularly well is *It Follows* (2014), which revolves around a strange curse transmitted through sex. Those affected by the curse are continuously followed everywhere they go by a variety of odd people moving at a slow, but very steady pace. This movie definitely has a huge creep factor, as it places the audience in a situation where they are faced with one of the most common anxiety-heightening traits: unpredictability.⁵⁷ The heightened state of focus and anxiety *It Follows* creates in its audience puts them in the perfect position to be startled by the few jump-scares it offers.

While the body may react strangely to the feeling of being creeped out, there is a very clear physical reaction one has when they experience an actual scare. A scare is defined as

⁵³ McRobbie, Linda Rodriguez. "On the Science of Creepiness." Smithsonian. October 29, 2015.

<https://www.smithsonianmag.com/science-nature/science-creepiness-180957093/>.

⁵⁴ Holohan, Meghan. "Creepy People Literally Give Us Chills, Study Finds." NBC News. May 09, 2012.

<http://bodyodd.nbcnews.com/news/2012/05/09/11619352-creepy-people-literally-give-us-chills-study-finds?lite>.

⁵⁵ Holohan, Meghan. "Creepy People Literally."

⁵⁶ Ibid.

⁵⁷ McRobbie, Linda Rodriguez. "On the Science of Creepiness."

something that activates the amygdala and causes a fight or flight response. When watching a horror movie, the motor regions of the brain begin to shut down as one sits and watches the film. A well-timed jumpscare, however, will override any conscious thoughts about the irrationality of the horror film, and send the body into a fight or flight response.⁵⁸ This reaction will cause a person's pupils to dilate, their heart to race, adrenaline to begin rushing into their systems, and override any rational reaction to the scary stimuli.⁵⁹ This is why a person who is easily startled may jump or scream in reaction to a horror film; they simply react instead of rationalizing the situation.⁶⁰ The physical reaction one has to horror films also explains why there are some people who love horror and some who absolutely despise it. Those who are considered thrill-seekers may be more likely to watch horror movies simply because they enjoy the rush of adrenaline that accompanies a scare. Inversely, some may avoid horror films all together because they dislike this same rush of adrenaline.⁶¹

Horror films, in the end, seem to be another way for "high-sensation seekers" to get the rush of adrenaline and dopamine they crave. Those who are thrill seekers, adventurous, and generally more adept at dealing with uncertainty and anxiety will tend to enjoy horror films more simply for the natural high it offers them, as the hormones released during a scare are very similar to those released during positive, high-arousal states.⁶² Additionally, studies have shown that the brain's neural activity is similar when exposed to real-life horror situations, and

⁵⁸ Gillian Mohny, "The Science of Fear: What Happens to Your Body After a Good Scare." ABC News, October 30, 2015, <https://abcnews.go.com/Health/science-fear-body-good-scare/story?id=34855202>.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Nadia Kounang. "What Is the Science behind Fear?" CNN, October 29, 2015, <https://www.cnn.com/2015/10/29/health/science-of-fear/index.html>.

⁶² Jason Bailey, "The Psychology of Scary Movies." Flavorwire, October 27, 2016, <http://flavorwire.com/592727/the-psychology-of-scary-movies>.

fabricated horror situations.⁶³ So perhaps watching horror films is also a way of learning how to deal with and control our innate or learned fears. Horror filmmakers are all too happy to test the limits of absurdity and morbidity in order to strike this fear into viewers, coming up with creatively disturbing ways to keep the audience attentive and anxious. It is true that there will never be a film that is able to scare every single person in the audience, as there are too many psychological and physical differences between each person to take into account. But when a horror film is experienced by an audience together, when a jump-scare causes their hearts to race and screams fill the theater, they can begin to feel closer to each other.⁶⁴ Finally, making it through a horror film gives many people the same sense of achievement that they would receive after an actual scare, even if they are consciously aware that the horror movie is fake, because the human body responds to the threat as if it is real.⁶⁵ Conquering our fears, feeling close to our fellow audience members, and feeling a sense of satisfaction, are all huge contributing factors to the popularity of horror films as a genre. Similar to a magician, the horror filmmaker draws these reactions out of the audience through carefully crafted manipulation, misdirection, and trickery. The payoff of being scared is the cocktail of high-arousal hormones and the false sense of achievement and success. And who should rob the audience of that? They made it to the end of the film alive, after all.

⁶³ Thomas Straube et al., "Neural Representation of Anxiety and Personality during Exposure to Anxiety-provoking and Neutral Scenes from Scary Movies." *Human Brain Mapping*, July 07, 2009, <https://onlinelibrary.wiley.com/doi/abs/10.1002/hbm.20843>.

⁶⁴ TED-Ed, "Why Is Being Scared so Fun? - Margee Kerr." YouTube, April 21, 2016, https://www.youtube.com/watch?v=oetVvR5RQUs&ab_channel=TED-Ed.

⁶⁵ Ibid.

Bibliography

- Alvarez Lince, Bernardo. "From the Seduction Theory to the Oedipus Complex." PubMed Central, September/October 2005, <https://www.ncbi.nlm.nih.gov/pubmed/16220155>.
- The Associated Press. "Infrasound Linked to Spooky Effects." NBC News, September 07, 2003, http://www.nbcnews.com/id/3077192/ns/technology_and_science-science/t/infrasound-linked-spooky-effects/.
- Bailey, Jason. "The Psychology of Scary Movies." Flavorwire, October 27, 2016, <http://flavorwire.com/592727/the-psychology-of-scary-movies>.
- Blumstein, Daniel T., Richard Davitian, and Peter D. Kaye. "Do Film Soundtracks Contain Nonlinear Analogues to Influence Emotion?" PubMed Central, May 26, 2010, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3001365/>.
- Bond, Michael. "How Extreme Isolation Warps the Mind." Future, BBC, 14 May 2014, www.bbc.com/future/story/20140514-how-extreme-isolation-warps-minds.
- Burnham, Douglas. "Immanuel Kant: Aesthetics." Internet Encyclopedia of Philosophy, www.iep.utm.edu/kantaest/#SH2c.
- Child Study Center. "Research." Rutgers University, www.childstudycenter-rutgers.com/research.
- Creed, Barbara. *The Monstrous-Feminine: Film, Feminism, Psychoanalysis*. London: Routledge, 1993, <http://ieas-szeged.hu/downtherabbithole/wp-content/uploads/2018/02/Barbara-Creed-The-Monstrous-Feminine-2007.pdf>
- Dictionary.com, "Uncanny." 2019, <https://www.dictionary.com/browse/uncanny>.

- Faruqee, Anoka. "The Kantian Sublime: Why Care?" 2009,
<http://anokafaruqee.com/the-kantian-sublime-why-care/>.
- Freeland, Cynthia. "Explaining the Uncanny in The Double Life of Véronique." *Horror Film and Psychoanalysis*, 2004, 87-105.
- Freud, Sigmund, James Strachey, Anna Freud, Alix Strachey, and Alan Tyson. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. London: Hogarth Press, 2001, https://uncanny.la.utexas.edu/wp-content/uploads/2016/04/freud-uncanny_001.pdf.
- Guarino, Ben. "How Jumps Scares Actually Work." *Inverse*, October 28, 2015,
<https://www.inverse.com/article/7531-the-unexpected-physiology-of-jump-scares>.
- Holohan, Meghan. "Creepy People Literally Give Us Chills, Study Finds." *NBC News*, May 09, 2012,
http://bodyodd.nbcnews.com/_news/2012/05/09/11619352-creepy-people-literally-give-us-chills-study-finds?lite.
- Knudson, Inge M, and Jennifer R Melcher. "Elevated Acoustic Startle Responses in Humans: Relationship to Reduced Loudness Discomfort Level, but Not Self-Report of Hyperacusis." *PubMed Central, National Center for Biotechnology Information*, June 2016, www.ncbi.nlm.nih.gov/pmc/articles/PMC4854822/.
- Kristeva, Julia. *Powers of Horror: An Essay on Abjection*. Translated by Leon S. Roudiez, New York: Columbia University Press, 1982,
<http://users.clas.ufl.edu/burt/touchyfeelingsmaliciousobjects/Kristevapowersofhorrorabjection.pdf>.

Kounang, Nadia. "What is the Science Behind Fear?" CNN, October 29, 2015,

<https://www.cnn.com/2015/10/29/health/science-of-fear/index.html>.

McRobbie, Linda Rodriguez. "On the Science of Creepiness." Smithsonian, October 29, 2015,

<https://www.smithsonianmag.com/science-nature/science-creepiness-180957093/>.

Mohney, Gillian. "The Science of Fear: What Happens to Your Body After a Good Scare." ABC News, October 30, 2015,

<https://abcnews.go.com/Health/science-fear-body-good-scare/story?id=34855202>.

Morrow, Justin. "The Science of Silence: Disquieting Uses of Infrasound in Movies." No Film School, June 21, 2017, <https://nofilmschool.com/2017/06/disquieting-uses-infrasound>.

Moura, Gabriel. "The Kuleshov Experiment." Elements of Cinema,

<http://www.elementsofcinema.com/editing/kuleshov-effect.html>.

Nugent, Jack. "Why Jump Scares Suck." Now You See It, Youtube, August 23, 2016,

https://www.youtube.com/watch?v=nXEF1lcW-oQ&ab_channel=NowYouSeeIt.

Ramsayer, Kate. "Infrasonic Symphony." Science News 165, no. 2 (January 10, 2004): 2,

http://www.phschool.com/science/science_news/articles/infrasonic_symphony.html.

Reaney Reuters, Patricia. "The Fear of 'haunted' Houses Explained." ABC News, September 8,

2003, <http://www.abc.net.au/science/articles/2003/09/08/941414.htm?site=scie&topic=latest>.

Renée, V. "5 Lighting Techniques You Can Use on Your Next Horror Film." No Film School, 26 Apr. 2018,

nofilmschool.com/2018/04/5-lighting-techniques-you-can-use-your-next-horror-film.

- Renée, V. "Horror Lighting 101: How to Use Uplighting in Fresh, New Ways to Scare Your Audience." No Film School. October 27, 2018, <https://nofilmschool.com/2018/10/horror-lighting-101-how-use-uplighting-fresh-new-ways-scare-your-audience>.
- Romano, Aja. "How *Suspiria* Turns the Color Red into a Plot Point." Vox. November 09, 2018, <https://www.vox.com/culture/2018/11/7/18056244/suspiria-red-meaning-aesthetic-luca-guadagnino-dario-argento>.
- Reavley, N. J., A. F. Jorm, and A. J. Morgan. "Beliefs about Dangerousness of People with Mental Health Problems: The Role of Media Reports and Personal Exposure to Threat or Harm." PubMed Central. April 5, 2016, <https://www.ncbi.nlm.nih.gov/pubmed/27048265>.
- Royer, Carl, and Diana Royer. *The Spectacle of Isolation in Horror Films: Dark Paradises*. New York: Haworth P., 2005.
- Straube, Thomas, Sandra Preissler, Judith Lipka, Johannes Hewig, Hans-Joachim Mentzel, and Wolfgang H.R. Miltner. "Neural Representation of Anxiety and Personality during Exposure to Anxiety-provoking and Neutral Scenes from Scary Movies." *Human Brain Mapping*, July 07, 2009, <https://onlinelibrary.wiley.com/doi/abs/10.1002/hbm.20843>.
- TED-Ed. "Why Is Being Scared so Fun? - Margee Kerr." YouTube, April 21, 2016, https://www.youtube.com/watch?v=oetVvR5RQUs&ab_channel=TED-Ed.
- Williams, David E. "Flashback: *Suspiria*." An International Publication of the ASC, February 25, 2019, <https://ascmag.com/articles/suspiria-terror-in-technicolor>.

FILMOGRAPHY

A Nightmare on Elm 's Street (Wes Craven, 1984)

A Tale of Two Sisters (Kim Jee-woon, 2003)

Annihilation (Alex Garland, 2018)

As Above, So Below (John Erick Dowdle, 2014)

Battle Royale (Kinji Fukasaku, 2000)

Carrie (Brian De Palma, 1976)

Eraserhead (David Lynch, 1977)

Frankenstein (James Whale, 1931)

Friday the 13th (Sean S. Cunningham, 1980)

Gravity (Alfonso Cuarón, 2013)

Green Room (Jeremy Saulnier, 2015)

Halloween (John Carpenter, 1978)

Insidious (James Wan, 2010)

It (Andrés Muschietti, 2017)

It Follows (David Robert Mitchell, 2014)

Jaws (Steven Spielberg, 1975)

Lights Out (David F. Sandberg, 2016)

Psycho (Alfred Hitchcock, 1960)

Rear Window (Alfred Hitchcock, 1954)

Snakes on a Plane (David R. Ellis, 2006)

Snow White and the Seven Dwarfs (William Cottrell, 1937)

Suspiria (Dario Argento, 1977)

The Babadook (Jennifer Kent, 2014)

The Blair Witch Project (Daniel Myrick and Eduardo Sánchez, 1999)

The Exorcist (William Friedkin, 1973)

The Prestige (Christopher Nolan, 2006)

The Ring (Gore Verbinski, 2002)

The Shining (Stanley Kubrick, 1980)

The Witch (Robert Eggers, 2015)

They Look Like People (Perry Blackshear, 2015)

Vertigo (Alfred Hitchcock, 1958)