

The Fear of Technology in Horror Movies: A Comparative Film Analysis Through the Lens of Sociotechnical Imaginaries

Hüseyin Cenk Erdem

Department of Science, Technology and Society, Istanbul Technical University, erdem22@itu.edu.tr

ABSTRACT: Science, Technology, and Society (STS) studies examine the social and cultural factors that shape public perceptions of technology. This study problematizes technology representation in horror movies by considering the sociotechnical imaginaries literature and explores the sociocultural effects of technological opacity and the existential fear of losing control. The qualitative research explores the fear of technology in horror movies, comparatively analyzing the discourses of AI technology in three films purposefully selected in terms of their popularity in the last five years: *Upgrade* (2018), *Child's Play* (2019), and *M3gan* (2022). The study concentrates on these movies because, in the past five years, the fear of artificial intelligence has been further fueled by speculative technology development information circulation, including Elon Musk's neurotechnology company Neuralink's goal to develop implantable brain-computer interfaces (BCIs). Merging human consciousness with AI technologies has generated fears of loss of privacy and potential control over one's own thoughts and actions. The fear of AI has also been heightened by the emergence of humanoid robots, notably Sophia, developed by Hanson Robotics. Sophia's human-like appearance and advanced AI capabilities have generated both fascination and fear. This study encourages critical thought on the effects of technical opacity that influence our interactions with developing technology by investigating the depiction of technology in these movies. Findings would help us grasp the complex relationship between technology and fear. In order to create informed dialogues about the moral, social, and cultural effects of technological breakthroughs, it asks for increased transparency and critical engagement with technical processes.

KEYWORDS: Sociotechnical Imaginaries, Technology Representation, Horror Movies

Introduction

The rapid growth of science and technology in today's connected world has a significant impact on how we live our daily lives and how the public perceives the world. Science, technology, and society (STS) studies focus on figuring out how technological advancements interact with their larger societal context.

It is not possible anymore to consider the public as an anonymous mass of people supporting any scientific or technological advancement. Both scientists and those responsible for scientific policy have had to persuade the public, earn their support, or hold them back. People now need a basic understanding of science and technology at many different levels of everyday life when making decisions, whether they are personal or global. Sharing knowledge plays a crucial role in public debates over science and technology, which have become increasingly common over the 20th century. These debates often center on questions of participation and control. As knowledge advanced and harmful effects surfaced, blind faith in science disappeared (Felt 2000, 2-11).

This research aims to investigate how AI technology is portrayed in horror films, a fascinating topic that provides insightful information on the worries and apprehensions associated with contemporary technological advancements. The AI discussion is still up for grabs. According to some well-known technologists, AI will catch up to or surpass human intelligence in ten years. Others say that growth is gradual and that such breakthroughs are at least a century away (Manning 2020, 7).

Because of their extreme novelty, unpredictability, and ambiguity, emerging technologies have become a source of risk. These dangers range from the invasion of privacy by Internet applications to the safety concerns around genetically modified technologies and others, such as the security risk posed by autonomous vehicles. Emerging technological risk is slower, concealed, coupled, and unknown than traditional risk, which increases the likelihood that it may cause societal anxiety and possibly mass incidents (Li and Li 2023, 1).

In recent years, the sociotechnical imaginaries literature has become an important framework for examining the dynamic interaction between technology and society. This study, which builds on this theoretical underpinning, aims to investigate the sociocultural implications of technical opacity and the existential fear of losing power, as represented in horror movies. The research intends to offer insight into how these narratives mirror and intensify real-world worries and apprehensions about rapidly expanding technological environments by examining the fear of technology shown in these films.

Three recent horror movies—"Upgrade" (2018), "Child's Play" (2019), and "M3gan" (2022)—are the subject of this qualitative study. These films were chosen on purpose because of their widespread appeal in the last five years and their examination of the anxiety around artificial intelligence (AI) technology. In the past five years, speculative information regarding technical advancements, such as Elon Musk's neurotechnology business Neuralink's plans to produce implanted brain-computer interfaces (BCIs), has fanned the dread of AI more and more. Concerns about losing privacy and control over one's thoughts and actions have been raised by the concept of fusing human consciousness with AI technologies.

These worries have grown as humanoid robots, most notably Sophia from Hanson Robotics, have come into existence. Sophia has captured the public's interest in a way that is both fascinating and unsettling due to her remarkably human-like looks and sophisticated AI capabilities. These technical representations in horror films provide a distinctive prism through which to examine society's perspectives and anxieties about artificial intelligence (AI) and sophisticated robots, inspiring critical analysis of the societal ramifications of our technological innovations. In the modern horror genre, the focus has switched from the monster that formerly served to reinforce our own inherent humanity to the technological advancements that are redefining what it means to be human (Powell 2017, 56).

The study aims to promote critical thinking about how technological opacity affects our interactions with emerging technology. The goal of the study is to identify underlying societal concerns and phobias by examining how technology is portrayed in horror films. This will help us better comprehend the complex relationship between technology and dread.

The predicted results of this study have important significance for promoting educated and fruitful discussions concerning the ethical, social, and cultural effects of technological advancements. The project promotes a more nuanced understanding of how horror films reflect public perceptions of technology because of technological opacity. Ultimately, this information can help to direct ethical technology advancement, policy-making, and public discourse, producing a culture that embraces technological advancement while being aware of its possible drawbacks.

Representation of Technological Advancements

Kaplan and Haenlein define artificial intelligence as a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation" (Kaplan and Haenlein 2019, 1). Robotics and artificial intelligence are frequently discussed in popular culture. The iconic instance of HAL, a spacecraft's intelligent control system that turns against its human passengers, first appeared in the Stanley Kubrick classic "2001" in 1968. Since 1984, the Terminator films have been based on the premise that a neural network created for military defense purposes becomes

self-aware and turns against its human designers in order to prevent being deactivated. The 2001 film "A.I." by Steven Spielberg, which was adapted from a short tale by Brian Aldiss, examines the personality of an artificial youngster with intelligence.

Based on events in an Isaac Asimov novel, the 2004 film "I, Robot" depicts sentient robots that were created to defend humanity but are now becoming a threat. The 2016 television series "Westworld" is a more recent version, where androids provide entertainment for human visitors to a Western theme park. The visitors are urged to indulge in their most fervent fantasies and desires. Robots with intelligence, autonomous vehicles, neurotechnological improvements to the brain, and genetic modification are evidence of profound change that is occurring at an exponential rate. Previous industrial revolutions freed humans from using animal power, allowed for mass production, and gave billions of people access to digital technology. But there is something profoundly different about this Fourth Industrial Revolution. A variety of new technologies that are integrating the physical, digital, and biological worlds, affecting all disciplines, economies, and sectors, and even questioning notions of what it is to be human, are what define it (Bartneck, Lütge, Wagner, and Welsh 2021, 25).

Recently, robotics and artificial intelligence have been frequently depicted in popular horror movies. In fact, movies have a long history of straying from scientific reality. Six intrepid individuals travel to the moon in a capsule that is blasted from a huge cannon in George Méliès' 1902 motion picture *A Trip to the Moon*. The explorers come into contact with moon dwellers, who capture them when the capsule smashes into the moon's eye in a spectacular sequence. The moon people push them off the moon after they've made it back to their capsule, where they safely land in the ocean before falling back to earth. The most worrisome scientific images involved "modification of and intervention into the human body, the violation of human nature, and threats to human health by means of science," according to a study by Weingart, Muhl, and Pansegrau of 222 films that show science (Weingart, Muhl, and Pansegrau 2003, 1).

In essence, science fiction is a direct engagement with modern society that sits at the intersection of technological, scientific, critical, and social ideas because it shapes our perceptions of what is possible now and in the future. Analyzing the shared aspirations and anxieties that drive such conceptions anchors us in the social realities that serve as the foundation for science-fictional imagination (Schmeink 2016, 19).

Societal Fear of Science and Technology

The societal fear of science even has roots in Western folklore and literature. The Faustian Legend was similar to the widespread notion that science was a secretive, illegally acquired branch of knowledge with strong ties to magic. The notion of a scientist as a magician develops when the experimenter is perceived as unintentionally meddling with nature and he looks to be a threat because he wants to unleash forces of nature that should be "left as they are." It is a Faustian deal that the scientist makes with the powers of darkness rather than the forces of light in exchange for satisfying his curiosity about the nature of the world and man. The fact that alchemy was integral to the "new science" and that "natural Magick" was another facet of it served to support the notion that experimental science and dark forces, like magic, are closely related. For instance, the chemical laboratory was constructed below, deep in the basement, beneath groined stone arches, from the fifteenth through the eighteenth and well into the nineteenth centuries. But there were more indications of mistrust or fear of science dating back to its inception than just the hint of magic and black art. The scientist was frequently despised and mistrusted because he promoted a different route to knowledge than the one established by God's revelation, because he meddled with natural laws and attempted to defy God's will, and because he conducted experiments that could have disastrous results (Cohen 1981, 2).

In particular, a concern that we are harming ourselves through science and technology or that we are losing control is reflected in science fiction as a fear of life in the future. This may help to explain why the Frankenstein legend has been so well-liked throughout science fiction history. Science's greatest hope is for man to play God by creating life, but its greatest fear is for that life to be found to be soulless and without purpose (Doll and Faller 1986, 1).

Sociotechnical Imaginaries

Sheila Jasanoff and Sang-Hyun Kim first used this concept in 2009 when they compared and contrasted South Korean and American sociotechnical nuclear energy imaginaries from the latter half of the 20th century. In addition to conducting expert interviews, Jasanoff and Kim looked at social protests, technological and infrastructure advancements, national policies, and government representatives' discourse. Sociotechnical imaginaries may be developed by governments and policymakers, by specialized social organizations, or by a combination of the two (Jasanoff & Kim 2009, 120). Jasanoff and Kim came to the conclusion that while in the US the prevailing sociotechnical imaginary viewed nuclear energy as hazardous and in need of containment, in South Korea nuclear energy was primarily envisioned as a method of fostering national growth. Certain groups, societies, and countries have sociotechnical imaginaries for what they believe is possible when science and social transformation are combined. These visions may reflect what a particular society is capable of doing as well as what a particular state or country aspires to. Sociotechnical imaginaries are potent conceptual tools that influence both the present and the future. These generally held views of desirable futures are grounded in common perceptions of the social order and standard of living that can be attained through scientific and technological progress. Imaginaries become powerful in shaping our views on innovation and technology when they are consistently performed and supported by institutions.

Moreover, in popular culture, movies also influence the public's perception of technology through their depiction of technology. They may reflect the societal fears of technology, but at the same time, they reinforce the anxieties about technological advancements. Recent years have seen a rise in the importance of sociotechnical imaginaries as scholars have come to understand their influence on social transformation. They provide us with an understanding of our anxieties as well as a glimpse into the potential of science and technology.

Societal Reflections in Horror Movies

In recent movies, there has been an increase in the depiction of new technologies, particularly in the representation of genetic modification, especially in horror movies that emphasize how out-of-control it has become, including *28 Days Later* (2002), *Komodo* (1999), *Flying Virus* (2001), and *Frankenfish* (2004). In fact, the risks of genetic alteration have taken on the role of nuclear radiation's perils in a number of remake movies. In the *Spiderman* (2002) remake, he gains his abilities after being bitten by a genetically altered spider rather than a radioactive spider, and in the *Hulk* (2003) remake, he gains his abilities as a result of his father's genetic engineering studies rather than gamma radiation. The veracity of the depictions of biotechnology is greatly overstated in each of these movies to enhance the drama (Cormick, 2006, 2).

In the past five years, there have been impressive technological advancements, particularly in artificial intelligence and robotics technologies, and this study purposefully picks up three popular movies in the last five years: *Upgrade* (2018), *Child's Play* (2019), and *M3gan* (2022) and aims to analyze the discourses of artificial intelligence technology in these three films, exploring the clues of broader societal fear of technology in their depiction of AI.

In the not-too-distant future setting of popular horror writer and director Leigh Whannel's 2018 horror film "*The Upgrade*", technology dominates almost every facet of daily

life. But when the antagonist Grey's (Logan Marshall-Green) self-defined technophobe world is turned upside down, his only chance for vengeance is an untested computer chip implant.

Blue collar mechanic Grey and his wife Asha's (Melanie Vallejo) self-driving car crashes in the movie when it experiences problems. Then some people come, and a man kills Asha. Asha bleeds to death next to Grey as he stares helplessly. He becomes depressed because the police were unable to find their assailants. He is given the option to have a high tech chip inserted to enable him to walk after attempting suicide. He is finally convinced to have the surgery despite his initial reluctance (IMDB 2018).

The setting depicts near future in which everything is automated, including self-driving cars and intelligent devices, in the movie and the movie portrays Grey as detached from this technology-driven era. The underlying message is that the movie does not embrace advanced technologies from the very beginning. Then, after a tragic self-driving car accident, a brilliant scientist named Eron (Harrison Gilbertson) comes to the scene and offers to perform an experimental procedure on Grey in order to implant a device called STEM, which is essentially an Artificial Intelligence that enables Grey to walk again by connecting his brain and his nervous system. After he learns that STEM (voiced by Simon Maiden) has a mind of its own and has given him the capacity to turn into a killing machine, the movie represents the dangerous potential of artificial intelligence. The movie also refers to societal anxieties about autonomous vehicle accidents with the story's tragic self-driving car accident scene. When STEM viciously murders a man for the first time in a kitchen fight, The movie shows that the Artificial Intelligence device STEM implanted in him asks Grey's permission to operate and gets out of control. The broader societal fears may stem from the fear of losing control and, here we see an artificial intelligence device get all the control and become something dangerous.

The plot of the 2019 remake of the classic horror film "Child's Play (1988)" revolves around a mother (Aubrey Plaza) who, ignorant of its more sinister nature, gives her 13-year-old son (Gabriel Bateman) a toy doll for his birthday (IMDB 2019). This remake of one of the most popular horror movies of all time adds a kind of warning about artificial intelligence, and this time the famous horror icon Chucky operates with artificial intelligence. Chucky played the Lakeshore Strangler, a serial killer who transplanted his soul into a doll, in the original "Child's Play," created by the writer Don Mancini (IMDB 1988).

The new Chucky doll in the remake is a robot operating with artificial intelligence. A factory worker removes Chucky's safety features at the start of the movie. After all, Chucky turns into a fiercely dangerous robot that operates with artificial intelligence. The new slasher horror reboot of the Chucky franchise, which was directed by Lars Klevberg, represents a Chucky with artificial intelligence. AI Chucky's capabilities are broad in the movie because he can link to smart devices, including drones, self-driving cars, thermostats, and televisions.

In the Universal film M3gan, director Gerard Johnstone and screenwriter Akela Cooper tell a new scenario of what happens when androids with artificial intelligence (AI) turn deadly. In the movie, Under extreme pressure at work, a toy company's robotics engineer, Gemma (Allison Williams), decides to pair her lifelike doll M3GAN prototype with her niece Cady (Violet McGraw), and M3GAN starts to act independently (IMDB 2022).

A well-dressed robot tucking kids into bed isn't the only way artificial intelligence is already effortlessly incorporated into many aspects of our lives, but "M3GAN" raises concerns about how dependent we are on it. We frequently use the built-in assistants of Apple and Amazon products, Siri and Alexa, respectively. Many customers clamor to get Teslas because of their semi-autonomous driving features. "M3GAN is a metaphor for a lot of stuff happening in our lives, including the unintended consequences of autonomous robotics," said Daniel H. Wilson, a science fiction novelist and former roboticist, in an interview with CNN (Andrew 2023, 1). The movie again depicts an advanced form of robot that operates with artificial intelligence and turns into a killing machine.

Conclusions

In this comparative analysis of the discourses of AI technology in three films, *Upgrade* (2018), *Child's Play* (2019), and *M3gan* (2022), this study explores the fear of technology in horror movies in the last five years, fueled by technological advancements in artificial intelligence. It also questions the effects of technical opacity that influence our interactions with developing technology by investigating the depiction of technology in these movies. Robots with intelligence, autonomous vehicles, smart devices, and AI technologies are evidence of profound change in our daily lives. Hence, the broader societal fears of loss of privacy and potential control over one's thoughts and actions may stem from the non-transparent processes of developing new technologies. This study also considers the sociotechnical imaginaries literature and explores the sociocultural effects of technological opacity and the existential fear of losing control. Findings could help us better understand the intricate connection between technology and fear. It asks for greater transparency and critical involvement with technical processes to facilitate informed discussions about the moral, social, and cultural implications of technological advancements. This may also help to soothe all the irrational fears.

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