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DECODING THE AI ZEITGEIST: A THEMATIC ANALYSIS OF INTERNET MEMES
ABOUT ARTIFICIAL INTELLIGENCE

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ABSTRACT

The advancement of artificial intelligence (AI) has captured the public imagination while simultaneously sparking discussion about the implications of these technologies. This thesis explores cultural narratives and attitudes surrounding AI through an inductive thematic analysis of 115 AI-related internet memes. Findings reveal perspectives about AI's potential to undermine uniqueness, displace human labor, and operate unchecked; simultaneously, some memes may reflect an attitude of caution and optimism, recognizing AI as a helpful tool. By unpacking these cultural narratives, this thesis contributes to a deeper understanding of how memes can be used to communicate societal dynamics, particularly in the realm of AI.

Keywords: Artificial intelligence, internet memes, cultural attitudes, thematic analysis

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INTRODUCTION

Artificial intelligence (AI) has become one of the most widely discussed technologies of recent years. Advancements in AI such as anthropomorphic chatbots, autonomous vehicles, and advanced facial recognition software continue to push past human expectations and permeate into various facets of society. As these technologies continue to pervade public discourse and imagination, memes have become an important vehicle through which many communicate. Memes efficiently convey ideas and emotions across social networks as byte-sized digital content designed for mass sharing. Through parodied pictures and words, memes encode symbols, metaphors, and narratives that can often go “viral” (Marwick, 2013).

This thesis bridges scholarship across critical technology studies, cultural analytics, and memetics. It sees memes as artifacts through which cultural assumptions regarding artificial intelligence can be elucidated. By examining the emotions and themes conveyed in internet memes, we can gain insights into societal narratives and perceptions surrounding the anticipated trajectory of artificial intelligence. It is important to note that this analysis aims not to judge the validity of such sentiments, but rather to contextualize the cultural milieu of perceived AI futures in a novel way.

LITERATURE REVIEW

This thesis explores memes about artificial intelligence (AI) to unpack cultural assumptions and attitudes toward rapidly developing technology. Relevant overlapping fields of research include memetics, mass communication, AI, and technostress, which are expanded upon in this literature review.

Memes: Defined

The foundational concept of memes was introduced in 1976 by evolutionary philosopher Richard Dawkins in *The Selfish Gene*. In this work, Dawkins conceptualizes memes by comparing them to genes — entities that replicate, mutate, and “respond” to societal pressures. In particular, the meme is defined as “a unit of cultural transmission.” This early concept included examples such as “tunes, ideas, catch-phrases, clothes fashions, ways of making pots or of building arches” (1976). Since then, memes have grown to be theorized upon in many different fields such as genetics, linguistics, and sociology, eventually becoming a field of its own — memetics.

Though still applicable in such fields, the contemporary colloquial definition of memes almost always features the internet as a backdrop. Wiggins and Bowers recognized that the concept of the “meme” used by scholars of digital culture varies from that of the definition of evolutionary biologists:

[T]he very idea of the meme, has itself mutated and evolved in a new direction. An internet meme is a hijacking of the original idea. Instead of mutating by random chance, before spreading by a form of Darwinian selection, internet memes are altered

deliberately by human creativity. In the hijacked version, mutations are designed—not random—with the full knowledge of the person doing the mutating. (2015)

This idea of the human-hijacked intentional alteration and spread of memes is also reflected in Shifman's *Memes in Digital Culture*: memes are defined as “(a) a group of digital items sharing common characteristics of content, form, and/or stance, which (b) were created with awareness of each other, and (c) were circulated, imitated, and/or transformed via the Internet by many users.” Furthermore, Shifman defines “content” as “ideas and ideologies,” “form” as “the physical incarnation of the message,” and “stance” as “the information memes convey about their own communication” (2013). By this definition, examples of memes include viral videos that are parodied or mimicked on YouTube or elsewhere, or humorous photos that are widely remixed by Internet users. Similarly, Wiggins and Bowers recognized that “social networks distribute Internet memes without cessation every moment of every day. Most Facebook users likely encounter a meme and/or distribute a meme daily” (2015).

This thesis further defines internet memes as artifacts of participatory digital culture. Viewing memes as artifacts highlights their properties as possessing virtual physicality (existing in the human mind as well as the digital environment), having a social and cultural role in the new media landscape (informing the viewer about the social behavior of the individuals and groups that produce it), and underscoring the purposeful production and consumption of memes (Wiggins & Bowers, 2015). The idea of participatory digital culture is based on Jenkins' initial definition of participatory culture as “a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices” (2009). Furthermore, Jenkins argues that participatory culture emerges “as the culture

absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate, and recirculate media content in powerful new ways (2009). Therefore, examining memes as artifacts of digital culture can provide authentic insight into how social and cultural issues are being communicated and understood within online communities.

Memes: Affordances

While memes seem to have a simple aim — to become “popular, actual, and humorous content that can be easily noticed in a social network but also easily spread” — these “shareable, sometimes pithy, and often puerile” units can also be used in more novel and functional ways (Bebić & Volarevic, 2018). Given the ubiquitous nature of social media websites and blogs, memes can quickly spread digestible and accessible messages. Hagh describes memes as a “practically inescapable form of content for the average online user” (2020), which is further expanded upon by Kien’s definition: “content that takes on distributional characteristics and reach that appear to an observer as if it has a life-force of its own” (2013).

Hagh mentions that one of the main affordances of a meme is its multimodality; therefore, it is an ideal format for “conveying humor reliant on expressing feelings that mass audiences can relate to” (2020). Humor is highly interdependent on culture (Apte, 1985), which is why meme humor can convey unique insights into the emotions and beliefs of a community, particularly communities that use such humor with a specific goal (Hagh, 2020). As the adage goes, a picture is worth a thousand words. Hagh further posits that the abstract nature of memes allows them to portray emotions that creators may otherwise be unable to describe through words

alone. Additionally, memes are a unique artifact to examine as they can introduce topics for discussion and support without requiring the poster to share too many personal details (Bauer & Ngondo, 2022), which may connect to users' proclivity to share more freely and openly.

Memes are inherently creative forms of humor but have also been researched extensively through other lenses, particularly politics. Hagh found that social and political ideologies are often disseminated via meme formats (2020). Additionally, in researching the use of viral content in communicating politics, Bebić & Volarevic conclude that memes have largely emerged as the lingua franca of several elections, giving digital citizens a new way of communicating their beliefs. Related to politics, Ask & Abidin found that one of the key affordances of meme humor is that it has the ability (and tendency) to critique those in power in contrast to resorting to humor that punches down (2018).

Another related affordance of memes is their power to inject humor as a collective coping mechanism to eliminate stressors (Guilmette, 2008). Gal et al. discuss that public discourse (and the personal narratives that constitute it) is central to the construction of any collective identity. Memes create collective identities through shared norms and values (2016). Social media platforms and other participatory digital enclaves where memes are posted and viewed have become places where public discourse thrives, and therefore, where collective identities are built. Research on collective coping has also revealed that the use of memes reduces stress, particularly due to the intrinsic value of using humor to share experiences, feelings, and symbolic values. Additionally, memes have been found to provoke comments and discourse and amplify messages in ways traditional media cannot (Ortiz et al., 2021).

Artificial Intelligence: A History

Although artificial intelligence (AI) is a widely discussed and popular topic in 2024, the field has a long history tracing back many decades. One definition of AI is “a system’s ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation” (Haenlein & Kaplan, 2019). AI, and more generally, the notion that computers can “think like humans,” formally originated with the work of the mathematician and computer scientist Alan Turing in 1950. Turing famously developed a code-breaking machine for the British government to crack the German Enigma code deployed in World War II. The Turing Test was also born through Turing’s further tests with intelligent machines, postulating that “if a human is interacting with another human and a machine and unable to distinguish the machine from the human, then the machine is said to be intelligent” (Haenlein & Kaplan, 2019). “Artificial intelligence” was coined and established as an academic discipline six years later, in 1956, at the Dartmouth Summer Research Project on Artificial Intelligence led by Marvin Minsky and John McCarthy (Taylor, 2021). Shortly after this fundamental event, there began an “AI summer” of sorts, which saw a nearly twenty-year period of significant success in the field. Examples include ELIZA, a natural language processing (NLP) tool capable of passing the Turing Test, and the General Problem Solver program, which could automatically solve certain simple math problems. These “success stories” gave way to more funding and interest in the field, and 1970 witnessed Marvin Minsky predicting that the general intelligence of an average human being could be reasonably developed within three to eight years (Haenlein & Kaplan, 2019).

However, rapid advancements in AI also brought new concerns and challenges. In 1973, the United States Congress cracked down on spending on AI research and several experts began criticizing the outlook of the field. Both the British and U.S. governments decided to halt most support for AI research, which kicked off the “AI winter” — a period of decreased funding and little advancements that lasted into the millennium. The field largely remained an area of “scientific obscurity and limited practical interest” for several decades, which experts attribute to the specific way that early “expert systems” intended (and failed) to replicate human intelligence (Haenlein & Kaplan, 2019).

Fast-forward to today, and most of the world has access to devices and technologies under the broad umbrella of AI. AI enables Facebook to recognize and tag faces in images, Siri to understand voice commands and act accordingly, and Tesla to develop autonomous vehicles (Kaplan & Haenlein, 2019). Due to the rapid rise of Big Data and massive improvements in computing power over the past couple of years, AI has revolutionized the business environment and entered the public sphere, becoming accessible to just about anyone with a smart device and internet connection. Most notably, in November 2022, Chat Generative Pre-Trained Transformer (ChatGPT), a software application based on a large language model (LLM), was launched by the company OpenAI. ChatGPT can “conversate” with users, write passable academic essays and code, and solve other complex theoretical and practical problems. The software has been labeled as a disruptive innovation due to its impact on standards regarding “original work” and “potential to disrupt the origination of innovation from human brains” (Sardana et al., 2023). Other technology companies scrambled to compete, producing Google Bard (now Gemini), Microsoft Copilot, and more. Other types of AI programs, such as image- and art-generators (OpenAI’s DALL-E, Stability AI’s Stable Diffusion, Midjourney, etc.) also came into popularity around the

same time. However just as the rapid advancement and proliferation of AI technologies have revolutionized our modern lives, it has also led to new societal challenges.

Technostress and Anxiety

Over the past few years, the world has experienced monumental changes spurred on by technological innovations. As information and communication technologies (ICTs) become deeply embedded across all spheres of life — work, play, and home, to name a few — there are growing expectations for people to seamlessly incorporate them into their lives. However, growing pains have been inevitable — an unintended one being the stress caused by ICTs such as AI (Ayyagari et al., 2011). AI anxiety represents one manifestation of this longstanding stress.

Technostress was coined by clinical psychologist Craig Brod as “a modern disease of adaptation caused by an inability to cope or deal with ICTs in a healthy manner” (1984), emerging due to increased use of ICTs in the workplace (Ayyagari et al., 2011). Teepe et al. found that effects of technostress include “job dissatisfaction, perceptions of being drained by the use of technological devices, feelings of exhaustion, loss of motivation, frustration, and burnout,” as well as further problems associated with digitalization, such as “replacement fear, stressful hyper-connectivity, an increase in a cognitively demanding and simultaneous decrease in manual jobs, and digitalization anxiety” (2023). While research has shed light on some contributors to technostress (e.g., identifying attributes of ICTs such as constant connectivity as potential sources), further examination into the causes and impacts of technostress remains limited in scope and depth (Ayyagari et al., 2011).

AI anxiety can be described as a form of technostress, originating with the first modern computers when many feared that computers threatened the very idea of what it means to be human. Johnson and Verdicchio argued that “human beings are thought to be unique because of their capacity to think, and if computers also can think, then fundamental notions about what it means to be human are undercut” (2017). This fear of displacement manifests itself in emotions of fear and trepidation, which are also commonly perpetuated in science fiction such as Spielberg’s *AI*, in which humans wrestle with the status of robots, or Garland’s “*Ex Machina*,” which sees intelligent robots yearning for freedom.

Johnson and Verdicchio further posit that most AI anxiety is a result of sociotechnical blindness, confusion about autonomy in computational entities, and an inaccurate conception of technological development. First, they recognized that public sentiment regarding AI could get out of control and affect human beings and society in “disastrous ways,” particularly when well-known public figures like Bill Gates, Elon Musk, and Stephen Hawking express their concern. The study went on to argue that AI can be understood as lines of code that perform computational operations; “as such, AI does nothing that affects the world” (2017). It concludes that though there are “good reasons” for AI anxiety, AI programs and software should not be the target of such feelings. Instead, the anxiety should center upon the people investing in the technologies and making decisions about the form and function of AI software and hardware in existing institutions and frameworks.

Based on these existing fields and findings, two questions arise to guide this research:

RQ1: What are common themes and symbols in memes about AI?

RQ2: What cultural attitudes do these memes reveal about AI?

METHODOLOGY

This thesis conducts a qualitative thematic analysis to uncover common ideas and symbols within a compiled collection of internet memes about AI.

To systematically gather a diverse range of memes from across the internet, data collection relied on Google searches to identify suitable AI memes and mining online meme communities (i.e., Reddit) for trending AI-focused content. This method was the only way to extract organic memes from their source. Data was collected from December 2023 to January 2024. This process yielded results like meme-exclusive forums such as iwastesomuchtime.com (IWSMT), digitalmomblog.com, and programmerhumor.io, as well as sub-communities such as r/memes and r/ProgrammerHumor on Reddit. These websites are all meme-exclusive forums that are moderated by a designated webmaster, either culling and posting content themselves or allowing selective materials to be published by the public. For example, the Digital Mom Blog is run by two moderators, Digital Molly and Zowie Elizabeth, who create and post each piece of content themselves. On the other hand, the popular Reddit forum r/memes is regulated by (often anonymous) volunteer moderators, with rules barring users from posting memes that are text-only or unedited webcomics. Additionally, barriers to posting tend to differ depending on the forum. Though there are certainly more forums out there, I specifically picked memes from Reddit because of its presence as one of the largest social media sites with dedicated communities for memes, where users can create, post, and comment freely. I selected the other meme blogs (IWSMT and Digital Mom Blog) because they each curate and publish viral memes that reach a wide audience, providing insights into memes that have gained mainstream popularity. Additionally, these blogs have longevity and established reputations. By selecting

both moderated meme blogs as well as open platforms like Reddit, I aimed to analyze memes that represent both mainstream and niche internet humor. This source diversity ensures a wider representation of audiences and examination of memes appreciated by varying senses of humor. The goal was to choose established, active meme sources that could provide viral, recent memes as well as moderated collections of popular memes.

A preliminary bank of 124 relevant memes was created after scouring search engines and social media platforms for memes relating to AI. A parsing process was then applied based on Osterroth's (2015) definition of the meme as a multimodal "language-image-text" medium. This framework asserts that the basis of a meme is the image, which is then "recontextualized by language." To be eligible for analysis in this research, each meme had to possess both image and text components. Artifacts such as text-based discourse on the social media platform X (formerly Twitter) that could fall into a broader classification of "memes" were eliminated out of scope for this thesis.

After parsing, 115 memes formed the final dataset. Out of the 115, 65 memes were found on various Reddit forums (r/memes and r/ProgrammerHumor are notable ones), and 50 memes were collected elsewhere on the Internet (blogs, popular meme websites, etc.). These 115 memes were then transcribed into textual descriptions and arranged in a spreadsheet for further analysis and coding.

Thematic Analysis

Conducting a thematic analysis was imperative to identifying and categorizing attitudes and sentiments about AI that appear in memes. I took an inductive approach to identify themes in

the dataset. In this bottom-up method, themes are identified without the basis of a pre-existing coding framework (Braun and Clarke, 2006). It is also worth noting that though objective inductive coding was the goal, it was inevitable for my own theoretical and epistemological experiences to permeate the coding process (Braun and Clarke, 2006).

Analytical Process

Following the phases of thematic analysis laid out by Braun and Clarke (2006), I first familiarized myself with the data by transcribing each image into text. Like alternative text, these descriptions detail the image and text of a meme. For example, the following image was described as “‘Disaster Girl’ symbolizing ChatGPT smiles deviously at the camera with a blazing house fire in the background, symbolizing ‘5000 years’ of accumulated human knowledge and knowhow.’”



Figure 1. Example AI meme featuring "Disaster Girl" format

The second phase involved generating initial codes to delineate remarkable and distinct features of the data. I analyzed each meme, marking underlying messages and attitudes according to my perception. These initial codes then led into the third phase, “Searching for themes.”

FINDINGS

After organizing and parsing, the memes analyzed in this thesis can be sorted into five major themes: “Man vs. Machine,” “Machine vs. Machine,” “Displacement,” “AI as a Solution,” and “Competency.”

Theme 1: Man vs. Machine

The theme “Man vs. Machine” explores the complex relationship between humans and artificial intelligence, particularly when it comes to discord or friction between humans and machines. The difference between this theme and others that explore dimensions of the relationship between humans and machines (i.e., “Displacement,” which explores humans losing social roles due to machines and AI) is that there is a distinct sentiment of opposition that many of the memes that fall into this category perpetuate.

17 memes were categorized under this theme. Data highlights concern over a man vs. machine intelligence war that may potentially threaten humanity if not properly controlled (e.g., one meme jokingly illustrates this with the text “destructive machine gods have risen and their machine legion [is] unleashed on humanity”). Other memes depict a sentient AI: one that has the potential to become exasperated or impatient with humans. As shown in Figure 2, most of these

memes, though meant to be humorous, have a foreboding undertone, often viewing humanity as living on the cusp of an all-out war against AI.



Figure 2. Being polite to your Google Home may reap benefits

Other poignant examples of memes in this theme include one featuring Puss in Boots, suggesting the possibility of ChatGPT turning into Roko’s Basilisk, a famous thought experiment that considers the creation of artificial intelligence that evolves into a sovereign entity that will retroactively penalize anyone who did not help bring it to existence (Seland, 2022). It is thought to be one of the “scariest thought experiments ever”; to many, it is a potential reality for humanity. In recent years, Roko’s Basilisk has seen a resurgence in discussion due to the advent of ChatGPT and other advanced LLMs. The creator of the meme cracks a joke using the “Dramatic Puss” meme format while simultaneously bringing to light their trepidation of the possibility of Roko’s Basilisk coming true.

Me telling ChatGPT "please" & "thank you" just in case it evolves into Roko's Basilisk:



Figure 3. One user's anxiety over Roko's Basilisk portrayed by Puss in Boots

Another meme categorized in this theme follows the “Baby Beats Computer at Chess” meme format, which is based on an animated scene of a toddler happily winning a game of chess against a buff anthropomorphized computer. Originally created by YouTuber TheOdd1sOut to discuss the futility of beating a computer at chess and board games, the meme illustrates the idea that humans can only beat computers at chess when the program is intentionally not trying or holding back (*Baby Beats Computer at Chess*, 2020). The caption expresses the creator’s sentiment as it comes to AI imitating human achievements (“I’m not afraid of the AI that passes the Turing Test” “I’m afraid of the AI that intentionally doesn’t”), giving the viewer a keen sense of competition between man and machine (in this case, with the result of oblivious man and victorious machine).



Figure 4. "Baby Beats Computer at Chess" illustrates one user's fear of Turing Test

By highlighting tensions that emerge around humans and machines vying for power in a metaphorical war, these memes operate under several key assumptions. First, the memes intrinsically portray man and machine as independent entities that can engage in conflict with each other, rather than AI as a tool that humankind has built and wields control over. These memes also presume that man and machine are worthy opponents for each other and well-matched in ability. Additionally, the memes presume that there can only be one victor in this “battle” that humankind is on the brink of. Overall, the memes in the “Man vs. Machine” theme display a complex interplay of fears and uncertainties that the creators experience regarding perceived strife between humankind and machines.

Theme 2: Machine vs. Machine

The “Machine vs. Machine” theme illustrates an emerging battle for supremacy between AI systems as they become increasingly capable. As models like ChatGPT and Google Bard attain more anthropomorphic conversational abilities, concerns arise over which one will “dominate.”

Nine memes fell under this category. Key players mentioned in the memes include Google’s Bard (renamed Gemini), OpenAI’s ChatGPT, Microsoft’s Azure and now-defunct Clippy, Elokence’s Akinator, and the CAPTCHA test. These memes generally depict two entities in conflict, striving to overpower or conquer the other (i.e., Figure 5), or highlight the differences between them.



Figure 5. Google Bard (Gemini) comes out on top over ChatGPT in this meme

As with the “Man vs. Machine” theme, an undertone of combat or war is present. Figure 5 achieves this by depicting ChatGPT as corpses in the background as Leonidas, King of Sparta, wields a sword while letting out a battle cry.



Figure 6. Power struggles between two prominent AI companies depicted through Japanese robot wrestling

Figure 6 is a GIF of wrestling Japanese robots that presents ChatGPT and Google Bard (now Gemini) as opponents in a ring, fighting over the victory of taking over the creator's job. An air of tension and inevitability permeates this humorous take on the creator's perception of AI companies and systems. Other memes under this theme present almost dystopian visions of different AI models vying over the spoils of automation and algorithmic efficiency.

The "Machine vs. Machine" theme highlights competitive tensions arising as personified AI systems, created by tech giants, engage in a metaphorical arms race for superiority. This generative AI market demands substantial computing power and operational resources, resulting in substantial barriers to entry and the potential for monopolization. In their pursuit of creating the most dominant, accurate, and effective LLMs, companies have been able to rake in significant profits, which are then continuously re-invested to improve their AI technologies.

In 2022, Ofcom, the United Kingdom’s communications regulator, launched an investigation into the cloud computing market, which LLMs heavily rely upon. The report highlighted three hyperscalers — Amazon Web Services (AWS), Microsoft, and Google — that own the infrastructure built into millions of physical servers and virtual machines globally. Ofcom expressed concerns about potential customer lock-in, where customers become dependent on particular suppliers and ecosystems, making it challenging for new entrants to the market. This situation can increase market share and power held by these hyperscalers (Cloud services market study, 2022).

The “Machine vs. Machine” theme captures the intensifying rivalry between AI systems and the companies behind them as they compete for dominance in the generative AI landscape. As these models become more advanced and human-like in their abilities, the battle for supremacy intensifies, fueled by the substantial resources and computing power required to develop and operate them. The memes in this category vividly depict this “Machine vs. Machine” narrative through metaphors of combat, war, and power struggles, reflecting the underlying tensions and high stakes involved in the race for AI dominance. The data indicates worries that entire industries could come under the control of a monopolistic ‘Robot Overlord’, rendering human roles obsolete. A sense of uncertainty and disbelief comes through as well, evident in the imagery of AI models masquerading as humans and subverting anti-robot tests. These concerns about AI supremacy and the loss of human roles naturally segue into the next theme, “Displacement.”

Theme 3: Displacement

The theme of displacement captures the growing unease and anxiety surrounding the encroachment of advancing AI systems into various jobs, roles, and domains once considered uniquely human. As AI capabilities expand and improve, there is a palpable sense of human uniqueness and indispensability being threatened. The McKinsey Global Institute's 2017 estimate that 400 to 800 million workers could be displaced by AI by 2030 emphasizes the potentially massive scale of this disruption. This theme resonates across many industries and professions, from artists and developers to customer support and even actors, as AI systems are increasingly updated to demonstrate competencies in areas once thought to be exclusive domains of human intelligence and creativity. AI art generators such as DALL-E and Midjourney can replicate what artists takes hours to make, in mere seconds. The onset of the COVID-19 pandemic and the accompanying economic downturn may have exacerbated these fears, as job security and the value of human labor have been increasingly called into question.

37 memes were categorized under this theme. These memes vividly illustrate real concerns that the creators have through various lenses. Figure 7, featuring the iconic character “Gru” from the Despicable Me franchise, satirically depicts a nefarious scheme to “develop a powerful AI,” “teach it to write code,” and ultimately “have the AI replace you as developer.” This tongue-in-cheek representation captures an underlying anxiety that AI systems could eventually supersede human professionals in their own fields without them even realizing it, only to look back in surprise that they were aiding in their own displacement.



Figure 7. Gru from the *Despicable Me* series illustrates a common struggle for developers

The data also illustrates creeping anxieties around AI not just transforming but fundamentally disrupting several career paths. An overarching sentiment emerges of people gradually losing economic security, purpose, and identity in the face of “superior” algorithmic competitors. Figure 8 is another meme that contrasts the utopian vision of a society where “robots handle all necessary hard labor while humans have leisure time for creativity” with the sobering reality of “2023: humans work hard jobs for barely any pay while robots write poetry, paint, and take over more and more creative work.” This juxtaposition encapsulates the real fear that companies’ encroachment into creative domains via AI art generators could displace human artists and diminish the value of human creativity. The Star Wars meme that accompanies the caption, with characters expressing bewilderment at their predicament, “Wait a minute how did this happen? We're smarter than this,” shows a sense of disbelief and unpreparedness many individuals may feel as AI systems rapidly advance and absorb the duties that were once theirs.

Sci-fi utopias: Robots handle all necessary hard labor while humans have leisure time for creativity

2023: humans work hard jobs for barely any pay while robots write poetry, paint, and take over more and more creative work



Figure 8. Sci-fi utopias got it all wrong

While some memes may express denial or disbelief at this displacement, others convey a grudging acceptance over the inability to compete with tireless AI productivity and efficiency of these technologies. The theme highlights the disruptive potential of AI to displace human workers across a range of different professions and fields. Figure 9 depicts a construction sign proclaiming, “Your skills are irreplaceable!” along with a “Chad” construction worker taunting a crying OpenAI logo-labeled figure by saying, “Hey ChatGPT, finish this building.” This meme humorously acknowledges that while AI technologies may surpass human capabilities in many areas, there are still certain labor-intensive fields that are beyond their physical abilities. However, despite the ostensible reassurance of the sign, the meme operates within the context of a reality where skilled workers in numerous industries are actively being displaced by AI technologies.



Figure 9. Can ChatGPT finish this building?

Overall, the displacement theme captures the profound unease and existential anxieties surrounding AI's potential to absorb and take over human roles, undermine human uniqueness, and disrupt traditional paradigms of labor and creativity. As AI systems continue to advance, these concerns are likely to continue to shape the discourse around their societal implications. Scholars have postulated even more unsettling scenarios, warning that if AI systems achieve superintelligence and become autonomous decision-makers, humans could face an existential threat, potentially "becom[ing] irrelevant, if not enslaved or extinct" (Johnson & Verdicchio, 2017). This sobering forecast emphasizes the fundamental challenge to human agency and self-determination that many think could arise from the unchecked development of superintelligent AI.

Theme 4: AI as a Solution

The “AI as a Solution” theme depicts pragmatism and even optimism about AI’s capability to solve a diversity of problems. While some of the memes acknowledge the potential for excessive hype and overly ambitious predictions, others point to using systems like ChatGPT in an assistive capacity alongside humans, rather than viewing it as a direct competitor or replacement.

Seven memes fell under this theme. Some of the memes address the dangers of a “technochauvinistic” viewpoint, a concept coined by Meredith Broussard in her 2018 book *Artificial Unintelligence: How Computers Misunderstand the World*. Technochauvinism refers to the belief that technology is inherently superior and “always the solution,” driven by a blind optimism about its capabilities and an overconfidence in computer functions. Broussard argues that this mindset often overlooks the limitations and potential consequences of relying excessively on technology. In the context of these memes, the technochauvinistic perspective manifests as an unwavering faith in the problem-solving abilities of AI systems, portraying them as capable of tackling a variety of tasks, from practical challenges to complex intellectual problems. However, this viewpoint fails to account for potential biases, errors, or ethical considerations that could arise from an overreliance on AI, as well as the strengths and capabilities that human intelligence and judgment brings to the table.



Figure 10. A user shares their reliance on generative AI for tasks like looking clever on emails

The data seems to emphasize establishing proper boundaries so that AI can enhance workflows. To do so, many of the memes end up portraying and poking fun at the absurdity of techochauvinist viewpoints. Whether leveraging ChatGPT to ease workloads or utilizing AI detection tools to maintain accountability, the overwhelming emphasis is on AI as a tool, rather than the replacement for humans. An underlying suggestion takes shape around focusing AI progress on augmenting people’s abilities rather than pursuing full automation. There seems to be an acknowledgment that while AI will create disruptions, it can also help overcome challenges if guided ethically.

One meme depicts a pleading man as OpenAI, saying “Will you please listen? I am not the messiah.” A group of people leaning toward him labeled “Students” then cry out, “HE IS THE MESSIAH!” This sentiment jokes that there are many who believe that generative AI companies like OpenAI have the means to solve many educational and logical problems.



Figure 11. Students hailing OpenAI, creators of ChatGPT, as "The Messiah"

Overall, this theme of AI as a solution to many problems runs under the assumption that technology can do many things faster and better than humans can, solving potential points of friction or issues in our society. However, this confidence in AI technologies is juxtaposed by the fifth theme, “Competency.”

Theme 5: Competency

The theme of “Competency” involves memes depicting the dissonance between widespread fears over advanced AI and the reality of current capabilities. Rather than dystopian “Skynet”-esque scenarios prevalent in science fiction and predictions, the data illustrates AI’s tendency to frequently fail tasks that seem basic to humans. Despite advancing rapidly, AI is shown to struggle with simple image recognition, have inconsistent reasoning, and frequently misunderstand context. As the British science fiction writer Arthur Clarke once said, “Any sufficiently advanced technology is indistinguishable from magic...yet when one understands the

technology, the magic disappears” (1973). Memes that fall under this theme illustrate this disappearance of magic — the moment you spot an imperfection in something that seemed flawless in concept.

45 memes fall under this theme. One possible explanation for the plurality of memes in this category is due to the communities that these memes were found in. A majority of them are made up of people who are generally experts in technology — for example, a subreddit such as *r/ProgrammerHumor* features memes and other funny content about the lives of programmers. Thus, this community may understand more of the inner workings of artificial intelligence and believe that this technology is not as far ahead as most laypeople may believe.

The emerging sense of the “Competency” theme is of models lacking fundamental general intelligence that comes naturally to humans. While greater algorithmic efficiency and optimization is achieved for specific technical goals, gaps remain for elastic thinking, emotional nuance, and common sense. There is an obvious disparity between AI’s weaknesses and the panicked responses of those who believe the technology will take over all facets of life. Figure 12, the “AI according to the news” meme, juxtaposes the sensationalized portrayal of AI as a humanoid silver robot with the stodgy reality depicted in the latter half, “AI in real life” – a person mistaking a butterfly for a pigeon. This meme highlights the reality of AI’s struggles with “basic tasks” like image recognition.

AI according to the news:



AI in real life:



Figure 12. A contrast in AI perception

This disconnect between the lofty expectations people have for advanced AI technology and its actual abilities is further exemplified by Figure 13, a meme depicting a monkey in a breathing tube (“on life support”) due to their doctor using ChatGPT to pass classes. This meme satirizes the potential risks of overreliance on AI in domains such as medicine and education.

Me in 2040 dying in the
operating table because my
Doctor used ChatGPT To Pass
medical school



Figure 13. According to this user, ChatGPT is producing under-qualified medical students

These memes and others in the theme push the creators' perceptions that while AI's rapid progress warrants ethical caution, current systems still lack well-rounded competencies required for human intelligence. As Haenlein and Kaplan note, "AI can be classified into analytical, human-inspired, and humanized AI depending on the types of intelligence it exhibits (cognitive, emotional, and social intelligence) or into Artificial Narrow, General, and Super Intelligence by its evolutionary stage" (2019). However, they argue that an "AI effect" occurs once these systems become widely adopted and understood – onlookers tend to reduce the behavior of AI, believing that these systems aren't exhibiting "real intelligence." This effect may be further exacerbated by the roles and knowledge that many of the creators of these memes possess (i.e., programmers or tech geeks).

DISCUSSION

The findings of this study provide valuable insights into the cultural attitudes and narratives surrounding artificial intelligence (AI) as expressed through the medium of internet memes. Unpacking the symbolic messaging behind these memes about AI allows us to chart key themes in the emergent sociotechnical landscape facing unprecedented AI advances. The five identified themes — “Man vs. Machine,” “Machine vs. Machine,” “Displacement,” “AI as a Solution,” and “Competency” — reveal a dynamic range of perspectives, from fear and anxiety to cautious optimism and pragmatism.

The “Man vs. Machine” and “Machine vs. Machine” themes reflect a deeply rooted apprehension about the potential for AI systems to surpass human capabilities and ultimately replace humanity. These themes tap into long-standing science fiction tropes about the implications of superintelligent AI. The memes in these categories frequently anthropomorphize AI systems, portraying them as worthy adversaries engaged in a metaphorical arms race or battle for supremacy. This personification of AI may stem from a human tendency to project agency and intentionality onto these technologies, even when such systems are creations of human design and decision-making (Li & Ayoung, 2021).

The theme of “Displacement” also furthers this sense of anxiety surrounding AI’s encroachment into various domains once considered unique to human creativity and intelligence. The memes under this theme highlight a perceived threat of AI to job security, economic stability, and even fundamental human values of human labor and artistic expression. These concerns are widely held, particularly in the context of rapid technological change and globe-shattering events such as the COVID-19 pandemic. The memes in this theme, therefore, could

potentially be a manifestation of the replacement fear that characterizes techno-anxiety (Teepe et al., 2023). Techno-anxiety theory also posits that as technologies become more complex and pervasive, individuals may also experience heightened levels of stress, feelings of inadequacy, and concerns about their place in a rapidly changing world (Brod, 1984). One possible interpretation may be that the memes reflecting these themes serve as an outlet for public discourse (Gal et al., 2016), allowing individuals to express their anxieties and process the perceived “threat” to their livelihoods, identities, and sense of humanity.

On the other hand, the “AI as a Solution” and “Competency” themes offer somewhat of a counterpoint to the other, more alarmist themes. The memes under the “Solution” theme embrace a more pragmatic, optimistic perspective, envisioning AI as a tool that humans can use to enhance our existing capabilities rather than replace them entirely. This theme aligns with ethical viewpoints of AI that see the technology as an asset in tackling complex challenges when deployed responsibly and intentionally. The “Competency” theme is unique in that many of the memes point out the limitations and vulnerabilities of AI systems. This viewpoint grounds the discourse, puncturing the unrealistic expectations that many have surrounding AI. These memes remind audiences that despite the advancements our world has seen in the realm of AI, current technologies still struggle with basic tasks that seem trivial to humans, such as accurate image recognition and contextual understanding. This theme echoes the “AI effect,” which states that once the background workings of a technology are unveiled and demystified, its perceived intelligence is diminished.

In summary, these themes reveal a zeitgeist that lays at the intersection of hopes, fears, realities, and uncertainties surrounding AI. The memes are a window through which to view broader societal discourse, amplifying voices that range from cautious to optimistic. In creating

and posting these memes, the creators also expose underlying tensions and contradictions inherent in our relationship with AI technologies. Additionally, this thesis contributes to a deeper understanding of the relationship between technostress and AI advancement. The findings possibly highlight the importance of developing technological literacy in order to mitigate needless fears, as well as push the responsible adoption of AI technologies.

Limitations

While this thesis provides insight into cultural attitudes and narratives, it is important to acknowledge several limitations of the research. This research focused on an examination of five major themes resulting from a dataset of 115 internet memes. As stated in the methodology section, thematic analysis was utilized to identify these themes and categorize the memes by attitudes about AI. A bottom-up inductive approach was used to identify themes without a pre-existing coding framework (Braun and Clarke, 2006). Due to this method, conclusive facts cannot be drawn regarding AI memes in general, or the impact of these memes. Thus, any conclusive discussion is exclusive to this specific dataset alone.

It is also important to recognize that a plurality of memes analyzed in this study originated from online communities and forums frequented by users with technical expertise or education in fields related to AI and computing (e.g., r/ProgrammerHumor on Reddit). While these communities can provide valuable insights into the perspectives of those closely involved with AI development and implementation, there is a possibility of bias in the memes collected. It is inevitable that those creating and engaging with technology memes in such spaces may have higher levels of technological literacy and direct experience with AI systems as compared to the

public. As a result, the narratives and attitudes expressed through these memes may not fully capture the diversity of viewpoints held by people with varying degrees of familiarity to AI. However, future research could explore memes circulating in more diverse digital spaces to gain a more comprehensive perspective.

Furthermore, this study examines internet memes as static artifacts, without delving into the dynamics of internet discourse and interactions that may occur around these memes in online communities. Since memes are often parodied and commented upon, their meanings and interpretations may shift as they are shared and contextualized across a variety of platforms and social networks.

Lastly, this study focuses on memes mostly originating from English-speaking online communities. As such, it may not be able to adequately represent perspectives and cultural narratives in other regions or linguistic contexts.

Future Work

This thesis opens up several possibilities for future work. One potential direction could scope out and analyze memes from a wider range of cultural and linguistic contexts. A comparative study across different regions or countries could provide insights into how cultural factors influence the perception and portrayal of AI through memes. Another direction is tracking themes and narratives surrounding AI in a longitudinal perspective to analyze how it permeates and affects various facets of society. Yet another interesting avenue could be combining qualitative and quantitative approaches, such as sentiment or network analysis, to

reach a more comprehensive understanding of the emotions, effects, and influence of AI-related memes across online communities.

Finally, as AI continues to advance and affect our society in various ways, it would be valuable to investigate the potential impact of AI-related memes on public perception and policy decisions. Such research could inform strategies for responsible and ethical technological governance, ensuring that the societal implications of these technologies are adequately addressed.

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