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Crafting the Machine Mind: A Poiesis Analysis of Artificial Intelligence in *Terminator 1*

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Abstract. The current study employed a Poiesis approach to examining the evolution of Artificial Intelligence (AI) in Terminator 1, a 1984 science fiction movie about AI robots. The focus was to analyze the film scenes that depict AI that might inspire the evolution of AI-driven technology in the modern world. The themes are AI independence, human-AI interactions, and ethical concerns regarding AI. The analysis was followed by comparing the AI depiction in the movie and modern AI technology in real life. The study showed that AI was depicted accurately within the movie's release. However, the applications of AI technology were still fictitious. The findings imply that researchers and policymakers need to ensure responsible AI development and focus on the importance of ethical frameworks in AI development. This study also highlights the responsibility of movie creators to balance realistic and ethical considerations in storytelling, as narratives such as those presented in Terminator 1 could shape public perceptions and societal attitudes toward AI.

Keywords: Movie Analysis, Artificial Intelligence, Terminator, Poiesis

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INTRODUCTION

Artificial intelligence can be seen as a tool created by humans and for humans. It is a machine or program that can learn and adapt to solve problems that require different solutions. The belief that artificial intelligence is intellectually superior is a source of interest and fear for scientists (Gawdat, 2022). Although intelligence means many ways, artificial intelligence supports a significant achievement and is a

fearsome threat to humanity. Critics argue that despite AI's remarkable computational and analytical capabilities, it lacks core human attributes such as emotional awareness, empathy, and the ability to navigate complex social interactions (Johnson, 2022). These limitations highlight the distinctions between human intelligence and AI, underscoring the irreplaceable value of inherently human traits. Emotional intelligence, for instance, is fundamental in fields such as health care, education, and leadership, where understanding, connection, and trust are essential. Without these qualities, AI, while powerful, fails to fully replicate the nuanced and holistic decision-making that humans bring to many areas of life.

The beginning of Artificial Intelligence can be traced back to Alan Turing in 1935, with the creation of the Turing Machine to break the German encryption code during World War 2 (Morais da Silva et al.,2024). As time evolves, AI has evolved beyond military usage and more into civilian application (Shahzad et al., 2023). In the 1980s, AI took its first step into the commercial market with a program called XCON or Expert Configurer. It became a tool for businesses to process customer orders. It marked a turning point, as AI began establishing itself as a practical and valuable asset in industries beyond research and defense, foreshadowing its transformative role in the global economy.

Artificial intelligence influences modern societies' response to the challenges people face (Delipetrev et al., 2020). From its early beginnings as a concept in computer science, artificial intelligence has grown into a revolutionary force across numerous industries within our society. Artificial Intelligence has become virtual assistants and advanced robots designed to help humanity. Its ability to learn, adapt, and make decisions has made the way for innovations once thought to be science fiction. As artificial intelligence continues to evolve, it raises important questions about ethical issues, application in war, and the relationship between humans and machines.

One of the ethical questions when it comes to AI is the usage of artificial intelligence as a weapon. The application of AI in war has transformed modern warfare, introducing inhumane precision, efficiency, and autonomy (Fornasier, 2021). AI-driven weapons systems, including drones and guided missiles, can execute complex tasks with minimal human control, significantly reducing response times and operational costs. These systems use machine learning algorithms to analyze vast amounts of data, adapt to dynamic environments, and make real-time decisions, enhancing their effectiveness on the battlefield (Gilli et al., 2022). However, AI as a weapon raises ethical and legal concerns, particularly regarding accidents. The rapid advancement of AI in military applications has given rise to international regulations to mitigate the risks and ensure that such technologies are deployed responsibly and ethically (Watts & Bode, 2024).

Terminator 1 is a science fiction movie where a robot known as the Terminator returns in time from a future ruled by artificial intelligence. Its mission is to kill Sarah Connor, whose future son, John Connor, to lead a rebellion against the AIs. At the same time, a soldier named Kyle Reese is also sent back in time to protect Sarah. As the Terminator pursues them, Sarah and Kyle form a bond while desperately trying to evade capture and destruction. The climax takes place in a dramatic battle where Sarah ultimately destroys the Terminator, setting the stage for future resistance and ensuring the survival of humanity.

In the film *Terminator 1*, AI plays a central role that engages the audience with the depiction of a dystopian future. The movie introduces Skynet, an advanced AI system that becomes self-aware and turns against humanity, launching a war between humans and machines. The portrayal of AI in *Terminator 1* reflects both the interest and fear surrounding the potential of intelligent machines. This cinematic representation highlights the imagined consequences of unsupervised AI development, serving as a cautionary tale about the risks and ethical issues of creating artificial intelligence. Through its narrative, *Terminator 1* provides the possible trajectories AI takes, using real-world discussions about the responsibilities and challenges of advancing AI technology.

Most science fiction movies that emphasize the role of AI in the story portray robots and AI more often as friendly, helpful companions of humans rather than menacing or harmful to humans (Nguyen, 2024). In *Terminator 1*, AI is the villain actively fighting humanity to maintain its existence. This depiction of AI as an enemy of humans was a concept before the release of *Terminator 1*, but what remains unique to the movie *Terminator 1* is the portrayal of how AI operates in combat and defense.

Previous studies have explored the comparison of real-life AI and depicted it as an independent race similar to humans for humanity. For example, one research about the novel "Klara and The Sun" explores the idea of AI as a sentient being capable of empathy and cognition (Sahu & Karmakar, 2024). The TV show "Rick and Morty" portrays AI emulating human behavior by having thoughts outside of their programming. AI contemplates its purpose, something that all humans eventually confront within themselves (Maxwell, 2021). One research about the depiction of AI in the game "Detroit: Become Human" also argues that AI is similar to humans by highlighting how they would face oppression the same way humans do (Ludwig, 2022).

However, there is a gap in the research concerning the depiction of AI, its role as a weapon, and the depiction of the future of *Terminator 1*. This study aims to describe the depiction of AI as a weapon in *Terminator 1*. It compares the AI-driven technologies in the year 2029 shown in the movie to the modern advancement of AI in real life. By doing this, this study understands how science fiction depiction compares to real-world technology advancement.

The main issue in the application of AI in war is mostly ethics. The ethical points with AI mainly stem from the fact that AIs are superior in both thought and physique. If robots replace our daily lives, people must ensure they are as safe as possible.

RESEARCH METHOD

This study employed a Poiesis approach, focusing on ideas created from existing ones (Conway, 2022). Poiesis investigates the process via which something that previously did not exist comes into being. In this study, the poiesis analysis examines the evolution of artificial intelligence (AI) in *Terminator 1*. By applying this framework, we explored how *Terminator 1* depicts AI in modern society and compared the movie's depiction of AI with the actual AI-driven technology in the "future" year mentioned in the film 2029. This paper includes a detailed analysis of the movie's storyline, characters, and themes to identify its messages about AI.

Additionally, this study reviewed the historical and current advancements in AI to draw connections between the film's fictional representation and the progress of real-world AI.

We analyzed the film scene by scene to find instances of AI depiction, noting context and implications. The themes of data classifications were AI independence, human-AI interaction, and ethical concerns about the connections between the depiction of AI in the movie and the development of AI in the real world. By combining knowledge from film and academic sources, this study provides a comprehensive understanding of the intersection between fictional and the progression of real-world AI.

RESULT AND DISCUSSION

This study highlights a few scenes that fall into the following themes: AI independence, human-AI interaction, and ethical concerns regarding AI. Although these scenes are not the only examples of AI depiction in the film, the study has determined that the chosen scenes are the most relevant for this study.

1. AI INDEPENDENCE

The film shows AI Independence as actions by the various AI robots. This study analyzes scenes that depict AI Independence from the narrative and compares them to real-life examples of AI Independence before drawing the connection between them to find if the depiction shows realism with the real world.

Figure 1. Depiction of Independent AI Drones (Terminator 1, 00:19:23 – 00:19:50)

Figure 1 shows an AI-operated drone that is shooting a group of humans. The humans hide behind rubble when they decide to split from the group and attack the robots. When the pair managed to blow up one of the robot tanks, the drone shifted its attention from the larger group of people towards the pair and began chasing them. This scene depicts independent AIs by making the AI assess the situation and prioritize particular targets.

In real life, AI technology has made something similar to AIs independently changing their priorities. Researchers have developed an AI that can automate the maintenance prioritization process using algorithms to ensure consistent decisions, reduce costs, and tolerate experience losses (Andronie et al., 2021). The idea behind this technology is to create an AI that can change the order of priorities in machine maintenance depending on the current situation. The AI would alert human supervisors whenever an issue occurs to suggest alternate solutions outside the standard protocol (Shin et al., 2021). Another example of an AI technology

application would be in the national defense with turrets that can automatically aim at their target (Biediger et al., 2021). Some technologies use object detection and tracking on turrets that use computer vision to simulate independent strategics (Qureshi et al., 2024). The prototypes for these technologies only implement tracking, but none allows the AIs to fire their weapons without human supervision.

Independent AIs have been a controversial topic for many researchers. One of the reasons is because of the innate fact that AIs lack complex reasoning and are unable to act in situations that are outside of their limited programming (McCarthy, 2022). We can see that Figure 1 is an unrealistic depiction of AI that the drone chases after the pair of humans instead of the group. Arguments are from the possibility of the AI determining that the pair of humans posed a threat rather than the group of humans at that given time, making it realistic because the drone is programmed to prioritize high-risk targets. This fact could be a valid argument; however, changing from a low-risk target to a high-risk target in the middle of combat is highly illogical within the situational context of Figure 1. This action risks the drone being destroyed and letting the group of humans escape if the drone would have killed a pair of humans instead of the group. It shows that an AI acting outside of its intended programming poses a greater risk of acting not just rebelliously but also illogically (Novelli et al., 2023).

Figure 2. The Terminator Killing The Wrong Person (Terminator 1, 00:30:50 – 00:32:07)

Figure 2 shows another example of the risk that comes along with independent AI. The figure depicts The Terminator breaking into the apartment of its target and proceeding to kill two people. The Terminator not only murders the wrong people but also kills them in a highly unnecessary way. This scene causes the audience to speculate about the emotional nature of The Terminator robot, questioning the authenticity of the film's depiction of real AI robots. The Terminator was strictly taking a precautionary measure by shooting the body multiple times. It is undeniable that The Terminator held a grudge against humanity. This grudge is when The Terminator kills the first person by throwing him against a wall multiple times. In reality, this is inefficient and highly unnecessary.

Figure 2 also emphasizes the inaccuracies of the film when it comes to depicting a target priority system. The main issue The Terminator faces during the scene is that it has to blindly kill the person whose name is Sarah Connor without any guide other than the name. The logical way of solving this issue is to search for information regarding the target, whether it is the target's face, occupation, address, etc. Any information connected to the target will help narrow down the search for the target and cause as much damage as possible. This reasoning is rooted in our desire to

sympathize by not bothering others with our business (Lou et al., 2022). It is something that an AI does not possess. Therefore, it would solve the problem by eliminating every target that shares a correlation with the current information about the target instead of actively finding more information that can help keep casualty and damages to a minimum.

Although real-life AIs acting outside their commands are too risky to be implemented, a target priority system in the film corresponds to reality. Real-life AI technology has never been in war; however, the research and development of AI weaponry has been used for national defense (Lee, 2021). We can see that the depiction of combative independent AIs in Terminator 1 inspires the modern development of AI technology (Hermann, 2023).

2. HUMAN-AI INTERACTIONS

Besides Independent AIs, the movie showed many instances of Human and AI interaction. The Terminator AI interacts with its many victims for one purpose or another.

Figure 3. Depiction of AI Robot Mimicking Human Speech (Terminator 1, 00:05:34 – 00:05:57)

At the beginning, we get the first example of AI-human interaction. Figure 3 shows The Terminator who needs to acquire some clothes when he encounters three gangsters who make fun of him for being naked. When the gangsters spoke, The Terminator repeated the words a few times. The AI mimicked the gangsters' speech for a reason unexplained in the film. After mimicking human speech, The Terminator spoke before killing the gangsters. This interaction between AI and humans highlights an AI's dependency on human input for adaptation.

The real-life modern equivalence is something akin to AI learning for chatbots. AI learning algorithms require input from actual humans before processing the output (Bandi et al., 2023). This input is from articles, news, websites, and even videos. This process determines the information the AI provides, the language it supplies the information, and how the AI structures the output. AI model responds with the language used, the information provided, and a structure the AI deems suitable if not mentioned in the input.

During the film's release in 1984, AI had just entered the commercial world with a program that could process online orders automatically. At that point, AI could learn but be unable to produce speech. With this, we can see that the movie depiction is quite far-fetched from the technology at that time. Although real-world technology might not be the sole inspiration for the AI behavior shown in Figure 3, many movies have depicted talking robots before the release of the movie

Terminator 1. One of these movies is Star Wars. The film depicts human-AI interactions in talking robots such as C-3PO and R2-D2. Although this is an early example of human-AI interactions, it is still flawed because the film depicted AI as emotionally human. The AI in Star Wars shows instances of feeling worried and jolly in their dialogue or actions. It is the opposite of how Terminator 1 depicted AIs as apathetic machines. Both portrayals have something in common. They are independent and can make mistakes in their decision-making. In terms of speech, the depiction in the film Terminator 1 gives a better portrayal of how AI is dependent on human input to communicate (Hancock et al., 2020) rather than the depiction in movies such as Star Wars, where AI is depicted essentially as hyper-intelligent humans.

In Figure 3, when The Terminator repeats what the gangsters say, it shows an understanding of speech for communication. It is halfway realistic with modern AI technology, as some parts are factual and others are fictitious. The process of speech learning is accurate with real life. Any AI must have an input to process before forming speech based on that input. Although the steps of AI speech learning are valid, the depiction is not. The film depicts AI learning by showing The Terminator repeating the similar words he heard in human linguistics, called "Monitoring and Repair."In AI technology, it is unrelated to learning purposes. Humans repeat speech as a way to monitor the speaker's speech or to monitor our speech. It is to express a mistake in utterance or a misunderstanding (Pepito, 2023). However, an AI would not need to repeat speech since it happens internally faster than the human brain (Pedro, 2023).

Figure 4. The Terminator Attempting a Rational Solution (Terminator 1, 00:59:07 – 01:00:05)

Figure 4 shows one of the most popular scenes depicting an AI. The scene shows The Terminator walking into a police station and asking to see Sarah Connor before getting denied by the policeman. The Terminator then says, "I'll be back," before driving a car into the police station and massacring the entire station. This scene is significant because it subtly depicts the learning capabilities of AI through human-animal interaction. Throughout the beginning, The Terminator has been illogically killing people to finish its mission faster, but to no avail. Figure 4 shows the audience how the movie depicts an AI learning from its mistakes and attempting different solutions, such as talking, lying, and manipulating. Figure 3 has already established that The Terminator came into the present without the ability to speak English, and only after receiving human input, then spoke vaguely like a human. In Figure 4, the audience watches an AI that does not use the first solution that came to mind but explores the other solutions first to see what would work effectively by using as little

effort as possible. The depiction of The Terminator's learning capability as an AI is accurate. Although the Terminator's attempt to solve its issue by communicating failed, the policeman was not suspicious at all, which makes this scene a successful improvement through adaptation.

The scene in Figure 4 shows how accurate an AI can be at mimicking humans. A recent example of this is chatbots that would pretend to be a particular character to deliver an immersive experience. Chatbots usually have a few identifying signs that make them distinguishable (Chaves & Gerosa, 2019). Some of these signs are using formal language, avoiding abbreviations, and a direct method of speech. Figure 4 encapsulates 2 out of 3 of these telling signs; the Terminator uses formal language to address the policeman and does not ask again when its request to see Sarah Connor fails. The Terminator uses an abbreviation by saying "I'll be back" instead of "I will be back," one could argue that the Terminator uses a short form because of the input from its surroundings rather than a dictionary.

Although the learning process of AI was inaccurate, the scene still serves as an effective cinematic tool for conveying the speed of AI learning and how AI's dependence on human input. For adaptation, this dependency on humans shows that AIs are inherently simple tools; however, the more an AI learns, the less it needs to depend on human inputs (Mosqueira-Rey et al., 2023). This independence shows both positive and negative. The positive is that AI can act without human supervision, while the negative is that AI can gain the knowledge and the ability to rebel against humans.

3. ETHICAL CONCERNS REGARDING AI

When AI acts independently, its interaction with humans will also change to be our equal (Xu et al., 2021). It raises some ethical concerns because they are not tools anymore but sentient beings. This study uses the same method to find the connection between the film depiction of AI ethics and real-life AI ethics concerns.

Figure 5. Depiction of AI Robots Using Weapons (Terminator 1, 00:13:40 – 00:14:40)

Figure 5 shows The Terminator enters a gun shop and requests a variety of firearms, then shooting the shopkeeper without hesitation after acquiring the weapons. The cause for this action is to complete his mission as fast as possible. This scene shows the ethical issue of AI with weaponry. This depiction of AI makes decisions and has no sense of right or wrong, showing how dangerous it can be if an AI operates without human control. The lack of human supervision enables AI to act

freely to reach its objective. In the scene, this freedom leads to the death of the shopkeeper.

The scene also shows the Terminator asking for a wide array of weapons, one of which is a futuristic weapon not yet invented. This fact further supports the previous claim that AIs depend on human input for information. When we dissect the scene in Figure 5, The Terminator lists the names of a few weapons displayed in the shop. Then he asked for a futuristic weapon that is not on display nor implied to have already existed in the time that the Terminator is in. This particular moment shows ignorance as one of the Terminator's mistakes. It highlights the similarities between the depiction of AI in Terminator 1 and real-life AI. Both real-life AI and the depiction shown in Terminator 1 can only think and act within the scope of their program limitations. Within the context of the scene shown in Figure 5, the Terminator asks for a weapon not yet invented because he knows it exists but fails to think about the possibility of the artillery not existing in the past, and this is because the Terminator has not yet received the information and only after the shopkeeper denied him the futuristic weapon, the Terminator received the information regarding the artillery existence at that time via human input.

In real life, an AI handling a critical task will operate on a different logic (Dobbe et al., 2021). Whether AI logic is ethical or not has been in debate for years. Humans will try to solve problems without any damage, while an AI will create an efficient plan and execute it with as much damage as necessary. The key difference here is empathy. A human will be less likely to cause trouble for others even when it inconveniences them. AI will see that as illogical and cause trouble and damage if it makes executing their plan a second faster (Srinivasan & San Miguel González, 2022). It will not pose an issue because of the three laws of robotics made by Issac Asimov that state a robot may not hurt a human being, a robot must obey the orders given by a human, and a robot must protect its existence without contradicting the first and second laws. These laws have been a common rule in every AI technology development process to ensure the safety of humans from AI.

The film Terminator 1 violates all three laws of robotics. We confirm that the regulations of AI ethics in the real world have not been in the narrative. In Figure 5, the Terminator breaks the first and second laws of robotics by disobeying the shopkeeper when he is not allowed to use the bullets and when the Terminator shoots the shopkeeper. However, the goal of The Terminator in this scene was to assassinate somebody as fast as possible to ensure a future where AI is the dominant species and guarantee his existence. From this, we can say that The Terminator partially follows the third law of robotics to protect its existence, even if it means breaking the first and second laws of robotics. It is one of the factors that is still in debate about using AIs for war or national defense.

This trope of AI against humanity has proved numerous times that an AI gaining sentience is unethical (Donath, 2020). The three laws of robotics have been broken many times in media, such as in the 1967 book I Have No Mouth and I Must Scream by Harlan Ellison, the 2014 movie “Ex Machina, and even the 2018 video game Detroit: Become Human uses the concept of AI against humanity to portray the risk and consequences of having sentient AIs. The film Terminator 1 is no exception to this trope. It has become one of the hugest media that uses AI as an antagonist. This reputation is on AI portrayal and AI usage in war.

When discussing AIs for war or national defense, the laws of robotics are one of the main factors debated. Many countries use AIs to protect their data and online infrastructures from cyberattacks (Nespoli et al., 2021), but countries have rarely used AI for protection against physical threats. Many countries struggle with bringing killer AIs into warfare (Haas & Fischer, 2017) because it is better at weaponry than any humans. The issues of risk and reward, for example, the risk of creating an uncontrollable AI weapon and the reward of having a superior military and defense, have caused laws and regulations of AI ethics to be static for many years.

Figure 6. Depiction of a Human-like AI Robot (Terminator 1, 00:54:41 – 00:55:57)

Figure 6 depicts what the inside of an AI robot could look like. After sustaining damage from a shootout, The Terminator retreated into a hotel room and took out his damaged eyeball, revealing a robotic eye underneath its synthetic skin. This scene raises concerns regarding AI robot production, particularly the ethical issue that may arise from creating robots that can talk, act, and look like humans. One dilemma when creating humanoid AI is the line that differentiates humans and machines. As AI technology develops, AI can imitate humans (Mitchell, 2021). The only differing factor that separates humans from AI is the physical appearance of the AI itself.

The endeavor to create a perfect replica of a human through AI is deemed unethical but highly sought after. Research conducted by the Queensland University of Technology has determined that people interact with an android than a mechanical or humanoid robot (Letheren et al., 2021). The previous study suggests that people are more friendly the closer an AI robot looks to being human. Although there are no laws against it, creating human-like AIs is still regarded as ethically ambiguous because it further blurs the line of what makes someone a human. If an AI robot can perfectly imitate a human and look exactly like humans, nothing differentiates it from being human other than its creation.

Although the depiction of ethical laws regarding AI development in the film *Terminator 1* is inaccurate, especially with how the development of AI in the narrative completely disregards the risk of independent AI weapons, it is significant to remember that it was not the purpose of *Terminator 1* to create a story where robots are tools but to create one where they are humanity's rival (Watts & Bode, 2024). The Terminator serves as a reminder for researchers in the field of AI development to follow the rules of robotics and regulations of AI development to avoid the tragedies shown in the film.

CONCLUSION

Using a Poiesis approach, we found that AI technology in 1984 in Terminator 1 was consistent until the modern day. This AI technology covers AI independence, human-AI interactions, and ethical concerns regarding AI. While the film accurately captured the nature of AI for its time, the applications depicted were largely speculative. However, we believe that science fiction movies such as Terminator 1 might influence the trajectory of technological innovation and research nowadays.

The implications of this study highlight several key points regarding the depiction of Artificial Intelligence (AI) in Terminator 1 and its relevance to modern AI technology. The films portray AI as independent and autonomous; thus, it is a cautionary tale for researchers and policymakers to ensure responsible AI development. Although it is a significant achievement for humanity to reach that level of AI technology, humanity still needs to consider the moral implications and ethics regarding AI. Humanity needs to pass laws and create regulations for AI technology development so that humanity can avoid the consequences depicted in the film Terminator 1. Terminator 1 can influence public perceptions and social attitudes toward AI. Therefore, filmmakers must portray AI accurately and responsibly, reconciling creativity with realistic and ethical issues.

Based on the given conclusions, future researchers could investigate how other science fiction films have influenced public perceptions of AI. They could also compare the specific technologies portrayed in "Terminator 1" and other films to identify areas of AI development that align with or diverge from the visions depicted in fiction. Since this study did not cover cultural aspects of the movie, there is a possibility in the future that researchers can explore the film more to provide context for how cultural narratives impact scientific progress and societal readiness for change.

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