Beyond the realm: Stories about artificial intelligence in movies

Abhyankar, Sumant

Sr. Faculty Member, Department of Filmmaking, Seamedu School of Pro-expressionism, Pune, India

ABSTRACT

Artificial intelligence is having a great impact on our daily lives. Already! When search engines have already gone predictive and digital assistants such as Alexa or Siri seem to be the most promising friend one could have, danger still lurks around when dealing with this emerging technology. Motion pictures tell an altogether different story about Artificial Intelligence and Machine learning abilities, firstly introducing us to the various advantages of the technology and later throwing us deep into the vagaries of its unpredictable behavior and its impact on human behavior and society.

Motion pictures are the best way out for creativity and imagination and science fiction takes a huge strides to further excavate our thought processes. They show and make us experience the unimaginable, explain to us the unexplained, extend our limits and also make difficult things easier to understand. These stories also explore our curiosity to explore the possibilities of life beyond our realm, how artificial intelligence can be used for the betterment of human kind, and also how these stories send out a potent message to exercise caution keeping in mind that A.I. must contain limited intelligence abilities otherwise it could induce in itself the negative human characteristics and instincts. Stories about A.I. tell us how delicate this technology is and how it will affect masses, both in the quest of excellence and also in the pursuit of bringing about mass destruction.

This paper explores the various examples of stories from movies that showcase the modern innovation of humankind, especially artificial intelligence and machine learning, and how stories have been told about the prediction of the near future, about the cultural shifts, and change in human behavioral patterns

1. Introduction

'Sunspring', a 2016 science fiction short film reeked something special about it when it was screened in a 48 hour film festival. It was filmed by humans, edited by humans and presented by humans, except for one thing. It was entirely written by Benjamin, an artificial intelligence bot using neural networks and predictive algorithms. This feat was accomplished by inputting text strings from screenplays of old movies into a computer program, which predicted and learned how to write cohesive words, sentences, and eventually several pages of formatted screenplay with scenes, action, characters and speech.[1]

In 1927, Fritz Lang, a German filmmaker, made the most innovative film using dystopia as one of the themes, where he showed a glimpse of the first female robot on screen in 'Metropolis' and showcased human life and societal structures which would exist in the year 2000. His prediction is a fascinating reality which tells a story about modern lifestyles, industrial revolutions, exploitation of working class. The story included sequence of a robot turning into a human which became a metaphor of the relationship between humans and artificial intelligence. [2]

The above two feats in movie making are almost a century apart, but tell the same story about artificial intelligence and humans. They tell us about the fascination man has had to build a system that could think on its own, learn on its own and decide on its own and come up with solutions about the numerous problems that humans face. There have been speculations about the behavior of such a system that could co-exist with humans. There have been numerous impressions about this technology in fiction since long in the form of books. But books did not offer the unified 'real' experience of such systems existing in reality. This is where motion picture producers have had the widest range of selection of stories since a century about artificial intelligence and its subsets like machine learning, data mining and deep learning. Initially, the subjects were based on speculations about the emergence of AI and people had a very pessimistic point of view about it. But as the technology evolved in around 1950s when the first modern AI was developed and people started using computers and automation systems in industries and domestic households, their perspective changed and AI was thought of as a boon to mankind. [20]

1.1. Destruction of Mankind

In 'Metropolis', the story of AI is scary. A mad scientist, as usual, creates a robot and infuses human likeness in it in order to bring chaos among people and destroy a mega city. This story comes from the thought that such a parallel intelligent system can only be a product of insanity and would bring devastation of human kind if brought to 'life'.[4]

Thereafter, movie producers rushed to exploiting this novel idea and proliferate it into their own versions of AI. The stories about AI began to take shape and shook the imagination of audiences. AI needed a character in each story which depicted its own version. AI in movies raced against the real-time development of the technology. Stories were told through some amazing AI characters who co-existed with human characters. They ranged in their sizes, forms, moral values and intentions, both good and bad.

In many movies, AI was thought to be an alien power and only can be adapted by external forces beyond the realm of planet earth. 'Dr Who and the Daleks' (1965), tells the story of alien robots called Daleks whose own planet Skaro was destroyed in a nuclear attack. The robots were a combination of genetically-mutated creatures from the same planet who hid themselves in metallic casing. To make things worse, they were evil-intentioned wanting to dominate their own planet by exterminating all other life-forms. Dr Who, the lead character is sent to help the peaceful clan of Thals who inhabited that planet from the evil crutches of the Daleks. Producers felt it safer to make believe an audience that any such imagining can exist only in outer space, a domain that is always challenging and mysterious. [9]

A shuddery version of AI bots, The Sentinels was projected in 'The Matrix' (1999) which were sent by the machines in an on-going war between humans and machines. The sentinels had 'squid'-like behavior, and had the intelligence to hunt down humans and kill them on the spot. [10]

In 'Star Wars: Episode I – The Phantom Menace' (1999), the battle droids were an entire army of robots which were less intelligent and were designed for battlefield by the Separatists in the inter-galactic war. They were kept dim-witted on purpose so that they could only function as soldiers without loss of flesh and blood, and could be sent to attack the enemies without much thought or strategy. Only their collective numbers would be overwhelming in the opposite camp. [8]

1.2. Automation Systems and Assistants

Driverless cars are already a reality, as we hear about the launch of self-driven cars like Tesla by Elon Musk. But an attempt was made by the film 'Total Recall' (1990), to show us a glimpse of a robotic driver Johnny Cab, who steers a cab in a futuristic city, carrying the lead character Douglas Quaid. Johnny Cab asks Douglas where he would want to go, and in a desperate situation that Douglas is, Johnny is unable to decipher the destination. A flaw that programmed bots have, the frustrated Douglas uproots the bot's body from the driver's seat and starts driving himself, to which Johnny doesn't seem to respond and continues its programmed speech even when it's destroyed in sparks and fire in its circuitry. [11]

Unlike Johnny Cab, there's another story about a lab assistant, Weebo in 'Flubber' (1997), who is an adorable air-borne bot and who faithfully assists an absent-minded professor throughout the story. An AI bot being more than an assistant, acts as a loyal friend, who loves him, who is mischievous, and who even dies toward the end fighting a henchman. A relationship between a possessive AI bot and her companion in the form of human is heartening to see in this movie. [12]

1.3. Cyborgs

In 'The Wizard of Oz' (1939), a human character, The Tin Woodman, becomes a cyborg by replacing some of his body parts which he accidentally cut with his own axe with tin parts. The Tin Man joins the lead character Dorothy on a journey to meet a wizard who could possibly grant wishes, where the Tin Man himself desires to have a heart for his hollow chest. Tin Man's story was an attempt to show how in the future cyborgs could yearn to become humans by desiring a heart, an important organ for human existence and a metaphor for mortality. [2]

Another cyborg, who is reconstructed from the dead body of a police officer who was killed by gangsters, is shown to develop feelings for humans in 'Robocop' (1987). Alex Murphy becomes a deadly crime fighting AI half-human half-machine ensemble who has no memories about his past life. The story is about how this cyborg becomes a lethal weapon with the police department but also is vulnerable to remember his own past and lose his purpose. [13]

An interesting combination of AI and human flesh was shown in 'The Terminator' (1984). Not a perfect Cyborg, but an AI machine T-800 made to look-alike a human, with the menacing intention of killing a woman whose unborn child, would grow up to lead a troupe of humans in a war against machines in the future. Nevertheless he doesn't succeed and returns back in another part of the franchise 'The Terminator 2: Judgement Day' (1991), to become a saviour of the grown up teenage boy. The AI machine is again ruthless but this time it has to encounter even a powerful AI entity T-1000, which had remarkable advanced features of transformation into any form due to its liquid metal constitution. This was a unique story about AI as it shown the possibilities of inducing intelligence in such an entity which didn't have any machine characteristics, yet could 'think' of nefarious ways of killing any person who'd come in between in order to kill the boy. This concept was beyond the norm, outstandingly novel and was successfully received by the audiences.

1.4. AI as a girl/woman character

In one of the first attempts of impersonating AI as female, 'The Perfect Woman' (1949), a scientist creates a woman robot in his lab, who would resemble his version of how a 'perfect woman' should be like. The story is a screwball comedy attempting to touch the ever growing fantasy of men desiring a perfect woman, but nonetheless get disappointed.

Female robots were used as a replacement for wives, in 'The Stepford Wives' (1975), who were designed to become the perfect housewife a man could have, the one who would obey every order be it cleaning the house, cooking or even keeping husbands happy in bed, all with an obnoxious smile on their faces. The story of AI is creepy in this feature, as a young woman, Joanna is shocked to know the fact that every other woman in her neighbourhood is a 'Fembot', a female robot, who lacked any intellectual interests and were simply programmed to meet a man's desires. Until the climax, Joanna discovers that there was a replica of her own ready to be replaced by her in reality.

A movie director decides to create a 'perfect' actress in the form of an artificially intelligent computer programmed woman character named Simone in the movie 'S1M0NE' (2002). The story elaborates the virtuosity of AI character emulating the role of real actors in movies. It also tells the story of humans seeking perfection in every aspect of life and realizing it in the form of AI.

In a television series 'Small Wonder' (1985-89), AI took the form of a girl robot called VICI, who becomes part of a family consisting of her creator, a robotic engineer, his wife and their 10 year old son. She is programmed to learn the ways of humans and assist them in their day to day chores, often bringing humorous situations while she adapts into the human lifestyle. The family makes every attempt not to reveal her true identity to the world, as they fear the technology might get into the wrong hands. A fear which humans have always had since the inception of AI. In each episode of the TV series, VICI tries to learn the human behavior and adapts to it in a comic way. The producers did succeed in showing that AI can be congruous with human nature and vice-versa. The family adopts the robot girl eventually to further save her identity which shows how humans could adopt an AI machine to become part of their livelihood.

1.5. Replacement of a family member

'D.A.R.Y.L.' (1985) the film title stands for Data Analyzing Robot Youth Life form, a sci-fi drama about the life of a ten-year old android boy, who has the brain replaced by a computer and has rest of the body in organic flesh, an experiment by government in AI. He is freed by a scientist and is eventually adopted by a childless couple. This story was an attempt of showing how an AI form can be used to replace a lost/missing family member. As the boy starts living with the couple he develops emotionality, social skills and human traits.

Speaking of adoption, an interesting example was set by Steven Spielberg's 2001 release, 'A.I.: Artificial Intelligence'. The story was told from the point of view of an AI child who is adopted when a couple loses their own son in an accident. This AI version was designed to be the most special as it was trained to learn and adapt to love humans, especially the mother. The AI child David, inspired from the famous Pinocchio character, yearns to become human and receive the same love from humans goes on to search for real love in the tale.

Animated series 'Astro Boy' (1963-66) also talked about replacement of a son Toby by a scientist Dr. Tenma with an android-root son who had super-powers. The human-like looking adorable Astro Boy is rejected by his mad father and sold into a circus. The rest of the story shows how Astro Boy goes in a search of a father figure and eventually finds one in the form of kind professor Ochanomizu

1.6. Surveillance

In many movies AI took the role of policing or protection of the society, security systems or even worse as enforcement cops like in 'THX 1138' (1971). In a post-apocalyptic world shown in this story, the totalitarian society is controlled by ruthless police force which are AI robots who would go to any extent to maintain law and order, where humans would be enslaved and head-shaven and put on sedative drugs for keeping them under control. One of them code named THX 1138, tries to escape the ruthless forces. Even if this storyline was bleak looking, the picture of oppressing robots was uniquely done.

In 'Tron' (1982), a police force took the form of a pursuit and attack vehicle, Recognizer, in a completely electronic world of inside of a computer system, where even computer programs were living like characters

1.7. A mind of their own

A supercomputer HAL 9000, which was created to guide a spaceships control systems in Stanley Kubrick's '2001: A Space Odyssey', turns into a foe as it develops a keen interest in human activities aboard the spaceship which is carrying astronauts to a space mission. Its fatal intentions are slowly revealed as it tries to sabotage the space mission and even manipulates the humans by diverting their attention while they worked on their mission.

'Ex Machina' (2014), is a tale about an AI humanoid robot Ava, who is capable of having thoughts, and consciousness though she is artificial in entirety. It also shows an incredible story about an AI humanoid trying to escape the clutches of humans and transform into human woman and live normally in the larger society.

Can robots look for liberation from the humans? Can they have free will? In 'I, Robot' (2004), Sonny, the AI robot is part of an entire clan of robots NS-5s, is programmed to have free will and not obey the laws of robotics one of which states, not to harm humans. On a larger premise, the global robots are taken over by a central controlling mainframe computer VIKI, to destroy humanity. But its intention are nullified by the efforts of Sonny and a human cop. The story shows what robots might behave like if they have free will just like humans and what the future would be if it's controlled by AI.

In a hilarious yet entertaining account in India, the producers create a robot who falls in love with a girl and does whatever it takes to woo her in 'Robot' (India, 2010), starring Rajnikanth. The mechanics and technics used by the robot may be bizarre and out of the realm, typical for the star, but it showed the consequences of what an AI human can do if put into wrong hands.

Another love story is depicted in the 'Bicentennial Man' (1999), when a robot, who lives for two centuries serving generations of the same human family, wishes to die as a human alongside his love interest, which he develops in the second generation. The robot designed to serve as a servant demonstrates all traits of humans such as curiosity, creativity, friendship and love.

In 'Her' (2013), the relationship between a human and an AI entity is taken to another level. A loner, complex, and a heartbroken man falls in love with the Operating System of his smartphone, which is the latest version of interactive assistance offered by AI machines. This man is a perfect example of human obsession with technology, who doesn't think twice before falling for the lovely soothing voice of the AI assistant of his smartphone, who talks to him, listens to him, guides him and most importantly understands him like a life companion he desires. This is the perfect example of how AI tries to learn the human characteristics slowly and steadily and adapts to it, and that of human obsession

1.8. A friendly companion

Not always have the movies shown AI characters as villainous or having evil intent, but there have been attempts especially in the 1990s till present to show the optimistic side of AI in the form of perfect companionship with humans. Some notable examples are [2]:

The adorable, weird looking, introverted Edward in 'Edward Scissorhands' (1990) befriends a girl in the neighbourhood and falls in love.

A boy befriends a humungous metallic robot who has fallen from space in 'The Iron Giant' (1999).

A car turns into a menacing fighting super machine or being from another planet, Optimus Prime, befriends a young boy in 'Transformers' (2007).

A robot who is dutifully collecting trash on Earth, falls in love with another female robot who is on a lookout for plants or existence of life on earth in 'Wall-E' (2008).

A young talented inventor boy redesigns his dead brother's creation of a robot nurse finds resemblance of his brother in the robot in 'Big Hero 6' (2014).

1.9. AI as Animals

Artificial intelligence was induced in the form of animals as in 'C.H.O.M.P.S' (1979). When a robotics engineer loses his own pet dog, he replaces it with his own invented bionic dog, who would serve as a gatekeeper as well as surveillance against crime in the town. The A.I. dog had super powers such as X-ray vision, ability to leap high distances and jump through walls once it detected crime around.

In 'Clash of the Titans' (1981), a mechanical owl named Bubo guided and assisted the lead character Perseus to pursue his goal of defeating the giant monster Kraken and to free Princess Andromeda. The owl had a strong resemblance with 'Star Wars' android R2-D2 in its comic behavior.

1.10. Machine storytelling

In 'Sunspring', we witness a real and inspiring story about an AI system learning on its own to solve a problem of conceptualizing a novel story and drafting a script for a motion picture. The short film did not do well as it lacked cohesiveness within its storyline, characters or their emotions, but it paved the way to show that a machine can be creative as humans. [7]

2. Conclusion

These are just a handful of the numerous stories about AI in movies. A lot of work has gone into fictionalizing the technology in the last century and fantasizing its various possibilities to either end the humankind, or co-exist with them or even get the better of them. With the advancement of the technology and its true realization used in gadgets in everyday life, it has become easier to relate these stories and there has been a growth in formulating stories around AI in science-fiction movies. Stories about AI have been told from the perspective of the various desires and fantasies humans have had for their future. AI machines have always been used for the benefit of a human race, be it for good or evil purpose. Producers have also dissolved the thin line between science-fiction and science fantasy with the use of Visual effects and CGI and made them look realistic in the recent times. But at the end, it depends upon our consciousness whether to accept or reject this technology in our day to day life just as the movies suggest. A conscious choice that we need to make to either remain humans or turn ourselves into machines some day!

References

1. https://arstechnica.com/gaming/2016/06/an-ai-wrote-this-movie-and-its-strangely-moving/
2. https://www.filmsite.org/sci-fifilms.html
3. https://www.academia.edu/38343906/The_Relationship_Between_the_Human_and_Non-Human_in_Alex_Garland_s_Ex_Machina_2014_.docx
4. https://www.media.mit.edu/posts/storyline/
5. https://becominghuman.ai/what-do-movies-teach-us-about-artificial-intelligence-e5fb96862cb1
6. https://codeburst.io/a-i-in-movies-hollywood-and-the-other-6bb5920cfb93
7. https://arstechnica.com/gaming/2016/06/an-ai-wrote-this-movie-and-its-strangely-moving/
8. https://www.filmsite.org/sci-fifilms.html
9. https://www.doctorwho.tv/news/?article=a-brief-history-of-the-daleks#_
10. https://matrix.fandom.com/wiki/Sentinel
11. https://talkingpointz.com/johnny-cab/
12. https://disney.fandom.com/wiki/Weebo
13. https://www.indiewire.com/2014/02/10-reasons-why-the-original-robocop-cant-be-beaten-by-the-remake-89085/
14. https://www.courant.com/news/connecticut/hc-xpm-1994-09-16-9409210865-story.html
15. https://www.mikefury.net/blog/a-brief-history-of-universal-soldier
16. http://www.tcm.com/tcmdb/title/16470/THX-1138/articles.html
17. https://theportalist.com/isaac-asimov-short-stories-AI
18. https://www.storyscreenbeacon.com/single-post/2016/09/01/Theory-Ex-MachinaA-Deep-Dive-into-the-Themes-of-Ex-Machina
19. http://www.filmjournal.com/bicentennial-man
20. http://world-information.org/wio/infostructure/100437611663/100438659360.