Research on the paradoxes in the artificial intelligence images

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Abstract. There is a wide argument about the development of artificial intelligence and whether it has emotions right now, conveying concern about Artificial Intelligence in the future. While people have not formed a consensus about Artificial Intelligence, even in the technical development field, this article explores a paradox in the common recognition of Artificial Intelligence image, which is the mixture of fiction and reality, collection and individual, by focusing on media served as extensions of the body and perspective, and the difference between a world in artwork and reality. The article is going to talk about the paradox between the conceptional Artificial Intelligence image and the existing technology by illustrating how media like film and fiction played a role in shaping the conceptual image in human mind. Using the story and narrative layer theory in narratology and extension theory in philosophy to analyze excerpts in In Search of Lost Time, how the illusion provided by novel can be distinguished and understood will be more concrete and practical in the following texts. All the elements including time and character should be distinguished since the world in a fictional work is unequal to the real world. Moreover, how the fictional work can provide a different perspective of substance and inspiration for our future actions is crucial, instead of trapping us in the anxiety of being replaced by a machine in the future, which can never have an answer at this time.

Keywords: Media, AI images, Fictional AI, Conceptual AI, Alien AI.

1. Introduction

Since the invention of Artificial Intelligence (AI), AI has been an extensive argument in the society. Critics have argued the question of whether AI will be out of control for several decades, but there has been no real consensus. While the computer scientists provided evidence about how AI works, opponents are always there saying that we cannot predict the future of AI because of its rocketing development. The future of AI has been analyzed from various perspectives, while plenty of literature or art fields are seen as somehow too abstract or metaphysical for machines to even learn to understand. Scholars in technology and linguistic area have worked on how to make AI understand and produce human language by Natural Language Process (NLP). However, unlike in daily communication, no successful storytelling AI system has yet been released, with the ability to structure a self-evident, fluent, understandable full-length novel or folklore. At least in the storytelling area, AI still has a long way to go. Notwithstanding the fact that most people know and believe AI cannot understand the art in the same way as us human do, the anxiety of being replaced by AI is still all over the society. Articles talking about whether the AI can understand things and have feelings as humans do with self-proven evidence

are flourishing, but rarely do arguments about the concept of AI differentiating from reality exist, which is going to be explored in the following article.

Using the theory of story and narrative layers in narratology and extension theory in philosophy to analyze excerpts in In Search of Lost Time [1], how the illusion provided by novel can be distinguished and understood will be more concrete and practical in the following texts. Thus, the article will use the conclusion to illustrate a new angle to perceive AI, which is able to release anxiety of the technology and give a new perception on fictional art as well as a clearer self-cognition as human.

2. Misunderstanding of AI image: fictional or as a whole

Since the future is always unforeseeable, people cannot reach a consensus on the development of AI. There is an element ignored in the argument: the role media plays on forming our stable view of AI image. In our daily lives, we consider the fast-developing AI as a horrible machine. The AI did so perfect that it can replace us to do chores, product, and even generate artwork. For instance, in 2018, the first portrait created by artificial intelligence was sold at auction with $432,500. The artificial intelligence does so perfect in almost all the fields, which our human's works cannot parallel with. While the applications can personalize news, products according to your taste, we feel that AI penetrates into every corner of our lives. Something popped up into your mind will appear on your mobile phone immediately, even when you have said nothing. The machine not only knows you well, but all the human being. As a result, when the computer system appears to be so sophisticated, which can be more flawless in its development, it is reasonable for us to be concerned that robots will acquire the same identity as humans and eventually replace us as human beings. By comparing the sound of the R2-D2 robot vs. the Cozmo robot [2], the name and function of the Weebo robot vs. the Jibo robot [3], and the prototype toys of the BB-8 [4] and DIY implementations of R2-D2 [5], Saffari etc. concluded that "it is an assumption that fictional robots have inspired the development of technology and the creation of real robots, especially the social robots."[6]

Right now, the equation between human and AI is concerned officially. In 2017, the first humanoid AI robot Sophia was awarded legal citizenship. The news of the first AI robot was committed as citizen raised broad arguments. However, even if it was not granted as a civilian, we can see that people have started to see them as subhuman, which means there is not a clear distinction between us human and AI. And this comparison between human and AI shows a progress in our concept of AI, which means it is not a completely alien group to us as before. Nonetheless, subhuman is still not equal to human, especially when it seems AI present strong capabilities far beyond our personal ability. It is understandable for our fear of replacing by the AI, since the future is unpredictable.

Not only having the "past" reoccur at "present", but literature books can also help a narrative to become eternal, which also break the instantaneity of time. While the narrator imaged by the author narrates, the story told by the narrator may have different effects on the story itself. In Lolita, the narrator Humbert Humbert, as a person who had a pedophilia, narrated the stories happened between him and Lolita [7][8]. While telling the whole story will bring Humbert's reputation even worse, he narrated with precise details and his covert desire. Although Humbert is an unreliable narrator who may still forge fictional events and feelings, it is still weird that he claims his narrative can keep Lolita, him, and their relationship forever. What can provide the eternality of the story? After his death, the people that owned the experiences and emotions had gone, the memory will be also buried as his body. In our common knowledge, his strange eternal hypothesis appears impossible to realize. However, if the eternality refers to the reader who will read this book after its publication rather than any element in the story, the eternality can be achieved to some extent. The story will be replayed again and again by everyone's reading, for the readers imagination when reading the book can reproduce the story [9].

The world being created in a literature work is different from ours, even if it is a realistic approach. In narratology, there is an emphasis on the different between the layer of story and the layer of narrative. The time in story is what happened in the world that the novel depicted, while the narrative is what the narrator chose to tell. The narrative can be truthful to the events that happened, and it can be totally distorted, fake. But even if the narrator represents the story in good faith, the narrative is still restricted

by factors like the perspective of the narrator, the structure of his narrative etc. Take time order as an example, the narrator can expand a moment into paragraphs that occupied a whole paragraph. Considering this factor, all the forms in a novel, is different from the reality, while not all of us are aware of it. The world in a novel created by the author, is definitely not same as the real world, even in a realistic novel. However, being aware of this differentiation in every text does not mean the fictional world is futile, because it reveals a new possibility to check a potential logic, future without restricting by the regulations and stable thoughts in real world. In a sci-fi movie, the narrative can be so logically self-proved, that we are easily trapped into the illusion that the story depicted is palpably possible in the future, while it is just a work propagated by media [9][10].

And the narrative also changes the places without any rules. The time in Proust's narrative created a new time flowing regulation which is different from the time rules in our recognition. For example, in In Search of Lost Time (À la recherche du temps perdu) written by Marcel Proust (2003), when the narrator was having the plump and fluffy Madeleine, there was an involuntary memory invoked with the taste and smell of the cake [1]. "No sooner had the warm liquid mixed with the crumbs touched my palate than a shudder ran through me and I stopped, intent upon the extraordinary thing that was happening to me." This scene is so vivid that it invoked the narrator of his childhood. His aunt Leonie will give him madeleine dipped in her lime-flower tea on Sunday mornings. "When a distant past nothing subsists, after the death of beings, after the destruction of things alone, more fragile but more enduring, more immaterial, more persistent, more faithful, the smell and taste are still long, as souls, remembering, waiting, hoping, on the ruin of everything else, to wear without flinching, their almost impalpable droplet, the immense edifice of memory." While the little bite invoked his memory, in a way that "as soon as I recognized the taste of the madeleine-soaked piece of basswood that my aunt gave me," there comes a connection between past and present, which is to say, his memory unfolded his Sunday morning scenes at present. The new time regulation in his narrative, built by the memory, differs from the irreversible time concept in our minds [1].

The enormous strength of AI did give a blow to our courage; nevertheless, we can find a misunderstanding of AI when we scrutinize the resources from which we got information about AI. Except for researchers and enthusiasts, the general public knows little about AI's operation mechanism. Take AI poetry writer as an example, how it learns human language in its way, how it archives the mass data and use it when get the instruction to write. There are many AI systems affecting our daily lives, such as the Chat Assistant, from which we benefit a lot from their intellectual and efficient work. Apart from the products we use in our daily lives, most people get their information from the news, which has brought a negative side effect to AI. There are so many opinions brought up by people, including scholars and researchers in certain areas.

2.1. Mixture of fiction and reality

The incredibly fast development of AI unleashed fears that AI is moving closer to the image depicted in sci-fi film or fictions. But the problem is, while AI appeared to gain characteristics portrayed in fictional arts, it does not mean AI is going to cause the extinction of human. Inspecting the AI images in artworks, what we should firstly pay attention on is the fact that film and fiction are media. No matter in what form, if it is released to public, it has commercial goals—profits. Due to the requirement to gain money, media need to attract more people. As we are not interested in the daily stuff around us, journals must explore unprecedented, shocking news, the sci-fi also calls for eye-seizing elements. Almost all the factors play roles in the key to success of a film, and the script of sci-fi film take an indisputably significant part. Not only the forms of the story should be magnificent, but the context has a requirement for impressive. Audiences are palpably fond of exciting films and stories, especially in sci-fi. Setting an intense conflict between us human and alien AI used by dystopian sci-fi films is a way to highlight the aspect of the genre, or sci-fi will make no difference to action movie or romance. And one way to emphasize the rivalry is to shape an omnipotent AI image, which is so strong that put our human in risks. However, there is a misunderstanding of AI as the existing system. While the fictional AI image is omnipotent, the AI system in our life is only designed for certain fields, which means it can only work

for a specific goal. For instances, assisting shopping, writing poetry, analyzing human emotion etc. Thus, although we are clear that the sci-fi movies are based on author's creativity and imagination, we are still setting an AI image influenced by the sci-fi AI images.

2.2. Mixture of entirety and individual

Therefore, the AI image in people's arguments is not the way an AI exist. The conceptual AI refers to the whole, which integrates all the AI which have different functions. In comparison, the omnipotent AI image in a dystopian sci-fi film is a single system, which means the individual have contained all the techniques and data in the system. However, even if our recognition of AI is close to existing AI, most resources of our fear are still fictional, which is to say, we are trapped in the depiction of a dystopian future. Not like the reality of now, which already happened, we can only make predictions about the future. In this sense, no matter whether the future of AI is going to be close to the image in a dystopian imagination, the fear will always exist in people's minds. As an alien force, the AI images will always be recognized as "the other", which cannot enter our conception of "we" and "us". The narrative in literature did not only exist in a literal sense, but it did lead to an association between AI and "the other" in our society's narrative. So, there is a problem with our imaginary rival AI, which is a feeble character.

3. Clearer recognition: human and AI

Besides, the essence of the argument can be seen in another way. When we see AI as the other, there is a binary opposition structure between us human and AI. The structure does not only appertain to building AI as "the other", but also a strengthen in the perception of "human". The only existence that human image refers to was human-being, but right now the unicity of the course cracked, since people have arguments on whether AI can be "human". So, the settled association between the concept of "human" and human image began to separate, and we have new consideration of the concept instead of simply refers to human image. In this way, AI image also bring a new consideration: what makes us human unique? Even if the all-sided AI can be produced, what separate us with it? By giving new definition, we are able to investigate our inner selves deeper, and understand where our uniqueness lies, and have the possibility to explore a method to utilize the AI system to improve our personal skills.

The binary opposition do bring us advantage of building more perception of ourselves, but this does not mean we should put AI at a completely opposite side to us human. Firstly, seeing AI to extend our body, it is unfair to entirely excluded AI from the "human" concept. Media is an extension of our body, perceptive. Individual person is limited by one's all the related elements including view, environments. While we are aware that time pass is what we are definitely unable to change, through the media of books, authors can create a fictional story that break the regulations of time and space. Narratives that are not chronologically developed may present a perspective for us to escape from the fear of time lapse. Which is to say, while we think time is irreversible, things that we experienced would be forget, or form into our memories. After mid-century, the time was generally categorized into past, present, future. And with the produce of clock, time was precisely divided. With the process of our recognition of time, what we have experienced was categorized into past, which will never occur physically again as memories. However, our incredible minds started to create narratives, using the language to express what our subject view can do with the elapsing time. A certain smell, sound, taste, or view will suddenly invoke your blocked memory, showing a vivid association between your past and present. Forget may be seen as a opposite side of remember, but they are not rival to each other. Experiences that have not came to you for a long time, is not forgot completely, it may pop up into your mind unexpectedly. As the madeleine moment, or Proust effect, it reminds us of the paradoxical points in our cognition that time is not simply chronologically developed in human's minds. In our lives, past and present, also forget and remember, is not clearly defined in the way we recognized.

Plenty of films have delineated AI image that is almost all-sided, expect the lack of emotion. And the unconscious, emotionless character of AI is the obstacle for it to live in the same way as us human. Gaining a human-like emotional identity is a possible setting for a sci-fi film. The plot can be more

thrilled after the AI robot in the movie started to have human identity, which can call for our sympathy of the robot and also get protagonist's trait.

While AI is using emotional expressions, it still does not have the same human feeling, nor it can understand the emotional fluctuation that people have. When we express our feelings, it is a procedure that our minds firstly capture the feeling, and then find and structure the form of sentences, which will be spoken in the end. It is a translation from our minds to our languages. When AI assistance talked to people, the sensational words it uses, like "happy" and "sad", is out of a settled procedure, instead of coming from AI's "brain" or "mind". How the machine works based on a mass database, which contained all the eligible words that people tend to use. By searching the most related word to the former one, AI can speak fluently. Moreover, only through the form of language, AI is able to predict your thought. The incredibly large database reserve not only the data, but also the relations of the information. For example, "apple" can associate with plenty vocabulary from different types, such as its bigger category "fruit", other fruits like "banana", its color "red", "green", "yellow", or its flavor etc. When we regard the idea that popped up into your mind as "inspiration", which may come out suddenly, the certain notion may be related to what you seen, read about, talked about before. The database reserve all the related information and rank the date by the relevance. In this sense, the misery process of our ideas can be illustrated as forms. The similarity between our speech and AI's language definitely brings the fear among people, concerning AI already has independent thought. The fear recalled the binary opposition between human and AI presented in sci-fi films, and brought it to our social narrative. While we define language as what only human is able to use, the flourishing of AI put it into a new stage.

What the conflict between human and AI brought to us is not only the fear, but also a reassess of human's status and ability. Observing the appearance, AI is about to structure the content with correct grammar, providing logical correlated sentences, who has the same form of our speech. The AI system only collected all the human ideas in a visual way, and its "creation" is a restructure of the existed materials. And human, is the spring of all the ideas that set the basis for AI's language database. However, people may doubt whether all the human language form can be illustrated, like the words in great literature? Authors may create texts without considering the form, but the content must be conveyed by the formation. Without words, the book can only remain in one's head as pure thoughts. Since the ideas must be expressed in certain way, it must have the form that shows the identity of the author and the work to some extent. As a result, if we consider AI's language to be a formational approach of integral human ideas, we may see new rules and characteristics in our thinking ability in the near future.

However, it is essential for people to change the recognition of AI and to see it as part of "us", which can help us have better understanding of ourselves. Since right now AI is able to "predict" and "express" human's feeling and actions without having independent emotion, and the block on several developing AI system is still technical issue, such as the AI story-telling system, which is focusing on the inner categories in the databases and the structure model provided to help the AI learn the form of the narrative. At least for now, we are still in the progress of strengthening the technology. In that case, the fear of the future of AI is not necessary, because the object of the fear is not an existing substance but a collection of all the individual systems influenced by fictional artwork.

Instead of sticking to the argument of whether AI has emotion and whether it is a potential risk for human, acknowledging the real existed AI, clarifying AI concept in individual or collection, using AI for improving ourselves is a much easier way for the public. Meanwhile, when the public has been educated about the knowledge of AI, the visional fear can be reduced with a stronger human concept developed. In this case, it is crucial for us to have a clarification between AI in the real life and fictional AI image, and to change the social narrative of AI from the character of the "other" to part of us.

4. Conclusion

By illustrating how a novel shape a fictional world in the text, the article pointed out the difference between the world in narrative and the world in reality, which is a critical factor that led to the mixture of conceptual AI and real AI. In addition, with the explanation of the mixture of entire and individual AI, the article talked about how the omnipotent AI image in sci-fi film and fiction shaped a subhuman

conceptual AI in certain sense, which resulted in paradoxical aspects inside of the AI concept. Using the story and narrative layer theory in narratology and extension theory in philosophy to analyze excerpts in In Search of Lost Time, how the illusion provided by novel can be distinguished and understood will be more concrete and practical in the following texts. All the elements, including time and character, should be distinguished since the world in a fictional work is unequal to the real world. Moreover, how the fictional work can provide a different perspective of substance and inspiration for our future actions is crucial, instead of trapping us in the anxiety of being replaced by the machine in the future, which can never have an answer at this time. However, there is some shortage because the article only provides a hypothesis in theoretical sense, which still need to be explored by research in other fields like psychology experiments. Instead of sticking to the argument of whether AI has emotion and whether it is a potential risk for human, acknowledging the real existed AI, clarifying AI concept in individual or collection, using AI for improving ourselves is a much easier way for the public. Meanwhile, when the public has been educated about the knowledge of AI, the visional fear can be reduced with a stronger human concept developed. In this case, it is crucial for us to have a clarification between AI in the real life and fictional AI image, and to change the social narrative of AI from the character of the "other" to part of us.

References

[1] Proust, M. (2003). In Search of Lost Time: The Way by Swann's. Penguin UK. pp.60-61
[2] Meet Cozmo. Anki-US. Available online at https://www.anki.com/en-us/cozmo.html, checked on, 5(8), 2020.
[3] Breazeal CL (2014) JIBO, The World's First Social Robot for the Home. Indiegogo. Available online at https://www.indiegogo.com/projects/jibo-the-world-s-first-socialrobot-for-the-home, checked on, 1(22), 2019
[4] Kevin McFarland. The Story (And Tech) Behind That Awesome Star Wars BB-8 Toy. WIRED. Available online at wired.com/2015/09/bb8-the-inside-story/, checked on, 5(8), 2020
[5] Paul Gentile. The Comprehensive Guide to Building a Realistic R2-D2 Replica. Makezine. Available online at https://makezine.com/projects/building-your-first-r2/, checked on, 12(13), 2020
[6] Saffari, E., Hosseini, S.R., Taheri, A. et al. "Does cinema form the future of robotics?": a survey on fictional robots in sci-fi movies. SN Appl. Sci. 3, 655 (2021). https://doi.org/10.1007/s42452-021-04653-x
[7] Nabokov V. V. (1992). Lolita. Knopf : Distributed by Random House.
[8] CONNOLLY, J. W. (2009). A Reader's Guide to Nabokov's "Lolita." Academic Studies Press. pp.36-40
[9] Propp, Vladímir, 1895-1970. Morphology of the Folktale. Austin :University of Texas Press, 1968. pp.50-68
[10] Bakhtin, M. M. (2010). The dialogic imagination: Four essays. University of texas Press. pp.84-258