

Do Algorithms Manipulate Human Thoughts in the Age of Artificial Intelligence

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Abstract: This essay will examine the impact of algorithms and artificial intelligence on social media, with a particular focus on the potential to influence human thoughts. Taking Facebook and Cambridge Analytica data scandal as main example to argue that algorithms could influence humans' behavior and self-consciousness to different degrees.

Keywords: Algorithm; Social Media; Self-Consciousness; News Feed

1. Introduction

Humanity has entered a highly information age represented by computers. Algorithm plays an important role in the development of science and modern society. Algorithm is a series of clear instruction like a recipe to solve the problem refers to the accurate and complete description by calculations. The core of the machine relies on the powerful logic behind the algorithm. Turning predicts the possible invention of intelligence machines and answers some important arguments around this prediction. He depicted Jefferson's (1949) argument, which is not until a machine can write a sonnet or compose a concerto because of thoughts and emotions felt, and not by the chance fall of symbols, could we agree that machine equals brain, not only write it but know that it had written it. No mechanism could feel (and not merely artificially signal, an easy contrivance) pleasure at its successes, grief when its valves fuse, be warmed by flattery, be made miserable by its mistakes, be charmed by sex, be angry or depressed when it cannot get what it wants. He denied that argument through the test and are defined that people who supported that argument might not 'forced into solipsist position' or 'human centered'. The essential difference between human and animal or machines is that human have autonomous consciousness. According to Cleeremans (2003) 'Our conscious experiences

have a strongly unified character. Unity is one of the most striking aspects of conscious experience. It is manifest in perception, memory, and action, and reveals itself most clearly through the fact that the many different things that we perceive, remember, or express through action at any given point in time all appear to belong to a single, unified, phenomenal field' [2]. As it mentioned earlier, in the consciousness of experiencing, along with the "growing" of people, their self-consciousness is also growing and changing in their experience and understanding of the world around them. As it mentioned earlier, however, the consciousness of experiencing, along with the "growing" of people, their self-consciousness is also growing and changing towards to their experience and understanding of the world around them through culture, society, politics and news. The existence of human consciousness does not determine on whether they can feel or realize the exist of their own consciousness. That is, the consciousness or thought of human could be changeable and influenced.

2. Algorithm

In biology fields, the human could be a predictable algorithm. A newborn baby eventually becomes a socialized man with the constantly "socialization" and "civilization", also, is a process that embedded in a variety of values, ideology, collective consciousness, and knowledge systems. This is a similar process to computer programming. To a certain extent, we might also have become an artificial intelligence that is surrounded by the rules of social laws and is followed by a series of instructions. Algorithm as a procedure is based on a powerful data structure that analyzes and executes a series of operations. However, could humans be guided to perform a series of instructions like algorithm? Researchers from Northeastern University (2010) conducted an experimental result that is 'despite the common

perception that our actions are random and unpredictable, human mobility follows surprisingly regular patterns' [5]. There is a concern about that human consciousness could follow the regular patterns and whether the algorithm can also predict human behavior and ideas in a way that people cannot see as algorithm can do many things. Ahlquist and Menges (2011: 95) notes that 'while most algorithms are tailored to automate tedious manual methods, there is a certain category of algorithms that are not aimed at predictable results. Their inductive strategy is to explore generative processes or to simulate complex phenomena. Such inductive algorithms can be regarded as extensions to human thinking and therefore may allow one to leap into areas of unpredictable, unimaginable and often inconceivable potential' [1]. It shows algorithm is not only undertake the complicated task, but also explore the nature of the generation of things, this progress could have seen as a divergent thinking as human. Algorithm might be closer to the facts, because base on a huge of data structure to analysis and comparison. and at the same time, on the accurate analysis of users' personal details, users might not still have realized that they may have a kind of preferences.

3. Algorithm and Self-Consciousness

Take an example from user's data leakage of Facebook, which aroused a lot of concerns about big data and users' privacy. "The New York Times" and "the Observer" published a breaking news about the firm named Cambridge Analytica, which collected 50000 users' personal information on Facebook and analyzed it through the harvested big data. Cambridge Analytica is suspected of providing support for Donald Trump during the 2016 presidential election. The News depicted that based on each user's daily preferences, personality characteristics, and behavioral characteristics, they predict their political inclinations. Facebook's advertising delivery system could personalize and customize for each user based on data analysis, have highly targeted news, and perform subtle "brainwashing", eventually reaching their purpose of unconsciously influencing users' voting choices. There are more than 2.2 billion active users on Facebook, even the vast majority of users have registered with real

personal information such as names, living cities, graduate schools, job etc. Additionally, the "like" function could reveals users' interest at some extent. Facebook could achieve the accurate advertising delivery to each user or a tag of group users through the analysis of "like". Cambridge Analytica got users' data from Facebook and created psychological portraits for the testers and built a powerful algorithmic model by comparing their altitudes and data. This model could even used to predict and influence other users' behavior patterns and voting choices. For example, for those neutral voters who are still hesitant might be feed targeted news or even fake news, which subtly changing and manipulating their psychology. A seriously problem is that when people make the decision might not realize that their self-consciousness already be manipulated and might deeply believe the choice they made is a spontaneous behavior. Therefore, Algorithm through filtered out several news or events could be used to serve for politics. Refer to the newspaper which quotes from the Cornell University computer scientist Jon Kleinberg "We have, perhaps for the first time ever, built machines we do not understand. At some deep level we don't even really understand how they're producing the behavior we observe. This is the essence of their incomprehensibility." In recent years, Google launched an idea that to collect comprehensively information from users and guide users' behaviors in the future. The system based on the premise of being able to access a large number of users' personal information and planning life goal for the user and guiding them to achieve the goal and the system might also automatically help users make life plans. Although, the system is a tentative plan by Google company so far, but to some extent, it could mean the possibilities that the strong algorithm might manipulate the consciousness of people and may even replace it. Because, when machine could prompt the actions for human which seems like the people is autonomously to access to the plan, however, the facts is the people is literally followed by the instruction of the machine. humans' behavior and consciousness could have controlled by biological algorithms. Though realities could be changed under artificial intervention in the future. However, how human could talk about freedom if free will is

no longer free. Scientific discovery tells us that free will may not exist, Andrew Griffin (2016) states that tricking subjects into believing that they had made a choice before the consequences of that choice could actually be seen. In the test, people were made to believe that they had taken a decision using free will – even though that was impossible [4]. It is not surprising that human consciousness can be rewritten or manipulated if human have not had free will.

4. Conclusion

By accurately analysing the actions of humans, algorithms may know more about ourselves than we do. While using the big data and algorithms to realize their own interests and preference, the media also has been doubted in ideological control over users. Franklin Foer concludes that 'algorithms are meant to erode free will, to relieve humans of the burden of choosing, to nudge them in the right direction. Algorithms fuel a sense of omnipotence, the condescending belief that our behavior can be altered, without our even being aware of the hand guiding us, in a superior direction' [3]. The algorithm allows people to achieve a certain degree of freedom. In the emerging flow of information, people do not have to search information by themselves, under the active assistance of the algorithm, they may always be able to passively find the information what they fancy. Even though algorithm can do many things which make a great influence on our society, but there are still many things that algorithms cannot do. For example, the pin snapping of important news, adding permissions, which can only rely on manual operation. Therefore, the algorithm distribution is not to give all the decisions to

the machine and back to the innate character, it is hard to define that "algorithm" might manipulate human's thoughts, because its human use algorithm as a tool to change human's thoughts to some extent. Algorithms allow people to reflect on our capacity to think, in this multi-informational society, whether human keep the capacity to think independently and critically instead of only passive acceptance. In the future, if algorithm could replace human's brain and artificial intelligence have the self- consciousness and then where is the superiority of human in comparison to machine.

References

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