CSCI 1801

Response Paper

Algorithmic Rationality and Human Reason

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2019.3.08

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In the article “Enlightenment Reason, Cold War Rationality, and the Rule of Rules”, Erickson et al. (2013) point out that the “human reason was reconceptualized as rationality” (p.29), which consider the following of rules as rational behavior. They believe the rationality is a matter of rules, the more mechanical the better. Machines can deal with complicated problems rationally through algorithmic programming. I partly agree with their point since the algorithm is more rational than human being. The algorithm is mechanical which can keep it away from the interference of feelings and other factors that effect the rationality of mankind. However, I do not believe that algorithm is absolutely rational since it is designed by human and the personal feelings or thoughts may get involved during the programming. Also, the limitations of machine learning limit the accuracy of the algorithmic judgement, even the judgment based on absolute rationality is not absolutely correct.

According to Erickson et al. (2013), “Human reason was often defined in opposition to mechanical rule following (or the rote behaviour of animals)” (p.31). During the Cold War, the algorithm-centered rationality began to dominate and take the place of the old enlightenment reason. In the enlightenment period, philosophers encourage people to calculate to raise the reason of human, when Babbage (as cited in Erickson et al., 2013) invented his difference engine, people found that the machines can do more complex calculation with little or no intelligence. When it comes to the Cold War period, people more likely to rely on the result generated or calculated by automated algorithm than people’ judgement.

However, 100% rational does not means 100% correctness. Morgenstern (as cited in

Erickson, 2013) pointed out that no matter how sophisticated the system is, the errors of algorithmic system is inevitable. He recorded an event in 1960 that the warning system of North American Aerospace Defense Command predicted the probability of the massive attack by Soviet missiles was 99.9%, but it turned out that the radar mistook the rising moon for a missile strike. He emphasized that nobody considered moon when designing the system. This is a error that can be traced back to human factors. Therefore, as long as human can make mistakes, the errors of algorithmic system is unavoidable.

In conclusion, although mechanical algorithms have more advantages over human beings in terms of rationality, we still cannot completely rely on algorithms. Emotional light is still an important part of human progress.

Reference

Erickson, Paul, Judy L. Klein, Lorraine Daston, Rebecca Lemov, Thomas Sturm, and Michael D. Gordin. 2013. “Enlightenment Reason, Cold War Rationality, and the Rule of Rules,” in *How Reason Almost Lost Its Mind: The Strange Career of Cold War Rationality, 27-50*. Chicago: University of Chicago Press.