

The Virtue Approach of Ethical Design for Transcultural Artificial Intelligence Systems

Liang Wang

School of Marxism, Xi'an Jiaotong University / No. 28, Xian Ning West Road, Xi'an, China; E-Mails: wangg85@163.com

Introduction

In the face of the current pandemic, IEEE has responded accordingly, suggesting that a cultural-contextual ethical values design approach should be considered when applying Artificial Intelligence Systems (AIS) to COVID-19 (the Executive Committee of The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems 2020). AIS are applied in different cultural contexts, and as different cultural traditions necessarily have different ethical concepts, it is important to consider cross-cultural differences in the ethical design of artificial intelligence systems. Which ethical theories should we consider? Why virtue ethics? This is the central question of the thesis.

Virtues and Transcultural Contexts

When thinking about the ethical design of AIS from a transcultural perspective, this paper argues that virtue ethics has an advantage over deontological ethics and utilitarian ethics because virtue has a strong contextual correlation. First, contemporary "contextualism" has conducted a series of social psychological experiments, such as "simulated prison", "hurrying", "lawnmower interference" (Merritt M W, Doris J M, & Harman G 2010, pp. 356-357). Through the analysis of empirical data, it has been demonstrated that the interference of situational factors seriously affects virtuous behavior. Second, denying virtue is a character. Trait research has also shown that the relationship between character and virtuous

behaviour is very weak in specific contexts (Merritt M W, Doris J M , & Harman G 2010, p. 357). How can virtues be extended to different cultural contexts? Learning is an important way to develop virtue. We need knowledge and experience.

Virtue, Practical Wisdom (Phronesis) and Knowledge

Practical wisdom is the central concept of virtue, and practical wisdom is a wisdom that is closely related to knowledge. First, practical wisdom is a kind of "ability-knowledge". According to Hursthouse (1999, p.13), "Each of the virtues involves getting things right, for each involves phronesis, or practical wisdom, which is the ability to reason correctly about practical matters." Second, practical wisdom is knowledge. Rosen (2002, p.119) argues that practical wisdom is the knowledge that allows us to adapt our inner purpose to the complexities of the situation at hand, and that with this knowledge, we take the right actions. Third, practical wisdom is the excellence of practical reasoning (Li Yitian 2020).

"Bottom-up" Virtues Design for Transcultural AIS

Since virtue depends on practical wisdom based on empirical knowledge, AIS can be trained "bottom-up" to acquire virtue. There are several key steps here: first, identify active ingredients in the context; second, learn or match the context-associated virtues; third, positively motivate and reinforce the learning; fourth, develop multi-context training; fifth, apply; sixth, evaluate; and seventh, improve. The design idea also can be referred to the "moral experts" model proposed by Narvaez (2006, pp.716-718) and the "chronically accessible goals" model proposed by Snow (2006).

Conclusion

Virtue ethics is the best ethical theory to apply to the ethical design of transcultural AIS because of its transcultural advantages and learnability.

References

Hursthouse, R. (1999). *On Virtue Ethics*. OUP Oxford.

Li Yitian. (2020). Sense, Cognition and Virtue: The Emotional Concept and Interpretation of Aristotle's Virtue Ethics. *Philosophical Trends*, (4), 92-102. (in Chinese)

Merritt, M. W., Doris, J. M., & Harman, G. (2010). Character. In *the Moral Psychology Handbook*. Oxford University Press.

Narvaez, D. (2006). Integrative Ethical Education. In *Handbook of Moral Development*. Lawrence Erlbaum Associates, Inc..

Rosen, S. (2002). *The Elusiveness of the Ordinary: Studies in the Possibility of Philosophy*. Yale University Press.

Snow, N. E. (2006). Habitual Virtuous Actions and Automaticity. *Ethical Theory and Moral Practice*, 9(5), 545-561.

The Executive Committee of The IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems (2020). *Statement Regarding the Ethical Implementation of Artificial Intelligence Systems (AIS) for Addressing the COVID-19 Pandemic*. IEEE Standards Association, 17 April 2020. Accessed June 11, 2021, from extension://oikmahiiipjniocckomdcccplodldodja/pdf-viewer/web/viewer.html?file=https%3A%2F%2Fstandards.ieee.org%2Fcontent%2Fdam%2Fieee-standards%2Fstandards%2Fweb%2Fdocuments%2Fother%2Fgieais-covid.pdf%3Futm_medium%3Dundefined%26utm_source%3Dundefined%26utm_campaign%3Dundefined%26utm_content%3Dundefined%26utm_term%3Dundefined#=&zoom=80.