Chapter 7 For Better or for Worse? Ethical Implications of Generative AI

Catherine Hayes

University of Sunderland, UK

ABSTRACT

This chapter explores how the social implications of AI are being posited, often sensationalized as a threat to humanity, rather than being framed in something humanly designed that ought to remain within the control of its maker, transparent in terms of capacity to undertake complex decision making and which most importantly is accountable for every individual action made in terms of design and programming. The aims of the chapter are threefold, namely, to consider global ethics and the impact that AI could potentially have in terms of increasing societal inequalities in terms of existing infrastructure; to provide an insight into the developmental and progressive use of AI across organizational infrastructures such as global medicine and health and the military; finally, to embed the concept of ethical AI and the potential for its praxis across all areas of its integration.

INTRODUCTION

'I'm increasingly inclined to think that there should be some regulatory oversight, maybe at the national and international level, just to make sure that we don't do something very foolish. I mean with artificial intelligence we're summoning the demon.'

(Elon Musk, MIT's AeroAstro Centennial Symposium, 2014)

This chapter will consider applied ethics in the context of pedagogical practice in relation to the potential impact of Artificial Intelligence (AI) in education and other societal infrastructures such as the military and health and medicine. The extent to which AI has been progressively integrated into society over the last three years, has exponentially increased media and scientific debates of what is and what might be, if all we are to believe about AI is realised (Bareis & Jatzenbach, 2022). As with any landmark paradigmatic shift in society's use of and access to technological advance, the widespread introduction of AI has both positive and negative aspects which can be harnessed for both human progression

DOI: 10.4018/979-8-3693-1565-1.ch007

and decimation (Mikalef et al, 2022). Initial debates surrounding AI focused predominantly on their functionalist capacities to reduce the complexity and challenge of largely physical tasks, where algorithmic decision making could be used as an adjunct support to mundane and burdensome human work (Mirbabaie et al 2022). This has now progressed to the widespread cognitive debates as to how AI can address tasks which before, seemed impossible and largely inaccessible, in terms of the decision-making processes necessary to undertake them (Madhav & Tyagi, 2022). One of the key aspects of these debates is how humanity has often designed AI in human form, to the extent technological artefacts are often perceived as robots with a high degree of sentient ambition (Owe and Baum, 2021). It is often thought AI can compete for cognitive advantage rather than simply being a design artefact used to extend the reach of humanity's applied intellect (Mele, & Russo-Spena, 2023; Yamin, et al, 2021). This has led to widespread hyperbole that AI somehow has the capacity to override human cognition and that its capacity for extended algorithmic thinking may eventually pose a huge threat to mankind, alongside offering some of the greatest technological developments of our age (Cools, Van Gorp & Opgenhaffen, 2022). Unlike other technological advances whether the choice to engage with them was always an option, AI poses a wider societal issue where that choice may no longer be possible, should the self-advancement of algorithmic decision making pose an overriding threat to humanity in terms of speed and capacity for action (Igna & Venturini, 2023). As such the ethical principles of AI are factors that all organisations now must contemplate so that the integration of ethical practice becomes a societal norm in terms of the use of AI in practice. Beyond an anthropological perspective, social ethics and the philosophies underpinning them all impact upon the capacity of organisational decision making and how AI may remain fully controllable and where the algorithms within which it operates may be constructively aligned with those affective attributes of humanity, that as a society, we would wish to promulgate, rather than any degree of negativity (Henin & Le Métayer, 2021). Whilst every organisational infrastructure operated by humans is designed on principles of altruism, equity and equality, the integration of AI poses several questions which necessitate critical reflexivity of the situated nature of their use within highly sensitive contexts such as healthcare, law, and education, all of which can have the potential for an inordinate impact on society as it is currently known (Cheng, Varshney, & Liu, 2021). Perhaps then it is rather an issue with the design of AI rather than implementation, which ought to serve the hyperbole and hypothesising that surround it (Bareis & Jatzenbach, 2022). This chapter will also explore how the social implications of AI are being posited, often sensationalised as a threat to humanity, rather than being framed in something humanly designed that ought to remain within the control of its maker, transparent in terms of capacity to undertake complex decision making and which most importantly is accountable for every individual action made in terms of design and programming (Novelli, Taddeo & Floridi, 2023).

The aims of the chapter are threefold, namely, to consider global ethics and the impact that AI could potentially have in terms of increasing societal inequalities in terms of existing infrastructure; to provide an insight into the developmental and progressive use of AI across organisational infrastructures such as global medicine and health and the military; finally, to embed the concept of ethical AI and the potential for its praxis across all areas of its integration.

PARAMETERS OF GLOBAL INEQUALITY

Geopolitically there are several ethical debates around the role of AI (Palomeres et al, 2021). A collective sense of global responsibility necessitates ensuring not only accountability but a huge degree of reassur-

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/for-better-or-for-worse/343701

Related Content

Towards a Student Security Compliance Model (SSCM): Factors Predicting Student Compliance Intention to Information Security Policy

Felix Nti Koranteng (2020). *Modern Theories and Practices for Cyber Ethics and Security Compliance (pp. 204-216).*

www.irma-international.org/chapter/towards-a-student-security-compliance-model-sscm/253671

Generation Y and Internet Privacy: Implication for Commercialization of Social Networking Services

Zdenek Smutny, Vaclav Janoscikand Radim Cermak (2019). *Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 978-1002).*

www.irma-international.org/chapter/generation-y-and-internet-privacy/228765

Emerging Threats for the Human Element and Countermeasures in Current Cyber Security Landscape

Vladlena Benson, John McAlaneyand Lara A. Frumkin (2019). *Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 1264-1269).*

 $\frac{\text{www.irma-international.org/chapter/emerging-threats-for-the-human-element-and-countermeasures-in-current-cyber-security-landscape/228782}$

Security and Privacy Issues of Big Data

José Mouraand Carlos Serrão (2019). Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 375-407).

www.irma-international.org/chapter/security-and-privacy-issues-of-big-data/228736

The Human Factor: Cyber Security's Greatest Challenge

George Platsis (2019). Cyber Law, Privacy, and Security: Concepts, Methodologies, Tools, and Applications (pp. 1-19).

www.irma-international.org/chapter/the-human-factor/228717