

Stoicism and posthuman care: AI, robotics, and the future of medical anthropology

Xianyang Zeng

Jin Ling High School Hexi Campus, Nanjing, China

zengxianyoung@icloud.com

Abstract. This paper examines the ability of Stoic ethics to diagnose and alleviate ontological anxiety caused by generative artificial intelligence (AI) in healthcare settings. It puts forward the idea that as AI progressively colonises areas that have traditionally been considered exclusively human, such as creative problem-solving and empathic attunement, it erodes established anthropocentric boundary markers. This can lead to existential distress among clinicians and patients. Avoiding the simplistic debate of 'prohibition versus endorsement', the study reimagines such anxiety as a cultural rupture: algorithmic mediation dismantles the symbolic economies of caregiving and destabilises the intersubjective foundations of medical identity. Mobilising the Stoic triad of the dichotomy of control, the equation of virtue with eudaimonia and the exercise of detached universality in a cosmopolitan context, the argument outlines a post-human medical ethic that uses AI for data-intensive, procedural labour, while preserving emotionally saturated, morally valenced care as an exclusively human prerogative. Cross-cultural robustness is provisionally modelled through family-centric interface design in East Asian contexts and algorithmic autonomy safeguards in Euro-Atlantic jurisdictions. The analysis acknowledges methodological constraints, particularly the limited scope of clinical scenarios currently investigated and the lack of empirical evidence.

Keywords: Stoic ethics, ontological anxiety, generative artificial intelligence, post-human medical ethic.

1. Research background

1.1. Ontological anxiety

I have observed two key trends: first, students are increasingly relying on generative AI to complete their schoolwork; second, parents and teachers are continually locked in a binary debate between “technological bans” and “universal acceptance.” [1] This social discussion is characterized by a distinct polarization: on one end are technological utopians, such as the assertion that “AI will solve climate change and cure cancer,” and on the other end are doomsday sentiments, such as the prediction that “AI will ultimately destroy humanity.” [2] I believe both of these simplistic approaches reflect cognitive inertia. Beneath this surface lies a more theoretically valuable concern: anxiety about the deconstruction of human uniqueness by technological development.

This existential anxiety has deep and long historical roots. During the second wave of AI in the 1980s, technology was primarily instrumental [3]. Today, the breakthrough development of large language models has enabled a qualitative leap in AI from mechanistic to quasi-subjectivity.

This raises three core questions: 1) What are the underlying mechanisms by which generative AI causes psychological discomfort? 2) Sociological explanations for the positive correlation between accelerated technological development and anxiety levels; 3) The philosophical roots of this collective anxiety and unease [4]. These questions ultimately point to a fundamental ontological question: what defines humanity in the age of artificial intelligence?

We constantly contrast human uniqueness with technology, and we consistently construct our own uniqueness through the lens of the technological other [5]. When machines surpass us physically, we assert human cognitive uniqueness. When calculators surpass us in computational power, we view creativity and emotional intelligence as uniquely human. As generative AI systems create poetry, generate books, and engage in complex philosophical conversations, AI is eroding what we once believed to be the last bastion of human uniqueness, dissolving the last bastion of human essentialism.

If machines can do what we once believed only humans could do—not just calculate, but also create, not just process data, but also appear to understand—then what is truly special about humans [6]?

Ultimately, the rapid development of AI has not only reshaped the ways of social production and knowledge creation but has also triggered a profound ontological anxiety within the collective psyche. This anxiety is not a simple technophobia, but a multidimensional dilemma involving cognitive reconstruction, value reassessment and identity recognition [7].

1.2. Deconstruction of Stoic core ideals

The Dichotomy of Control. The Dichotomy of Control is a cognitive framework that distinguishes between what is controllable and what is uncontrollable. Modern psychological research generally recognizes its effectiveness in anxiety management. For example, Harris R. argues in *Embracing Your Demons: An Overview of Acceptance and Commitment Therapy* that the Dichotomy of Control can help individuals shift their focus from uncontrollable external variables, such as layoffs, to controllable internal choices, such as improving their abilities, thereby reducing anxiety [8].

Modern psychology has validated its anxiety management value, and it can guide individuals in medical settings to shift their focus from uncontrollable anxiety about being replaced by machines to controllable actions such as improving their professional abilities and actively participating in treatment [9].

Virtue as Happiness. Stoicism considers virtues such as rationality, justice, and courage to be the core of happiness, advocating that individual values are not dependent on external factors, such as technological evaluation or machine efficiency. Robertson found that individuals who prioritize virtue exhibit significantly greater psychological resilience when faced with the uncertainty of being replaced by technology [10]. This provides theoretical support for medical practitioners to alleviate professional value anxiety and for patients to rebuild their subjective identity.

Detachment and universality. “Detachment” refers to maintaining a rational perspective on external factors, such as the formal differences in machine care, and focusing on the essence of care. “Universality” emphasizes equal care that transcends individual and cultural differences [11]. Together, these two concepts constitute the core theoretical anchors of posthuman medical ethics.

2. Theoretical adaptability analysis

Stoic ideas are naturally compatible with posthuman concerns. Their advocacy of “rational response to adversity” can respond to technological anxiety, and their value orientation of “virtue first” can balance technological instrumental rationality and lay the foundation for the subsequent construction of an ethical framework [12].

2.1. Medical anthropology attribution of anxiety about “machines replacing human empathy”

Based on the perspective of “cultural construction” in medical anthropology, combined with Mestrovic S.’s theory of “post-emotional society” and Benjamin W.’s theory of “technological reproduction,” this paper deconstructs the essence of anxiety [13,14].

Fractured cultural symbols. In traditional medicine, “human empathy” is a cultural symbol that carries trust and responsibility, such as the comforting handshake offered by doctors and nurses. However, the standardized operations of robots/AI have dismantled these symbols, leading to the public’s perception of “alienation of the essence of care.” [15]

Shaken subjectivity. From a medical anthropology perspective, humans in traditional medicine assume the role of “caring subject,” with doctors and nurses leading decision-making and patients experiencing emotional connections [16]. The intervention of AI/robots restructures the “human-machine relationship,” triggering identity anxiety about “weakening human subjectivity.”

Concerns about cross-cultural differences. A comparative study of Eastern and Western philosophical practices reveals that Eastern “humanized medicine” relies more on “human empathy” than Western “specialized medicine.” This leads to differences in the intensity and dimensions of anxiety about “machines replacing empathy” across cultures, which warrants further analysis.

2.2. The construction and practical verification of Stoic ethical framework

In terms of establishing an ethical framework, centered around the Stoic principle of “detachment-universality,” this approach deeply connects theory with posthuman medical practice from multiple perspectives. Regarding the role of technology, leveraging the “control dichotomy” to distinguish between controllable and uncontrollable things, this approach clarifies the “assistive tool” nature of machines in medical settings. Specifically, machines can undertake controllable tasks such as physiological data monitoring and standardized psychological counseling, which do not require deep human emotional involvement. However, “emotionally dependent” tasks, such as hospice care and intervention for complex psychological trauma, which rely heavily on human emotional connection, must maintain human control to prevent technology from overstepping its boundaries and replacing the core human role of care [17,18].

In terms of defining the essence of care, the concept of “detachment” guides the public to transcend the inherent perception that empathy is exclusively human, and to rationally focus on the essence of care as “needs fulfillment” rather than “interactional form.” For example, this approach recognizes the caring value of AI’s real-time detection of emotional fluctuations and warnings, and robots’ provision of regular companionship and daily assistance, thus breaking the reliance on a single “human form” of empathy [19]. In the dimension of the value balance principle, based on the proposition that “individual value does not depend on external things” in “virtue is happiness”, “virtue” is taken as the core orientation of technological design and medical practice.

In the dimension of cross-cultural adaptation, based on the “equal care” emphasized by the concept of “universality”, differentiated designs are carried out in combination with the medical care customs in different cultural contexts. For example, in response to the tradition of “family participation in medical decision-making” in Eastern culture, family interaction and feedback interfaces are reserved in the robotic care system; in response to the preference for “individual autonomous decision-making” in Western culture, the individual right to choose and be informed of AI medical solutions is strengthened.

2.3. The practical verification of Stoicism

In terms of validating psychological practical implications, for medical professionals, the “control dichotomy” approach can be used to guide them away from the uncontrollable anxiety surrounding “technology replacing professional values” and toward “controllable virtuous practices.” For example, these approaches can proactively enhance their ability to deeply communicate with patients and optimize their humanistic interpretation of treatment plans. By strengthening these humanistic skills, which cannot be replaced by machines, they can rebuild their professional identity and alleviate the anxiety caused by technological replacement [20]. For patients, the concept of “virtue is happiness” can be used to reconstruct their value perceptions and guide them to focus on their “controllable rights” in the medical process, such as the right to independently choose treatment options and provide subjective feedback on their care experiences. This can mitigate the anxiety of “objectification” caused by being “evaluated by machine data” and “dominated by technological processes.”

In terms of interdisciplinary dialogue and future technological guidance, the ethical principles of Stoicism can be combined with medical anthropology’s attribution of cultural anxiety about “machines replacing human empathy.” [21] The theory of “surveillance capitalism” warns against “technology’s excessive pursuit of data and efficiency while ignoring human rights.” The Stoic concept of “universal care” sets a humanistic bottom line for the design of AI medical algorithms, incorporating dimensions such as individual privacy protection into the algorithm development process to prevent algorithms from ignoring patients’ humanistic needs due to their “data first” approach, and providing directional guidance for the future development of AI and robotic medical technologies.

3. Limitations

As an exploratory study focusing on “Stoicism and Posthuman Medical Care,” this study has several limitations due to its stage of research, data availability, and perspective coverage.

First, the single cultural perspective. The study’s analysis of anxiety surrounding “machines replacing human empathy” fails to fully incorporate cross-cultural comparisons. Public perceptions of the “core definition of medical care” and “acceptance of technological intervention” vary significantly across different cultural contexts [22]. The current discussion, based solely on generalized cultural anxieties, lacks a detailed analysis of the adaptability of Stoic concepts of “universality” across different cultural contexts, potentially limiting the cultural universality of the conclusions.

Second, the limitations of the technical context. The study primarily focuses on two typical scenarios: nursing and psychotherapy, omitting other medical technology areas such as surgical robots and AI-assisted diagnosis [23]. This may result in an incomplete discussion of the practical value of Stoicism and a difficulty in fully addressing the diverse ethical and psychological issues of posthuman healthcare.

4. Conclusion

Based on the above analytical framework, this exploratory study reached the following core conclusions.

Theoretical applicability conclusion: the Stoic concept of “detachment and universality” can serve as a preliminary prototype for an ethical framework for posthuman medical care. Its “universality” can respond to medical anthropology’s demand for “equality of care,” while its “detachment” provides a rational perspective for addressing technological anxiety, filling the current research gap in the intersection of “traditional philosophy and posthuman medical ethics.”

Cultural anxiety attribution conclusion: the anxiety surrounding “machines replacing human empathy” is not simply a fear of technological replacement, but rather a combination of “the disruption of traditional cultural symbols of care” and “concerns about human subjectivity” from a medical anthropology perspective. While superficially, it stems from dissatisfaction with

“machines’ lack of emotional warmth,” it also stems from existential anxiety about “technology undermining the core value of humans in medicine.”

Practical Value Conclusion: facing the new adversities and anxieties induced by AI-powered healthcare, Stoic philosophy still offers practical guidance. Its advocacy of “rationally distinguishing between the controllable and the uncontrollable” can help individuals alleviate excessive concerns about technological replacement. The concept of “universal care” also provides technology developers with an ethical reference for “balancing efficiency and humanity”, but due to the lack of primary empirical data and secondary literature, the conclusions still need further verification.

References

- [1] Harris, R. (2006). Embracing your demons: An overview of acceptance and commitment therapy. *Psychotherapy in Australia*, 12(4), 70–76.
- [2] Robertson, D. J. (2019). How to think like a Roman emperor: The stoic philosophy of Marcus Aurelius. St. Martin’s Press.
- [3] Mestrovic, S. (1996). Postemotional society. *Journal of Classical Sociology*.
- [4] Benjamin, W. (2018). The work of art in the age of mechanical reproduction. In *A museum studies approach to heritage* (pp. 226–243). Routledge.
- [5] Annas, J. (2007). Ethics in stoic philosophy. *Phronesis*, 52(1), 58–87.
- [6] Durand, M., Shogry, S., & Baltzly, D. (2023). Stoicism. *Stanford Encyclopedia of Philosophy*.
- [7] Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75–89.
- [8] Enchiridion. (2012). Courier Corporation.
- [9] Robertson, D. J. (2019). How to think like a Roman emperor: The stoic philosophy of Marcus Aurelius. St. Martin’s Press.
- [10] Li, H., Ding, X., & Li, M. (2024). A cross-cultural comparison of Chinese and Western philosophical practice: Exploring new paths for philosophical healing and social harmony. *Humanities and Social Sciences Communications*, 11(1), 1–21.
- [11] Gill, C. (2016). Building resilience today: How can ancient stoicism help? In I. Sikorska, K. Gerc, & T. M. Ostrowski (Eds.), *Resilience and health in a fast-changing world* (pp. 33–46).
- [12] Cavanna, A. E. (2019). Stoic philosophy and psychotherapy: Implications for neuropsychiatric conditions. *Dialogues in Philosophy, Mental & Neuro Sciences*, 12(1).
- [13] Robertson, D. (2018). Stoicism and the art of happiness: Practical wisdom for everyday life: Embrace perseverance, strength and happiness with stoic philosophy. Hachette UK.
- [14] Zeba, M. (2021). Stoicism emotions and good life (Doctoral dissertation, University of Rijeka. Faculty of Humanities and Social Sciences. Department of Philosophy).
- [15] Nijhof, A. H. J., & Rietdijk, M. M. (1999). An ABC-analysis of ethical organizational behavior. *Journal of Business Ethics*, 20(1), 39–50.
- [16] Mestrovic, S. (2013). The barbarian temperament: Towards a postmodern critical theory. Routledge.
- [17] Schell, E. C. (2020). Epictetus’ Enchiridion and the influence on women. *Ancient Philosophy Today*, 22(1), 1–18.
- [18] Sellars, J. (2020). Marcus Aurelius. Routledge.
- [19] Schur, M. (2022). How to be perfect: The correct answer to every moral question. Simon and Schuster.
- [20] Annas, J. (2011). Intelligent virtue. Oxford University Press.
- [21] Gill, C. (2006). The structured self in Hellenistic and Roman thought. OUP Oxford.
- [22] Harris, R. (2022). The happiness trap: How to stop struggling and start living. Shambhala Publications.
- [23] Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. PublicAffairs.