



---

## **The Purpose of Progress**

### **Examining the Ethical Value of Technological Advancement in a Globalized World**

**Lilah Connell**

Master's student, International Relations Department, Tsinghua University

**Abstract:** This article examines the ethical underpinnings of technological progress to argue that it does not constitute a universal value. Drawing on the philosophies of Martin Heidegger and Herbert Marcuse, it explores how technology is not merely a human-controlled tool, but also an emergent force that acts as a framework or orientation shaping our thoughts, actions, and relationships. While technological advancement can be rationally justified by its potential for human improvement, in today's globalized world it often serves the capitalist ends of efficiency, power, and profit. Applying Aristotle's theory of values, this article considers the ethical implications of pursuing modernization, rather than happiness, as the "chief good." I conclude that technological progress, when relentlessly pursued without deliberate ethical contemplation, can subvert our critical thought and human purpose, and risks undermining the truly universal values of freedom and autonomy.

**Keywords:** *Technology, progress, ethics, universal values, globalization, modernization*

## Introduction

Technology is rapidly developing and diffusing as we increasingly incorporate it into new aspects of daily life. It has undoubtedly made our lives more convenient and connected, but this progress has not been without drawbacks. It has also increased global competition, deepened inequalities, and exerted pressures to adapt. As we precipitously approach unprecedented and irreversible technological advancements, it is critical to consider the ethics of technological progress, examining how it simultaneously reflects and impacts our humanity and values in today's globalized world. This complex relationship to technology thus begs the question of whether it constitutes a universal ethical value. Understanding the nature and implications of technological progress as an ethical value requires an exploration of the relationship between technology and humanity, and the underlying values and external forces that drive us to pursue technological advancement, perhaps even to our detriment.

## Philosophical Underpinnings: Heidegger and Marcuse on Technology & Humanity

Martin Heidegger and Herbert Marcuse describe technology as a framework or rationality that shapes our thoughts, motivations, and interactions. Heidegger argues technology is not merely an instrument or tool used as a means to an end, but rather “a way of revealing” the world to us.<sup>①</sup> Its *essence* is an “enframing” orientation that reveals the resources of the world that are available to us and their potential for future application. Technology is thus a powerful framework for positioning humans in nature that imposes a reciprocal controlling relationship. Humans are both controlled by this reductionist view of the world as raw materials, which poses risks to our understanding of our humanity, and are simultaneously also in control of “challenging forth” these raw materials, thereby unlocking their potential for further application.<sup>②</sup>

Marcuse understands technology as a “social process” in which humans and social groups play an integral and inseparable role as not only the inventors but also directors of its “application and utilization.”<sup>③</sup> With the increasing mechanization of commodity production, Marcuse argues technology can become an “instrument for control and domination” whereby individuality is subordinated to a capitalist rationality in

---

<sup>①</sup> Martin Heidegger, *The Question Concerning Technology*, trans. William Lovitt (New York and London: Garland Publishing, 1977), 12.

<sup>②</sup> *Ibid.*, 15.

<sup>③</sup> Herbert Marcuse, “Some Social Implications of Modern Technology,” *Studies in Philosophy and Social Science* 9, no. 3, (1941): 138.

---

---

pursuit of efficiency and profit incentives.<sup>①</sup> What emerges is a new “technological rationalization” in which an individual’s performance is evaluated by efficiency and standards of achievement set externally by the technical apparatus. In other words, he suggests that individuals are increasingly becoming incorporated into this machine as their “liberty is confined to the selection of the most adequate means for reaching a goal which he did not set.”<sup>②</sup> The implication of technological progress is therefore a shrinking room for human spontaneity, critical thought, self-reflection, and ultimately subjective freedom and autonomy.

In both these conceptualizations, the relationship between humanity and technology is cyclical, with technology exerting a force on our worldviews, actions, and social relationships just as we aim to control and shape its progression for our rational ends. There is an aspect of mutual reinforcement as well as an inevitability and inescapability in the way Heidegger and Marcuse understand the nature and implications of technology on society. While our rationality leads us to innovate and “feed the [technical] apparatus,” neither philosopher believes technological progress is an intrinsic part of our human nature, despite its historical evolution.<sup>③</sup> This sense of inevitability only emerges from our interactions with technology and our application of it to the modern world. It is when technological progress is left unchecked, with no contemplation or reflection on its impacts, that it poses a danger to our humanity and autonomy by reducing our ability, or perhaps even willingness, to question the ends we are pursuing through this perpetual modernization.

## **Technology & Globalization: An Unreflective Competitive Cycle**

Given its rational underpinning, it may seem logical to conclude that technological progress is a highly universal value. This is seemingly supported by the rapid development and prioritization of technology across the globe. There is fierce competition among countries and companies alike for technological edge and the subsequent power it bestows. The sheer amount of resources societies invest in technology alone demonstrates the value we perceive it to have. However, the prevalence and acceptance of technology in our modern world should not indicate its validity as a global and universal value. To understand why technological progress is not, in fact, universally valid, we must explore the cause of its global adoption.

In our current globalized system, we are experiencing what feels like an unfettered, irreversible proliferation of technology. But this is not necessarily the result of careful contemplation or the belief that technology is key to social improvement. Let us take artificial intelligence (AI) as an example. While AI has enormous potential for efficiency, top AI scientists

---

<sup>①</sup> *Ibid.*, 139.

<sup>②</sup> *Ibid.*, 142.

<sup>③</sup> *Ibid.*, 144.

---

and CEOs have warned of the “risk of extinction” if AI is not treated with the same global priority as pandemics and nuclear war.<sup>①</sup> Concurrently, the media has characterized the international competition surrounding AI development as an “arms race.” In this competitive context, AI research has progressed rapidly, despite a lack of significant societal demand and widespread concern regarding the technology’s implications for our humanity. Our approach to AI development demonstrates how political, economic, and military competition can fuel technological progress potentially at the expense of our rational interests.

This trajectory of AI aligns with Thomas Friedman’s analysis of the relationship between globalization and technology. Friedman argues our embrace of technology is largely out of necessity to remain economically competitive in a world in which “almost everyone—either directly or indirectly—feels the pressures, constraints and opportunities to adapt to the democratizations of technology, finance, and information that are at the heart of the globalized system.”<sup>②</sup> He emphasizes that globalization is not a choice, but rather a reality that cannot be stopped “except at a huge cost to your society and its prospects for growth.”<sup>③</sup> Countries that fail to adapt to the new system therefore risk being left behind. The cyclical pattern emerges once again. Technology is a key driver of globalization that lowers the barriers to entry in the global marketplace, while simultaneously globalization propels and compels technological innovation.

In portraying globalization as an unstoppable force heavily fueled by and guiding technology, Friedman implies that technological progress is inevitable and beyond human control. This undermines the role humans play in the development and direction of technology emphasized by Heidegger and Marcuse while validating Marcuse’s warnings of our incorporation into the “technical apparatus” in which our autonomy becomes limited. However, it is due to a lack of critical reflection that globalization has come to *feel* inevitable. While the adoption of technology itself may be universal, and the pressures to adapt to the globalizing world are likewise universally experienced, in reality we determine the pace and trajectory of globalization. However, the very belief that technology has become an uncontrollable competitive compulsion illustrates the point that the simple fact of its global proliferation does not secure its status as a universal value.

---

<sup>①</sup> Center for AI Safety, *Statement on AI Risk* (2023), <https://www.safe.ai/work/statement-on-ai-risk>.

<sup>②</sup> Thomas L. Friedman, *The Lexus and the Olive Tree* (New York: Anchor Books, 2000), 73.

<sup>③</sup> *Ibid.*, 112.

---

## Ethical Evaluation: Modernization as an End in Itself

An analysis of the “ends” of technological progress casts further doubts on its validity as a universal ethical value that can guide us in our determination of good and bad. According to Aristotle, values are means to the highest end or “chief good” of *eudaimonia*. It follows that if technological progress is an ethical value, it should serve as a means to this *eudaimonia* of happiness and human flourishing. However, in modern society technological advancement is more often pursued for purposes of power, profit, efficiency, and productivity within a never-ending capitalist M-C-M’ cycle.<sup>①</sup> In other words, once realized as ends, profits and efficiency are then recycled as instruments to continue modernizing and improving upon our previous technological successes. Put even more simply, there is no “end” to efficiency.<sup>②</sup> Within this cycle, it is easy to lose sight of the rational reason behind or higher aim of such technological pursuits. Modernization, rather than happiness, is treated as the chief good. We ought to question this pursuit as modernization does not fulfill the criteria of a “complete” end worth choosing in and of itself “never for the sake of something else” and “without qualification.”<sup>③</sup>

This cyclical pattern demonstrates our complex relationship with technology in which technological progress is at times human-centered, driven by our inclinations to innovate and improve upon society, but at other times acts as a constraint on our own free will when we act out of power or profit-driven instincts that blind us from contemplating the ends we are pursuing. It is this inherent, ever-present danger that distinguishes technological progress from the truly universal ethical values of freedom and autonomy.

## Conclusion

The philosophical frameworks of Heidegger and Marcuse emphasize how humans and technology reciprocally interact to guide and shape one another. This relationship creates an underlying danger that, left unchecked in the absence of ethical contemplation, our rational pursuit of technological progress risks infringing upon our autonomy. While the prevalence and capitalistic value of technology contribute to an essence of universality, the competitive forces compelling globalization demonstrate its societal acceptance does not equate to ethical value. A further Aristotelian examination of the meaning of universal values reveals the superficial nature of technological progress as it is employed as a means to modernization that

---

<sup>①</sup> Karl Marx, *Capital: A Critique of Political Economy. Volume I*, trans. from the 3rd German ed. by Samuel Moore and Edward Aveling, ed. Frederick Engels (Moscow: Progress Publishers, 1954).

<sup>②</sup> Xiaoyang Tang, *Session 6 Lecture* (October 21, 2024).

<sup>③</sup> Aristotle, *Nicomachean Ethics*, trans. and ed. Roger Crisp (Cambridge: Cambridge University Press, 2014), 10.

---

lacks a meaningful end or higher aim. As we pursue new technological endeavors, we must constantly evaluate the purpose and price of our progress through deliberate assessment of its impact on our genuine universal values.

## Bibliography

- [1] Aristotle. *Nicomachean Ethics*. Translated and edited by Roger Crisp. Cambridge: Cambridge University Press, 2014.
- [2] Center for AI Safety. “Statement on AI Risk.” 2023. <https://www.safe.ai/work/statement-on-ai-risk>.
- [3] Friedman, Thomas L. *The Lexus and the Olive Tree*. New York: Anchor Books, 2000.
- [4] Heidegger, Martin. *The Question Concerning Technology*. Translated by William Lovitt. New York and London: Garland Publishing, 1977.
- [5] Marcuse, Herbert. “Some Social Implications of Modern Technology.” *Studies in Philosophy and Social Science* 9, no. 3 (1941): 138–162.
- [6] Marx, Karl. *Capital: A Critique of Political Economy. Volume I*. Translated from the 3rd German edition by Samuel Moore and Edward Aveling. Edited by Frederick Engels. Moscow: Progress Publishers, 1954.
- [7] Tang, Xiaoyang. “Session 6 Lecture.” October 21, 2024.