



Journal of Philosophical Investigations

Journal of Philosophical Investigations

Print ISSN: 2251-7960 Online ISSN: 2423-4419

Homepage: <https://philosophy.tabrizu.ac.ir>



University of Tabriz

The Political Philosophy of Artificial Intelligence

Rouhollah Eslami 

Associate Professor of Political Science Department, Ferdowsi University of Mashhad, Mashhad, Iran. E-mail: eslami.r@um.ac.ir

Article Info

Article type:

Research Article

Article history:

Received 02 November 2025

Received in revised form 14 January 2026

Accepted 17 January 2026

Published online 14 February 2026

Keywords:

Artificial Intelligence,
Political Philosophy,
Critical Theory,
Governance,
Phenomenological
Pessimism

ABSTRACT

This paper examines the political philosophy of Artificial Intelligence (AI) through three distinct approaches: optimistic positivist scientism, critical middle ground, and phenomenological pessimism. The central issue addressed is the ethical and political implications of AI, specifically how it influences governance, social structures, and human autonomy. The research questions explore how AI can be understood in terms of its potential and risks, how different political philosophies interpret its role, and what governance models can mitigate its negative consequences. The methodology adopted is a comparative analysis of key thinkers and their contributions to the debate on AI. The framework includes positivist, critical theory, and phenomenological perspectives, with a focus on how these paradigms inform the understanding of technology and its societal impact. Key theorists discussed include Francis Bacon, Karl Marx, Yuval Harari, Jürgen Habermas, Martin Heidegger, and Hannah Arendt, each offering a unique viewpoint on the nature of AI and its implications for governance and human existence. The findings highlight three divergent views: the optimistic positivist approach sees AI as a tool for progress, advocating for technological innovation and global governance; the critical middle ground emphasizes ethical oversight and regulation to prevent social inequality; and the phenomenological pessimism warns of AI's potential to undermine human freedom and autonomy, leading to a dystopian, technocratic society. The study concludes that while AI offers significant potential for improving human life, it also raises profound challenges that require careful regulation, ethical consideration, and a commitment to preserving democratic freedoms.

Cite this article: Eslami, R. (2026). The Political Philosophy of Artificial Intelligence. *Journal of Philosophical Investigations*, 20(54), 463-482. <https://doi.org/10.22034/jpiut.2026.70031.4315>



© The Author(s).

Publisher: University of Tabriz.

Statement of the Problem

Artificial Intelligence (AI) has rapidly evolved from a scientific endeavor into a transformative force that shapes every aspect of human society. Defined as the simulation of human intelligence processes by machines, AI encompasses a range of technologies that enable systems to learn, reason, and perform tasks autonomously (Russell & Norvig, 2021). AI technologies are categorized into fifteen distinct types according to Schwann (2020), encompassing domains such as machine learning, natural language processing, robotics, and neural networks. These diverse technologies raise profound questions about their implications for political systems, governance, and societal values.

On the other hand, political philosophy investigates foundational questions about governance, power, justice, and the ethical responsibilities of rulers and citizens. Its focus spans themes like democracy, war, diplomacy, and the nature of governance itself (Aristotle, trans. 1996; Rawls, 1971). By exploring normative frameworks and principles, political philosophy provides a lens for evaluating the structures and goals of political systems, both traditional and emergent. The integration of AI into political processes and decision-making necessitates a philosophical inquiry into its compatibility with these foundational principles.

This paper investigates the intersection of AI and political philosophy, addressing a fundamental research question: *What does artificial intelligence do to political philosophy?* To frame this question, we examine AI's capacity to reshape notions of democracy, influence power structures, and challenge traditional ethical frameworks within governance. Through this exploration, we aim to understand whether AI serves as a tool that enhances political ideals or as a disruptive force that necessitates a reevaluation of those ideals.

1. Artificial Intelligence: Foundations and Classifications

The term "Artificial Intelligence" was first coined by John McCarthy in 1956, and since then, it has undergone significant theoretical and practical development. Schwann (2020) identifies fifteen categories of AI, each with unique characteristics and applications:

1. **Machine Learning (ML):** Algorithms that enable systems to learn from data and improve over time without explicit programming.
2. **Natural Language Processing (NLP):** Systems that understand and generate human language.
3. **Robotics:** Machines designed to perform tasks autonomously or with minimal human intervention.
4. **Computer Vision:** AI systems capable of interpreting and understanding visual data from the world.
5. **Expert Systems:** Programs that emulate decision-making abilities of a human expert in specific domains.
6. **Neural Networks:** Computing systems inspired by the structure of the human brain.
7. **Deep Learning:** A subset of neural networks designed for advanced pattern recognition.

8. **Reinforcement Learning:** Systems that learn optimal behaviors based on rewards and penalties.
9. **Fuzzy Logic Systems:** Algorithms that handle reasoning with uncertain or imprecise data.
10. **Autonomous Systems:** AI-driven entities that perform tasks without external control.
11. **Chatbots and Conversational Agents:** Interactive AI capable of simulating human-like conversations.
12. **Generative AI:** Systems that create novel content, such as text, images, and music.
13. **Cognitive Computing:** AI designed to simulate human thought processes in complex decision-making.
14. **Swarm Intelligence:** Distributed AI systems mimicking collective behaviors of groups like insects.
15. **Edge AI:** Decentralized AI systems that process data locally rather than relying on cloud infrastructure.

Each of these technologies raises ethical and political questions. For instance, machine learning algorithms employed in decision-making can perpetuate biases, while autonomous systems challenge conventional notions of accountability in governance (O'Neil, 2016).

2. Political Philosophy: Frameworks and Goals

Political philosophy is an inquiry into the foundational principles of political organization and governance. Classic works such as Plato's *Republic* and Aristotle's *Politics* emphasize justice, the common good, and the role of rulers in creating a harmonious society. Modern philosophers like Hobbes, Locke, and Rousseau expand these discussions to include the social contract, individual rights, and the legitimacy of authority (Hobbes, 1651/1994; Locke, 1690/1980; Rousseau, 1762/1997). Contemporary debates in political philosophy address the challenges posed by globalization, technology, and cultural pluralism (Rawls, 1971).

Political philosophy is concerned with normative questions:

- Why should people organize into political communities?
- What is the purpose of governance?
- How should power and resources be distributed?
- What ethical frameworks should guide diplomacy, conflict, and decision-making?

Themes like democracy, justice, and the ethics of war have long been central to political philosophy. In the context of AI, these themes acquire new dimensions. For example, does the use of AI in electoral processes enhance or undermine democratic ideals? Can AI-driven governance align with the philosophical goals of justice and equity?

3. AI's Impact on Political Philosophy

The integration of AI into political systems raises transformative questions about the future of governance. This intersection is characterized by both opportunities and challenges:

1. **Redefining Democracy:** AI technologies such as data analytics and predictive modeling influence electoral processes and policy-making. While these tools can improve efficiency, they also risk undermining democratic values by enabling manipulation of public opinion and eroding transparency (Zuboff, 2019).
2. **Shifting Power Dynamics:** The concentration of AI technologies within multinational corporations and powerful states shifts traditional power dynamics, creating new forms of dependence and inequality (Brynjolfsson & McAfee, 2014).
3. **Ethics of Decision-Making:** Autonomous systems deployed in areas such as criminal justice or military operations challenge traditional ethical frameworks. For instance, who bears responsibility for decisions made by AI systems in life-and-death situations?
4. **Governance and Accountability:** AI systems operate within a "black box," making their decision-making processes opaque. This lack of transparency conflicts with the principles of accountability and rule of law central to political philosophy (Pasquale, 2015).
5. **War and Diplomacy:** AI's role in autonomous weapons and cyber warfare necessitates rethinking the ethics of conflict. Similarly, AI-driven diplomacy may enhance predictive capabilities but risks reducing complex human relationships to algorithmic outputs (Singer, 2009).

The question, *what does artificial intelligence do to political philosophy?* underscores the urgency of developing a coherent theoretical framework for evaluating AI's impact on governance and societal values. By examining this intersection, we can address both the opportunities for enhancing political ideals and the risks of disrupting them. This inquiry requires interdisciplinary collaboration, drawing on insights from computer science, political theory, ethics, and law.

4. Review of Literature

The discourse surrounding the intersection of technology, artificial intelligence, and political philosophy is richly informed by seminal contributions from globally recognized scholars. This section reviews key academic works to contextualize and analyze the conceptualizations of technology, artificial intelligence, and their political implications:

1. **Giorgio Agamben:** Agamben's work on biopolitics and the "state of exception" offers insights into how AI technologies might extend state control and surveillance. He argues that technological systems redefine the relationship between citizens and authority, potentially diminishing agency (Agamben, 2005).

2. **Mark Coeckelbergh:** Coeckelbergh emphasizes the ethical dimensions of AI, arguing for a relational approach to technology. His analyses focus on the social embeddedness of AI and its implications for autonomy and justice (Coeckelbergh, 2020).
3. **Yuval Noah Harari:** Harari warns of the existential risks posed by AI, including the erosion of human agency and unprecedented inequalities. His work critiques AI's role in centralizing power among elites (Harari, 2018).
4. **Alexander Wendt:** Wendt explores the philosophical underpinnings of AI's potential to reshape global political structures, emphasizing its alignment with constructivist approaches to international relations (Wendt, 2015).
5. **James Rosenau:** Rosenau's studies on globalization provide a framework for understanding AI's transnational impacts. He identifies AI as a disruptor of traditional governance systems and advocates for adaptive political frameworks (Rosenau, 1997).
6. **Francis Fukuyama:** Fukuyama examines the potential of AI to challenge liberal democratic norms, arguing that AI governance may necessitate new institutional designs to safeguard democratic accountability (Fukuyama, 2018).
7. **Henry Kissinger:** Kissinger's reflections on AI emphasize the geopolitical implications of AI, particularly in terms of strategic stability and global power balances (Kissinger, 2021).
8. **Joseph Nye:** Nye's analysis of soft power considers how AI might alter statecraft by enhancing informational control and shaping perceptions on a global scale (Nye, 2011).
9. **Manuel Castells:** Castells focuses on the network society and how AI amplifies connectivity while exacerbating digital divides. He highlights the role of AI in creating new forms of social and political capital (Castells, 2010).
10. **Michel Foucault:** Although Foucault's primary works predate contemporary AI, his theories of power and surveillance are foundational for critiquing AI's panoptic tendencies (Foucault, 1977).

The question, *what does artificial intelligence do to political philosophy?* underscores the urgency of developing a coherent theoretical framework for evaluating AI's impact on governance and societal values. By examining this intersection, we can address both the opportunities for enhancing political ideals and the risks of disrupting them. This inquiry requires interdisciplinary collaboration, drawing on insights from computer science, political theory, ethics, and law.

5. Methodology and Theoretical Framework

This study adopts a normative methodology, utilizing Max Weber's ideal-type framework to explore the philosophical implications of artificial intelligence (AI) in political contexts. Weber's ideal-type methodology is particularly suited to this analysis, as it allows for the

construction of conceptual models that help explain complex social phenomena. By using this approach, the study delineates three methodological paradigms grounded in the interpretive phenomenology, critical theory, and positivist scientism traditions, creating ideal-types for understanding AI's influence on political philosophy: optimistic scientism, critical moderation, and pessimistic phenomenology.

6. Normative Methodology and Weber's Ideal-Types

Normative methodology emphasizes the evaluation of social and political systems against ethical and philosophical standards. Max Weber's ideal-type framework provides a heuristic tool for constructing simplified, exaggerated models of reality to analyze and compare complex phenomena (Weber, 1949). An ideal-type is not a perfect representation of reality but serves as a theoretical lens to highlight essential characteristics of a subject. In this study, the ideal-type framework facilitates the examination of AI's philosophical and political ramifications by categorizing diverse approaches into three distinct paradigms.

7. Three Methodological Paradigms

7-1. Optimistic Scientism

This paradigm reflects a positivist, science-driven perspective that views AI as a transformative tool for human progress. Advocates of optimistic scientism argue that AI enhances governance by increasing efficiency, objectivity, and decision-making capacity. Drawing on Enlightenment ideals, this paradigm envisions AI as a means to achieve political goals such as transparency, accountability, and equity.

Proponents like Henry Kissinger (2021) emphasize the potential of AI to improve strategic stability and global diplomacy. Similarly, Joseph Nye (2011) highlights AI's role in enhancing soft power and information dissemination. From this perspective, AI is seen as an extension of rational governance that aligns with democratic ideals and liberal political philosophy.

However, critics caution against over-reliance on AI's objectivity, arguing that biases embedded in algorithms can perpetuate systemic inequalities. For instance, Cathy O'Neil (2016) warns that data-driven governance often leads to the "weaponization of algorithms," exacerbating social divisions.

7-2. Critical Moderation

This paradigm represents a middle ground, combining elements of interpretive and critical methodologies to examine AI's dual potential for benefit and harm. Scholars within this framework emphasize the contextual and relational dimensions of AI technologies.

Mark Coeckelbergh (2020) adopts a relational ethics perspective, arguing that AI cannot be evaluated in isolation from its social and political contexts. He advocates for a dialogical approach to governance that incorporates diverse stakeholder perspectives. Giorgio Agamben's (2005) concept of the "state of exception" further critiques AI's role in expanding state surveillance and control, challenging its compatibility with individual freedoms.

This paradigm underscores the need for regulatory frameworks that balance innovation with ethical accountability. By fostering critical dialogue, it seeks to harness AI's benefits while mitigating its risks.

7-3. Pessimistic Phenomenology

The pessimistic phenomenology paradigm draws on existential and interpretive traditions to critique AI's impact on human agency and political structures. Yuval Noah Harari (2018) highlights the existential risks posed by AI, including the erosion of human autonomy and unprecedented concentration of power among elites. Michel Foucault's (1977) theories on surveillance and power provide a foundational critique of AI's panoptic tendencies, emphasizing its potential to entrench authoritarian governance.

This paradigm argues that AI technologies, by their nature, reduce complex human experiences to algorithmic outputs, undermining democratic ideals and ethical governance. It questions whether political philosophy can reconcile with the deterministic frameworks imposed by AI systems.

8. Theoretical Implications

The integration of Weber's ideal-types with the three paradigms outlined above provides a comprehensive framework for analyzing AI's impact on political philosophy. Each paradigm offers unique insights:

1. **Optimistic Scientism** envisions AI as an enabler of liberal democratic values but risks neglecting the ethical nuances of technological governance.
2. **Critical Moderation** bridges the gap between technocratic optimism and existential pessimism, advocating for context-sensitive and inclusive approaches to AI regulation.
3. **Pessimistic Phenomenology** challenges the deterministic assumptions of AI, emphasizing the need to preserve human agency and democratic principles.

Methodology and Theoretical Framework

This section presents the methodology and theoretical framework employed in the study to analyze the philosophical implications of artificial intelligence (AI) in political philosophy. A summary of the normative methodology and the paradigms is provided below.

Component	Description
Methodology	Normative methodology based on Max Weber's ideal-type framework.
Framework	Three paradigms: Optimistic Scientism, Critical Moderation, and Pessimistic Phenomenology.
Paradigm 1: Optimistic Scientism	Views AI as a transformative tool for governance. Emphasizes efficiency,

	objectivity, and democratic values. Critiques include potential algorithmic biases.
Paradigm 2: Critical Moderation	Combines interpretive and critical approaches. Highlights relational ethics and the need for contextual AI governance. Balances innovation with ethical accountability.
Paradigm 3: Pessimistic Phenomenology	Focuses on existential risks of AI, such as loss of human agency. Critiques deterministic frameworks and advocates for preserving democratic ideals.

By adopting Weber’s ideal-type methodology, this study constructs a nuanced analytical framework for understanding AI’s philosophical and political dimensions. The three paradigms—optimistic scientism, critical moderation, and pessimistic phenomenology—offer complementary perspectives that capture the complexities of AI’s integration into political systems. This methodological approach underscores the need for interdisciplinary inquiry and ethical reflexivity in addressing the challenges posed by AI.

9. Analysis of the Optimistic Positivist and Scientistic Approach in Modernity and its Impact on Universities, Politics, and the Global Economy

The optimistic positivist and scientistic approach represents a perspective that believes scientific progress and technology can significantly contribute to addressing global challenges and advancing societies. This viewpoint is at the heart of modernity and suggests that science and technology, particularly in the form of artificial intelligence (AI), can accelerate societal transformation. This analysis will explore the impact of this approach on universities, politics, global governance, and the economy, with particular emphasis on emerging technologies such as AI, blockchain, and e-governance.

9-1. Modernity and Scientism

In the context of modernity, the optimistic positivist approach is firmly grounded in the belief that science and technology are primary drivers of progress. The philosophy of Francis Bacon is foundational in this view, advocating for the role of human beings as knowledge-seeking agents whose progress and transformation are directly facilitated by scientific advancements (Bacon, 1620). Bacon’s vision of the *Great Instauration* anticipated the transformative power of knowledge and empirical methods, which laid the groundwork for the technological revolution that modernity embraced. Bacon’s emphasis on empirical research and experimentation represents the foundation for modern scientific methodologies (Kuhn, 1996).

This perspective sees technology not merely as a tool, but as a guiding force that reshapes society, economics, and culture. The rapid acceleration of scientific knowledge, particularly through AI, is perceived as the natural continuation of modernity, one that holds the potential to radically alter our way of life (Postman, 1992).

9-2. AI and the Transformation of Higher Education

In this optimistic framework, universities play a pivotal role in advancing scientific knowledge and fostering technological innovation. AI is seen as a key driver in the transformation of higher education, particularly in fields such as medicine, engineering, and eventually the humanities. As AI technologies develop, there is a growing reliance on automated systems for research, data analysis, and even teaching, which enables universities to expand their reach and efficiency (Brynjolfsson & McAfee, 2014). However, this transformation is not without its challenges, as concerns about the potential dehumanization of education and the loss of critical thinking abilities arise (Binns, 2018).

Nevertheless, AI is positioned as a tool that can enhance the human intellect and provide a more individualized educational experience. This paradigm suggests that the future of academia will be deeply intertwined with technology, driving both the structure of universities and the content of academic inquiry (Harari, 2016).

9-3. Politics and Governance in the Age of AI

The influence of AI extends beyond the academic realm into the political and governmental spheres. In the optimistic view, AI facilitates advancements in cyber governance, including e-governance, cyber diplomacy, and global citizenship. The expansion of AI technologies enables the creation of more efficient and transparent government structures, where digital platforms allow for greater citizen participation and policy implementation (Chui, Manyika, & Miremadi, 2016). Moreover, AI has the potential to enhance decision-making processes by offering data-driven insights that can lead to more effective governance (Marr, 2018).

Cyber warfare, the regulation of digital spaces, and the enforcement of international policies are also seen as critical areas where AI can make substantial contributions. AI-powered systems can monitor digital activities, combat cyber threats, and facilitate diplomatic negotiations in a highly interconnected world (Friedman, 2017). This transformation in governance is closely tied to the concept of a "global state" or global governance, where nations cooperate to address issues that transcend borders, such as climate change, cybersecurity, and economic inequality (Held, 2004).

9-4. The Global Economy and the Role of Blockchain

In the context of the global economy, blockchain technology is another critical innovation associated with this scientific and optimistic perspective. Blockchain's decentralized nature promises to revolutionize industries by providing secure, transparent, and efficient methods for transactions and data management (Narayanan et al., 2016). Its potential to disrupt traditional economic systems is substantial, as it can bypass centralized authorities and enable peer-to-peer transactions without the need for intermediaries.

The development of global cryptocurrencies and the increasing use of blockchain for international trade and finance are indicative of the ongoing transformation of the economic landscape. Advocates of this technology argue that it can lead to a more equitable and transparent global economy by reducing the influence of centralized banks and government institutions (Tapscott & Tapscott, 2016). Blockchain is seen as an essential component of a global economy that is more interconnected, decentralized, and inclusive (Peters, 2017).

9-5. The Rise of International Governance and the Decline of Governmental Monopolies

The optimistic positivist perspective also envisions a world where the monopolies of traditional state power are weakened, and international governance becomes more prominent. The idea of a "global state" is facilitated by digital technologies, such as blockchain and AI, which enable more efficient and transparent international collaboration. This model suggests that issues such as climate change, human rights, and economic disparity can be addressed through collaborative international efforts, where the traditional nation-state loses some of its dominance (Held, 2004).

With the advent of these technologies, the traditional mechanisms of state control are increasingly challenged, and new forms of governance emerge. In this new paradigm, multinational organizations and global coalitions take on greater responsibility for managing issues that transcend national borders (Sassen, 2016).

9-6. The Future of Voting and Human Rights in the Age of AI

The integration of AI into governance structures also influences the future of democratic processes. In the optimistic view, AI can streamline the electoral process, enhance voter accessibility, and ensure the integrity of elections through blockchain-based voting systems (Zohar, 2019). Furthermore, AI-driven policies can be used to promote global human rights standards, as AI technologies can monitor violations and provide recommendations for intervention (Pence, 2020).

The use of AI in policymaking holds the promise of creating more just and equitable societies by ensuring that policy decisions are based on data and are less influenced by political ideologies. AI can contribute to the realization of human rights on a global scale, enabling the development of policies that are responsive to the needs of marginalized populations (Binns, 2018).

The optimistic positivist and scientific approach to modernity posits that science, technology, and AI hold the keys to addressing the complex challenges of the contemporary world. By transforming universities, political structures, and the global economy, AI and other emerging technologies have the potential to reshape the future of human civilization. However, this transformation also raises critical questions about the role of human agency, the ethical implications of technology, and the balance between progress and the preservation of democratic values.

In this context, while the future appears bright for those who embrace these advancements, it is crucial to remain vigilant about the potential risks that accompany rapid technological change. The trajectory of modernity, guided by the principles of scientism and positivism, will ultimately depend on how societies choose to balance technological progress with ethical responsibility.

10. Analysis of the Critical Middle Approach: A Marxist, Frankfurt School, and Social Movements Perspective on Artificial Intelligence and Society

The critical middle approach to artificial intelligence (AI) offers a nuanced perspective, grounded in theories of social justice, political critique, and human emancipation. This approach, which includes Marxists, the Frankfurt School, and thinkers such as Daron Acemoglu, Yuval Noah Harari, and Robert K. Merton, emphasizes the limitations of a purely technocratic view of AI. It advocates for a more human-centered and socially responsible framework, reflecting concerns about technology's role in exacerbating social inequalities and undermining democratic values. This analysis explores the critical middle approach's arguments for a more socially engaged and critically reflective approach to AI, drawing from the works of key theorists in this field.

10-1. The Marxist Foundation: Technology, Labor, and Social Inequality

At the heart of the critical middle approach lies a Marxist critique of technological development. Karl Marx's analysis of capitalism offers an essential framework for understanding how technology, including AI, is embedded in relations of power and exploitation (Marx, 1867). Marx argued that technological advancements in capitalism are not neutral but are shaped by and serve the interests of dominant social groups, particularly capitalists, who use them to increase profits and maintain control over the working class. AI, in this view, becomes a tool that intensifies capitalist exploitation by automating labor and further alienating workers from their means of production (Zuboff, 2019).

Daron Acemoglu, in his work *Technology and the Future of Labor*, supports this critique, suggesting that AI's impact on labor markets depends on how it is developed and deployed (Acemoglu, 2019). He argues that AI is likely to exacerbate inequality unless accompanied by deliberate efforts to ensure equitable access to its benefits. Acemoglu's research highlights the need for policies that prevent the displacement of workers and ensure that AI benefits a broader swath of society, rather than just a small elite. The Marxist critique, thus, points to the importance of ensuring that AI serves the collective good and does not become another mechanism for entrenched inequality.

10-2. The Frankfurt School: Critical Theory and Humanism in AI

The Frankfurt School, particularly through the work of thinkers like Theodor Adorno, Max Horkheimer, and Herbert Marcuse, provides a philosophical foundation for understanding the social role of technology. The Frankfurt School critiqued the instrumental reason that often underpins technological development, arguing that technology in modern society tends to serve the interests of power, leading to forms of domination and control (Horkheimer & Adorno, 1944). They warned that technological rationality, when unchallenged by humanistic values, could result in a form of "one-dimensional" thought, where critical reflection and ethical considerations are sidelined in favor of efficiency and profit maximization.

In the context of AI, the Frankfurt School's critique is particularly relevant. The rise of AI technologies, often driven by corporate interests and state agendas, reflects a broader

trend of commodifying human life and reducing individuals to mere data points or economic units. The thinkers of the Frankfurt School, such as Marcuse (1964), would argue that AI, when placed solely in the hands of technocratic elites, could lead to further alienation, depersonalization, and a loss of human autonomy. Therefore, the Frankfurt School advocates for a “critical theory” approach to AI, one that is embedded in ethical concerns, human dignity, and social justice.

10-3. Harari, Acemoglu, and the Need for Critical Reflection on AI

Yuval Noah Harari’s *Homo Deus* and *21 Lessons for the 21st Century* provide a critical engagement with the future of AI, emphasizing the importance of ethical considerations in its development (Harari, 2016). Harari warns that AI has the potential to create a “useless class” of individuals who are displaced by automation and who have no role to play in the new economy. He advocates for a critical examination of AI’s social impact, particularly its potential to exacerbate inequality and social divides. Harari’s work aligns with the critical middle approach, which calls for the creation of policies that ensure AI is used to enhance human capabilities and promote social good rather than reinforcing existing power structures.

Similarly, Robert K. Merton’s emphasis on the unintended consequences of technological development is relevant here. Merton (1936) argued that technological innovations often produce results that were not anticipated or intended by their creators. In the case of AI, the unintended consequences could include the exacerbation of social inequalities, the erosion of privacy, and the marginalization of democratic values. The critical middle approach, therefore, calls for a more cautious, deliberate approach to AI development, one that takes into account both its intended and unintended social effects.

10-4. The Role of Social Movements, Feminism, and Environmentalism in AI Development

In the critical middle approach, there is a strong emphasis on the need for a revitalization of civil society and social movements to counterbalance the technocratic and instrumentalist tendencies of AI development. Feminists, environmentalists, and advocates for social justice argue that AI must be developed in a way that promotes human empowerment and addresses social inequalities. Feminist theorists such as Donna Haraway and Silvia Federici have critiqued the patriarchal structures embedded in technological systems, including AI, and have called for more inclusive and participatory approaches to technology development (Federici, 2012).

Feminist critiques highlight how AI could perpetuate gender biases if not carefully designed and regulated. These biases, embedded in training data and algorithms, can lead to discriminatory outcomes that disproportionately affect women and marginalized groups (West, Whittaker, & Crawford, 2019). The critical middle approach advocates for more inclusive practices in AI development, where voices from diverse social movements are heard and their concerns are addressed. Moreover, it calls for empowering women and other marginalized groups to ensure they benefit from AI technologies rather than being further excluded from them.

Environmentalism, too, plays a crucial role in this framework. AI can be used to address pressing environmental challenges, such as climate change, but it could also exacerbate environmental degradation if its development remains unchecked. Social movements advocating for environmental sustainability call for AI to be developed with ecological concerns in mind, ensuring that it supports sustainable practices rather than contributing to further ecological destruction.

10-5. The Need for a Renaissance of Critical Reasoning

The critical middle approach insists on the importance of reinvigorating critical thinking, humanism, and enlightenment values in the development and application of AI. Robert K. Merton's emphasis on "the sociology of knowledge" suggests that technological advancements must be evaluated not only for their scientific merit but also for their social and cultural implications (Merton, 1973). The critical middle approach, following thinkers like Jürgen Habermas, advocates for a rational discourse surrounding AI, one that engages a wide range of voices and critiques, ensuring that AI serves the public good rather than corporate or governmental elites (Habermas, 1984).

This engagement with reason and critical reflection on AI aligns with the broader tradition of humanism, which emphasizes the dignity of individuals, the importance of ethical consideration, and the need to preserve human agency in the face of technological advancement. A "renaissance" of critical reasoning, then, is necessary to ensure that AI is developed and deployed in ways that are ethical, democratic, and just.

The critical middle approach to AI calls for a thorough reevaluation of technology's role in society. Drawing from Marxist thought, the Frankfurt School, and contemporary social movements, this approach emphasizes the need for a more human-centered AI that addresses social inequality, promotes social justice, and ensures democratic values are upheld. As AI continues to advance, it is essential that we adopt a critical stance that challenges the purely technocratic vision of the future and instead seeks to align technological progress with the broader goals of human flourishing and social justice.

11. Analysis of the Phenomenological Pessimistic Approach: Heideggerian and Arendtian Perspectives on Artificial Intelligence

The phenomenological pessimistic approach to artificial intelligence (AI) is grounded in the existential critiques of technology advanced by Martin Heidegger and Hannah Arendt. From this perspective, AI is not merely a neutral tool of technological advancement but a force that threatens the very essence of human existence, the world as we know it, and our capacity for meaningful engagement with life. Drawing on Heidegger's concept of the "mathematization of the world" and Arendt's warnings about totalitarianism, this analysis explores how AI may lead to the destruction of human existence and freedom. The philosophical underpinnings of this view position AI as a catalyst for technological totalitarianism, dehumanization, and the erasure of the human experience.

11-1. Heidegger's Critique: The Mathematicalization of the World and the Death of Being

Martin Heidegger's critique of technology, particularly in his essay *The Question Concerning Technology* (1954), provides a foundational lens for the pessimistic phenomenological perspective on AI. Heidegger argued that modern technology, and by extension, AI, represents the "enframing" (Gestell) of the world, where everything is reduced to a mere resource to be optimized and exploited. In this process, the world is "mathematized" and "calculated," stripping it of its essential qualities and turning it into an object of control and manipulation (Heidegger, 1977).

For Heidegger, AI embodies this transformation of human existence into a calculative, instrumental mode of being. The technological worldview that underpins AI reduces the world to data points, algorithms, and processes, creating a framework where the meaning of human existence is overshadowed by the imperative of efficiency and control. Heidegger's concern was that this instrumental rationality, embodied in AI, diminishes our capacity to encounter the world authentically. AI, as an expression of this calculative thinking, represents a threat to the very fabric of human life, replacing genuine engagement with technology-driven interactions that sever the human connection to the world (Heidegger, 1977).

11-2. Edmund Husserl's Influence: Engineering the World and the Loss of the Lifeworld

Heidegger's critique draws significantly from Edmund Husserl, the founder of phenomenology, who focused on the concept of the "lifeworld" (Lebenswelt)—the world of lived experience, rich with meaning and context. Husserl warned against the dangers of reducing the world to a scientific, mathematical object, which he saw as the result of technological advancements, including AI (Husserl, 1936). From a phenomenological perspective, the technification of the world and the focus on instrumental reasoning represent an alienation from the lived world, leading to a loss of human authenticity and meaning.

In the case of AI, the push to turn the world into a series of algorithms, data sets, and processes is viewed as a threat to the "lifeworld" that provides a foundation for human consciousness and understanding. AI, in this regard, is a vehicle for the destruction of this rich, meaningful world. As AI increasingly dominates human life, it risks reducing human beings to mere cogs in a technological machine, further alienating us from the deeper, existential aspects of being (Husserl, 1936).

11-3. Arendt's Warning: AI and the Threat of Totalitarianism

Hannah Arendt's concerns about the rise of totalitarian regimes and the erosion of human freedom offer a stark warning about the potential dangers of AI. Arendt (1951) was deeply concerned with how technologies, particularly those controlled by centralized, authoritarian forces, could be used as tools of oppression and surveillance. In her work *The Origins of Totalitarianism*, Arendt explored how totalitarian regimes—such as those under Stalin and

Hitler—employed technology, including surveillance tools, to maintain absolute control over individuals' lives.

Arendt argued that totalitarianism is defined not only by political power but by the total control over human behavior, which is often facilitated by technological tools of surveillance, such as the kind AI can provide. AI, in this context, represents the ultimate instrument of totalitarian control. Governments and corporations can use AI to monitor individuals, track their behavior, and manipulate their choices. Arendt's warnings are particularly relevant today, as we see authoritarian regimes like China and North Korea utilizing AI and surveillance technologies, such as facial recognition and smart cameras, to exert control over their populations (Arendt, 1951). The use of AI in these contexts epitomizes the type of dehumanizing power that Arendt feared, where the individual is reduced to a mere object under the watchful eye of a totalitarian state.

11-4. Giorgio Agamben: The State of Exception and the Suspension of Law

The work of Giorgio Agamben, particularly his analysis of the "state of exception," further elaborates the potential dangers of AI in relation to political control. Agamben (2005) argues that modern states increasingly rely on states of exception, where laws are suspended in the name of security or crisis management. AI, with its power to monitor and control, plays a central role in the creation of such a state of exception, where ordinary legal frameworks are bypassed and individuals' freedoms are suspended in favor of technological control.

In a society governed by AI, the suspension of the rule of law becomes a possibility, as the technology can be deployed to justify extreme measures of surveillance, restriction, and control. Agamben's work warns of a future in which AI is used not merely as a tool for management but as a means of normalizing authoritarian rule and the erosion of democratic freedoms.

11-5. Michel Foucault: Surveillance and the Panopticism of AI

Michel Foucault's theories of surveillance and power are also crucial in understanding the potential impact of AI on human freedom. Foucault's concept of the "panopticon" illustrates how surveillance systems, whether physical or digital, exert control over individuals by making them internalize the watchful gaze of authority (Foucault, 1977). In the context of AI, this panoptic structure becomes increasingly sophisticated, with algorithms capable of tracking every movement, decision, and behavior of individuals in real time. Foucault's insight into the disciplinary mechanisms of power is crucial here, as AI can be used to create a digital "panopticon" in which individuals are constantly monitored, not just by state actors but by corporations and other institutions with interests in controlling behavior.

11-6. The Human Becoming the Tool: AI and the Reduction of Humanity

The phenomenological pessimistic view is fundamentally concerned with the reduction of human beings to mere instruments or tools in the face of advancing AI. Heidegger's concept of "being" is replaced with a cold, calculated existence where human beings become mere extensions of technology, existing only to serve the demands of the system. In this future, human agency and freedom are subsumed by the technological apparatus, leaving individuals powerless and dehumanized.

The potential for AI to trigger rebellion against its creators—through autonomous machines, robots, and systems that evolve beyond human control—further underscores the dystopian vision of technology run amok. The fear of AI's capacity for self-replication, autonomy, and resistance is reminiscent of science fiction, yet the theoretical underpinnings of this concern are grounded in the existential reflections of thinkers like Heidegger and Arendt.

The phenomenological pessimistic approach to AI, rooted in Heideggerian, Husserlian, Arendtian, and Agambenian thought, presents a dark vision of the future in which technology erodes the very foundation of human existence. By reducing the world to mathematical calculations, subjugating individuals to surveillance, and facilitating authoritarian control, AI becomes not a tool for human progress, but an instrument of destruction. This perspective warns against the unchecked rise of AI, urging society to reflect on its profound implications for human freedom, dignity, and the essence of life itself.

Table 1. *Summary of Three Approaches to Artificial Intelligence and Political Philosophy*

Approach	Key Thinkers	Definition of Technology & AI	Political Philosophy	Governance Model	Pathology	Solution
Optimistic Positivist Scientism	Francis Bacon, Francis Fukuyama, Ray Kurzweil, Elon Musk, Peter Singer	Technology as a force for progress and efficiency. AI as an extension of human capabilities. AI improves human life and productivity.	Liberal democracy, individual freedom, and market-driven governance.	Global governance, international economy, digital diplomacy, global citizenship, block chain, and AI-driven policies.	AI could lead to major social and economic disparities. Risk of technology-driven unemployment and inequality.	Promote technological innovation, increase global collaboration, emphasize education and welfare programs, and advance human-machine synergy.
Critical Middle Ground	Karl Marx, The Frankfurt School, Yuval Noah Harari, Amartya Sen, Jürgen Habermas, Lawrence Lessig	AI is beneficial but requires critical oversight. AI should support human needs but also raise ethical concerns. Technology is an instrument to balance human interests.	Critical theory, rational discourse, and human emancipation. AI is viewed as both a tool and a challenge for democratic and ethical governance.	Democratic governance with an emphasis on civil society, social justice, and regulation of AI. Focus on restoring balance and equity.	AI could deepen social divides and exacerbate inequality. Technology may be overly dominated by corporate or state interests.	Regulation of AI technologies, promotion of social justice, empowerment of marginalized groups, and strengthening democratic institutions.

Phenomenological Pessimism	Martin Heidegger, Edmund Husserl, Hannah Arendt, Giorgio Agamben, Michel Foucault, Giorgio Agamben	AI as the mathematical reduction of the world, leading to the destruction of human meaning and authenticity. Technology alienates and mechanizes the human experience.	Existentialism, anti-modernism, skepticism of technology. AI undermines human autonomy and leads to technocratic totalitarianism.	Authoritarian, totalitarian governance supported by surveillance technology, creating digital panopticons and eroding freedoms.	AI leads to loss of human autonomy, surveillance states, and the destruction of individuality. Threat of totalitarianism and technological domination.	Strict regulation of AI, empowerment of human dignity, restoration of democratic freedoms, and emphasis on human-centered development.
----------------------------	--	--	---	---	--	--

Conclusion

This paper explored three distinct approaches to Artificial Intelligence (AI) and its political philosophy, providing a comprehensive analysis of the optimistic positivist scientism, the critical middle ground, and the phenomenological pessimism perspectives. Each approach offers a unique understanding of AI's role in society, its ethical implications, and the political governance models that may arise as AI continues to evolve.

The first approach, Optimistic Positivist Scientism, views AI as a technological force for progress and efficiency. Thinkers such as Francis Bacon and Ray Kurzweil emphasize the potential of AI to augment human capabilities and foster economic and social progress. This perspective aligns with a liberal democratic philosophy, advocating for global governance, digital diplomacy, and AI-driven policies that could enhance productivity and global collaboration. The pathology of this approach is the risk of exacerbating inequalities and technological unemployment. However, its solution lies in promoting technological innovation, enhancing education, and establishing global cooperation to ensure AI benefits all of humanity.

In contrast, the Critical Middle Ground approach, represented by scholars like Karl Marx, Jürgen Habermas, and Yuval Noah Harari, maintains that AI is valuable but requires ethical oversight. This perspective acknowledges AI's potential but stresses the need for regulation to prevent its misuse and to ensure it serves the public good. The political philosophy of this group is rooted in critical theory, emphasizing human emancipation and social justice. The governance model proposed is democratic, focusing on civil society, fairness, and equitable distribution of AI's benefits. The main pathology concerns the potential for AI to deepen existing social inequalities and corporate domination, while the solution lies in regulation, the empowerment of marginalized groups, and strengthening democratic institutions.

The third approach, Phenomenological Pessimism, draws heavily on the existential critiques of thinkers like Martin Heidegger, Hannah Arendt, and Michel Foucault. This view warns that AI leads to the mathematical reduction of the world and the mechanization of human existence, threatening the authenticity and freedom of the human experience. Heidegger's critique of technology, along with Arendt's warnings of totalitarianism,

suggests that AI may become a tool for authoritarian governance, eroding individual freedoms through pervasive surveillance and control. The political philosophy of this group is anti-modernist, opposing both technological determinism and the dominance of AI in shaping political power. Its diagnosis is the potential destruction of human autonomy, leading to a totalitarian state controlled by AI, where humans are reduced to mere instruments of technology. The solution, according to this view, is to strictly regulate AI, emphasize human dignity, and restore democratic freedoms.

In conclusion, the paper provides a nuanced examination of AI's role within political philosophy, offering a balanced view of its potential and risks. While the optimistic positivist approach celebrates AI's promise, it overlooks the social consequences of unchecked technological growth. The critical middle ground recognizes these risks and advocates for regulation and social justice, while the phenomenological pessimism warns of a dystopian future where AI undermines human authenticity and freedoms. The analysis of these three perspectives reveals the complex and multifaceted nature of AI and highlights the need for careful consideration of its ethical, social, and political implications as we continue to integrate AI into every aspect of human life.

References

- Acemoglu, D. (2019). Technology and the Future of Labor. *Journal of Economic Perspectives*, 33(2), 7-36.
- Agamben, G. (2005). *State of Exception*. University of Chicago Press.
- Aristotle. (1996). *Politics* (C. D. C. Reeve, Trans.). Hackett Publishing Company.
- Arendt, H. (1951). *The Origins of Totalitarianism*. Harcourt Brace.
- Bacon, F. (1620). *Novum Organum*. London: John Bill.
- Binns, R. (2018). AI and the Future of Education: Challenges and Opportunities. *Journal of Educational Technology*, 45(2), 122-138.
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company.
- Castells, M. (2010). *The Rise of the Network Society*. Wiley-Blackwell.
- Coeckelbergh, M. (2020). *AI Ethics*. MIT Press.
- Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. Pantheon Books.
- Friedman, T. L. (2017). *Thank You for Being Late: An Optimist's Guide to Thriving in the Age of Accelerations*. Farrar, Straus and Giroux.
- Fukuyama, F. (2018). *Identity: The Demand for Dignity and the Politics of Resentment*. Farrar, Straus, and Giroux.
- Harari, Y. N. (2016). *Homo Deus: A Brief History of Tomorrow*. HarperCollins.
- Harari, Y. N. (2018). *21 Lessons for the 21st Century*. Spiegel & Grau.
- Heidegger, M. (1977). *The Question Concerning Technology and Other Essays*. Harper & Row.
- Hobbes, T. (1994). *Leviathan* (E. Curley, Ed.). Hackett Publishing Company. (Original work published 1651)

- Husserl, E. (1936). *The Crisis of European Sciences and Transcendental Phenomenology*. Northwestern University Press.
- Kissinger, H. (2021). *The Age of AI and Our Human Future*. Little, Brown and Company.
- Kuhn, T. S. (1996). *The Structure of Scientific Revolutions* (3rd ed.). University of Chicago Press.
- Locke, J. (1980). *Second Treatise of Government* (C. B. Macpherson, Ed.). Hackett Publishing Company. (Original work published 1690)
- Marr, B. (2018). *Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems*. Wiley.
- Merton, R. K. (1936). The Unanticipated Consequences of Purposive Social Action. *American Sociological Review*, 1(6), 894-904.
- Merton, R. K. (1973). *The Sociology of Science: Theoretical and Empirical Investigations*. University of Chicago Press.
- Marcuse, H. (1964). *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Beacon Press.
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and Cryptocurrency Technologies*. Princeton University Press.
- Nye, J. S. (2011). *The Future of Power*. PublicAffairs.
- O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. Crown Publishing Group.
- Pasquale, F. (2015). *The Black Box Society: The Secret Algorithms That Control Money and Information*. Harvard University Press.
- Pence, H. (2020). *Artificial Intelligence and Human Rights*. Oxford University Press.
- Peters, M. A. (2017). *Blockchain Education: Revolutionizing the Future of Higher Education*. Springer.
- Postman, N. (1992). *Technopoly: The Surrender of Culture to Technology*. Vintage Books.
- Rawls, J. (1971). *A Theory of Justice*. Harvard University Press.
- Rosenau, J. N. (1997). *Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World*. Cambridge University Press.
- Rousseau, J.-J. (1997). *The Social Contract* (C. Betts, Trans.). Oxford University Press. (Original work published 1762)
- Russell, S., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson.
- Schwann, M. (2020). *Artificial Intelligence and Its 15 Categories*. Springer.
- Singer, P. W. (2009). *Wired for War: The Robotics Revolution and Conflict in the 21st Century*. Penguin Books.
- Sassen, S. (2016). *Expulsions: Brutality and Complexity in the Global Economy*. Harvard University Press.
- Tapscott, D., & Tapscott, A. (2016). *Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies is Changing the World*. Penguin.
- Weber, M. (1949). *The Methodology of the Social Sciences*. Free Press.

Zohar, D. (2019). *Blockchain and the Future of Democracy: Decentralized Voting*. Blockchain Press.

Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.