ARTIFICIAL INTELLIGENCE AND KARL MARX'S ALIENATION OF LABOUR

Onyeka Emmanuel Uzowulu
NnamdiAzikiwe University, Awka
oe.uzowulu@unizik.edu.ng
08134060045

Dr. Kelechi Onyeka Ezeani
NnamdiAzikiwe University, Awka
ko.ezeani@unizik.edu.ng
08034276391

Mmesoma Precious Ajih
NnamdiAzikiwe University, Awka
mmesomaajih@yahoo.com
09099265088

ABSTRACT
The Industrial Revolution of the 18th and 19th century marked a major turning point in the history of the world. While it has been acclaimed to have brought about economic prosperity, it, regrettably, instituted capitalism, a system that is essentially alienating and exploitative. Mechanization of production forced vast population of handicraftsmen out of production while enthroning paid labour. The conditions of workers across Europe fueled Karl Marx's attack on capitalism with him proposing communism as a dialectical alternative. Marxism was yet to reach its peak when artificial intelligence that would not only help capitalists alienate and exploit workers but also cut them off from labour emerged. The worrisome implications of artificial intelligence for human existence resonates this philosophic exercise with the question of man's future without a place in the labour market. What is the future of man with the advancement in smart machines? Considering how it places man for exploitation, the question arises; is there a correlation between artificial intelligence and the theory of alienation construed by the German philosopher, Karl Marx? How can the challenges of artificial intelligence be balanced with human needs? What is the place of man in the new world of AI? Should man treat AI as part of the system or a means? Using the philosophical method of analysis, this research explains that, artificial intelligence if left unchecked will not just alienate man from labour but spells doom for humanity. The research recommends, therefore, that makers and scholars of AI must identify pathways for distributing the gains of Artificial Intelligence; it should also be regulated in such a way that it integrates human needs such that its operation will cease to be a threat to mankind.
Keywords: Alienation, Artificial Intelligence, Labour, Capitalism.

INTRODUCTION
The Industrial Revolution of the 18th and 19th century marked a major turning point in the

world history. The revolution is believed by many to have influenced every aspect of daily life in some ways; ensuring an average growth income and population growth as well as increasing and stabilizing the standard of living for the general population in the western world. For example, when innovations and mechanization of the means of production opened up, industrial revolution started, as the economic and commercial hub of the world. However, the euphoria of adopting Marxist communist doctrine can be said to be short-lived by the emergence of machine learning and Artificial Intelligence in the following century. The successes of the sciences and technological breakthrough leading to Artificial Intelligence is believed to possess enormous potential and power; having the capability of simulating any conceivable act of mathematical deduction by shuffling symbols as simple as "0" and "1". By drawing from computer science, psychology, linguistics, philosophy and other fields, Artificial Intelligence is meant to perform every task a man can do with even greater speed and accuracy. For example, following the outbreak of coronavirus pandemic, companies have come up with new technologies to slash cost, enhance productivity while reducing reliance on real-life people. This is, mildly stated, not just alienating man from labor but cutting him off from labor totally. In a recent report, World Economic Forum (WEF), concluded that "a new generation of smart machines, fueled by rapid advances in artificial intelligence (AI) and robotics, could potentially replace a large proportion of existing human jobs" (Leaders, 2016). The organization further raised concern over the availability of jobs for the teaming human population due to the fall in the cost of smart machines and their increased capabilities. Although concerns for jobs have been there for ages, artificial intelligence, robotics and technology are developing at a furious pace leaving a trail of deleterious effects that could last for generations. The effect of artificial intelligence on labour is indeed worrisome.

According to De Stefano (2019), artificial intelligence if not properly handled, has the potency of destroying humanity by taking over labour, whereas, labor is what distinguishes man from every other existent. Indubitably, this implies that the modern man alienates himself through his own creation. While Marx decried the mechanization of man for making men tools for amassing wealth for the few bourgeoisie, the new future, automation or artificial intelligence, robotics and related technology seems to have come to take away from people the little jobs they are living on (Marx, 2024). The implications of artificial intelligence for human existence have become an issue of concern and heated debate. While some scholars and researchers express their conviction and optimism believing that artificial intelligence, with its great potential is capable of boosting the economy and reducing the workload on man, some are worried of its negative implications which may go beyond the point of no return in destroying humanity. Artificial intelligence, no doubt, slashes the cost of production, however, it is robbing people of their jobs at the same time (Mukherjee & Sharma, 2022). It equally creates more surplus gain which remains an exclusive of the factory owners. It is against this backdrop, therefore, that this research is undertake to further investigate the nature and relationship which artificial intelligence has with man's alienation from his labour through the lens of Karl Marx's theory of alienation.

In its characteristic nature, philosophy is ever concerned with problem-solving, that is, articulating lasting solutions to man's existential challenges at all times and in all climes. It is due to this that prominent philosophers like Marx and Engels wrote extensively on the economic deprivation of man due to capitalism, the economic arrangement prevalent in their time (Sherwood, 1985). While Marx was greatly perturbed by what he perceived as man's alienation from his labor, further scientific and technological advancements are calling to question, the future and place of man in the labor market. The disturbing effects of automation, artificial intelligence or robotics, while being controversial, have become a source of worry as it touches the core of human value-labor. It is not dubitable that machines have made man's work easier and faster, however, the threat to man's existence which it poses calls for urgent attention. Intrigued by the furious pace at which artificial intelligence is gaining prominence and adoption, the researchers, in this work, attempts to do justice to the following perplexing questions: what is the future of man with the advancement in smart machines? In what way does artificial intelligence pose a threat to man's existence? Is there a correlation between artificial intelligence and the theory of alienation construed by the German philosopher, Karl Marx? How can the challenges of artificial intelligence be balanced with human needs? That is, in a way that it complements man, making humanity better other than endangering it. The above mind-boggling questions and the quests for a well thought-out answers necessitated this research. Thus, the research shall meticulously attempt to answer the questions raised in order to give more insight into man's predicament around his rival, smart machines.

MARX'S THEORY OF ALIENATION

The concept of 'alienation' has remained a fundamental discuss in the history of man. Major discuss on alienation is found in the disciplines such as sociology, psychology, philosophy, religion, economics, etc. The term means different things to different scholars and schools of thought over the centuries. According to Marcello Musto (2013), alienation in theological discourse referred to "the distance between man and God; in social contract theories, the loss of the individual's original liberty; and in English political economy, to the transfer of property ownership. The first systematic philosophical account of alienation was in the work of G.W.F. Hegel, who in *The Phenomenology of Spirit* adopted the terms *Entaüsserung* (literally self-externalization or renunciation) and *Entfremdung* (estrangement) to denote Spirit's becoming other than itself in the realm of objectivity (Hegel, 1977). Ludwig Feuerbach in *The Essence of Christianity* sees Alienation as "man's projection of his own essence onto an imaginary deity (Kınağ, 2022).

Marx, in *Wage Labour and Capital*, a collection of articles based on lectures he gave to the German Workers' League in Brussels in 1847, returned to the theory of alienation (Noyes, 2015). He maintains that labour-power is a commodity that the worker is forced to sell "in order to live," and "the product of his activity isnot the object of his activity. He states, that the worker, who for twelve hours weaves, spins, drills, turns, builds, shovels, breaks stones, carries loads, etc. does he consider this twelve hours' weaving, spinning, drilling, turning, building, shovelling, stone-breaking as a manifestation of his life, as life? On the contrary,

life begins for him where these activities cease, at table, in the public house, in bed. The twelve hours' labour, on the other hand, have no meaning for him as weaving, spinning, drilling, etc. but as earnings, which bring him to the table, to the public house, into bed. If the silk-worm were to spin in order to continue its existence as a caterpillar, it would be a complete wage-worker (Brixel, 2024).

S. Sayers (2011) notes that alienation is therefore characterized firstly by the transformation of everything into a commodity and secondly by the conversion of human beings into objects that can appear as commodities on the market .Labour mediates between people and nature, but capitalist production means that the relationship between humanity and the natural world is dominated by private property, the exchange of commodities and the division of labour. Marx's descriptions of this process are extremely powerful indictments of the system. He recorded that, it is true that labor produces for the rich wonderful things but, for the worker it produces privation. It produces palaces but, for the worker, hovels. It produces beauty but, for the worker, deformity. It replaces labor by machines, but it throws one section of the workers back into barbarous types of labor and it turns the other section into a machine. It produces intelligence but for the worker, stupidity, cretinism (Musto, 2021).

KINDS OF ALIENATION

O. Christ (2015) recognizes that Marx differentiates between four different dimensions of alienated labor. The alienation of worker from the product of his labor, alienation from the activity itself, alienation from humanity as a species-being, and alienation from other individuals. In the upcoming sections, the four different dimensions of alienated labor are portrayed in brief.

ALIENATION FROM THE PRODUCT: Alienation begins in the act of production. Marx says that the product is after all but the summary of the activity of production. If then the product of labor is alienation, production itself must be active alienation, the alienation of activity, the activity of alienation. This fact expresses merely that the object which labor produces (labor's product) confronts it as something alien, as a power independent of the producer. Through the alienation of workers by the products of their labor, the laborer generates an alien, objectified world for himself and becomes internally impoverished (Silver, 2019). In order to survive, the worker must produce goods through the utilization of the property of others and thus reproduces a goods shaped-objectification of the world and his own (goods-shaped) objectivity. Instead of an appropriation of the product, alienation on the part of the worker follows as the product is objectified.

ALIENATION FROM ECONOMIC ACTIVITY: The second component for alienation to obtain is that production cannot be under the laborer's control. Capitalists and capital control the worker's productive life. Marx believes that, the more objects the worker produces the less he can possess and the more he falls under the sway of his product, capital (Allman, 2007). The worker does not get to exercise their intrinsic nature in work, but takes

orders from the alien forces of the market and their capitalist exploiter. The evidence Marx posits as proof of this aspect of alienation is that people avoid work like 'the plague' once they leave the workplace. If spontaneous work is the consummate fulfillment of human nature, people ought to revel in it; but by being denied the best parts of their human nature, they recoil from more labour. Since what is essentially human is now negated, people therefore only feel free and active in their animal functions and what is human becomes animal, leading to self-estrangement.

ALIENATION FROM SPECIES-BEING: The third aspect of alienation is that individuals are alienated from their species-being. In practice and in theory he adopts the species (his own as well as those of other things) as his object, this is only another way of expressing it. Also because he treats himself as the actual, living species; because he treats himself as a universal and therefore a free being. In capitalism, individuals no longer produce for their fellow species; this form of producing is foreign to them. One's only reason for producing now is to satisfy their individual need for subsistence. In abstract political economy, and in the real world, workers now work for themselves as individuals, and not for their fellow humans. "Free, conscious activity," as one's characteristic form of labour, is nonexistent; labor is coerced, and since it is performed in a perfunctory manner, it ceases to be "conscious activity (Byron, 2016)."

ALIENATION OF THE INDIVIDUAL FROM OTHER INDIVIDUALS: The fourth aspect of alienation is a direct corollary of the previous problems. If one is alienated from their species-being, they are consequently alienated from their fellow species, i.e., other humans. Marx points out that, if "that man's species nature is estranged (alienated) from him, then it necessarily follows that he is estranged from other men, as all men share the same essential nature. Marx sees alienated labor as a unique historical moment predicated upon specific social and material productive conditions. Alienated labor is not insurmountable, nor is it a necessary condition for social production. Historicists are right to point this out. Marx believes the act of producing one's product for one's fellow humans, of one's own free and conscious volition, is an objective measurement of the consummation of one's fulfilled life activity. If humans are a species-being, they can return to free production through class struggle.

ALIENATION OF LABOUR IN THE MODERN WORLD

Alienation of labour described by Marx in the 1840s, continues to be relevant today. The Industrial Revolution of the 19th century squeezed many handicraftsmen out of business and simultaneously forced them into unfulfilling factory jobs (McCraw, 1998).The unprecedented influx of people into the city and its resultant unemployment offered the capitalists the opportunity to "force wages down to starvation level and fix an extremely long working day of sixteen to eighteen hours for a wage of about nine shillings a week for adults. The working condition of workers was condemnable and poor. The problem persisted into the 20th and 21st centuries, particularly in low autonomy jobs. Today factors such as division of labour, and the displacement of certain skills contribute to alienation

despite the automation of manual labour. However, new technology also helps to de-alienate through the interactive nature of internet that produces new opportunities. Adibifar (2016) notes that despite this technological changes, the key factors causing alienation is not dissimilar to 1840s and can be traced back to the dehumanisation and commodification of work and workers by the capitalist. For this reason, the alienating and de-alienating aspects of technology in the 21st century are relevant but should be viewed within the social and economic context in which the technology operates.

In order to compete in today's markets, business owners seek to increase efficiency while cutting down cost through technological innovation such as artificial intelligence, robotics and other AI-related technologies. Today, most routine production work has been automated. Many information processing and basic transactional jobs such as cashing checks and taking calls have also undergone automation or outsourcing to countries with cheaper labour. This is a result of greater processing and connectivity capabilities of new technologies. Technology has displaced certain skills and created new ones. Employers also seek to increase efficiency through disintegration of the most highly paid jobs. This means, routine tasks are separated from the job and automated or reassigned to lower skilled staff, a practice used in healthcare, engineering and computer science, for example. The Mckinsey report points out there is a growing polarisation of opportunities in the labour market, with strong demand for both the highest (IT, engineering) and lowest-skill jobs (like food preparation, caregiving), but decreasing opportunities for those in-between. This is accompanied by a widening income gap. This growing inequality and division of labour is reminiscent of the factors identified by Marx as contributing to alienation.

Furthermore, the alarmists have argued that new technologies, such as the Artificial intelligence, robotics and other AI-related technologies, create novel forms of alienation (Natale & Ballatore, 2020). This includes estrangement from other people, our bodies, nature, and real life. KELLER JR (1977) argues that for Marx alienation equated to the estrangement of workers from their creative potential due to exploitation, whereas claims about novel alienation fail to give evidence of negative outcomes for users. For example, there is no solid proof of a correlation between time spent online, or gaming and degradation of social interaction. Similarly, the concept of alienation from our bodies fails to convince as computer mediated communication requires the involvement of our sensory organs, as well as, personal interaction. He further notes that such claims also downplay the democratizing information sharing capabilities new technologies offer (KELLER JR, 1977). For example, the interactive nature of Web2 helped to connect like-minded individuals and gave voice to those previously marginalized. In a work scenario, internet-mediated labour allowed some workers greater flexibility to adapt work to their lifestyle choices. It also presented new possibilities for obtaining skills and income. This shows that contemporary technology can also be de-alienating and empowering. Donepudi et al argue that there is no conclusive evidence that the emergence and development of AI could lead to widespread job loss or increased inequality.

The relationship between technology and alienation is still relevant today as it was 150 years ago. Alienation is the estrangement of individuals from work conceptualized by Marx against the backdrop of capitalism and industrialization that forced workers into exploitative, routine production jobs (Kellner, 2006). Modern scholars and researchers recognized alienation as more widespread across jobs with limited worker autonomy. Today, technology helped automate or outsource many manual or lower skilled jobs, but factors contributing to alienation remain. These include disintegration of skilled jobs, polarization of demand for skills and a widening income gap. If not addressed these issues could result in the deskilling and degradation of the workforce. However, technology also provided means for greater connectivity, flexibility and empowerment. A recent study confirmed that the factors contributing to alienation today are similar to those 150 years ago and linked to the commodification of workers by the capitalist system (Øversveen, 2022). Overall, the relationship between alienation and technology remains relevant in the 21st century. However, it is the social and economic context that determines the extent to which technology will alienate or de-alienate workers.

A PHILOSOPHICAL ANALYSIS OF MARX'S ALIENATION IN ARTIFICIAL INTELLIGENCE

Karl Marx's theory of alienation, developed during the 19th century industrial revolution, offers a profound critique of capitalist modes of production. Central to his thought is the idea that workers become estranged from their labor, the products they create, their own human essence, and each other. In our current era, characterized by rapid advancements in artificial intelligence (AI), these insights take on renewed significance. As AI systems reshape the structures of labor, decision-making, and social interaction, they raise urgent questions about autonomy, creativity, and human dignity.

The rise of AI has introduced a new paradigm in the world of work. Automation, predictive algorithms, and machine learning are not only transforming traditional jobs but also redefining what counts as labor. Gig work platforms, AI-assisted management tools, and robotic process automation create environments where workers have minimal control or understanding of the systems governing their activities. Here, alienation is intensified: workers may no longer relate to the output of their labor or even understand the processes by which decisions about their labor are made. The opacity of AI systems, often referred to as "black boxes," exacerbates this disconnection. In his book titled *Artificial Intelligence*, Peggy Thomas sees artificial intelligence as technological advancement that has dramatically permeated every aspect of our daily lives(Caradaica, 2020). He emphasized that smart machines are furiously taking over the chores that were previously done by humans. According to him, each year smart machines become more proficient at chores we used to do for ourselves, and people purchase the newest electronic AI gadgets in hopes of making lives easier (Caradaica, 2020). AI, as Klapperich et al say in their "Understanding and Designing Automation with Peoples' Well-being in Mind," has tremendously made life easier creating the avenue for man to pursue the more "important things in life." AI, in Sarewitz (2010) view, has continued to improve man's life; relieving him of exacting and

physically and mentally strenuous jobs. The success of AI, he posits, is felt in all professions especially medicines and public health. He writes:

> Perhaps the most striking measure of scientific and technological change can be seen in medicine and public health. At the beginning of the twentieth century, the average American life span was forty-seven years. By the end of the century the average life span was approaching eighty years, thanks to advances in medicine in - cluding the development of vaccines and antibiotics, the discovery of powerful diagnostic tools such as X-rays, the life-saving technology of cardiac and neonatal care, and improvements in nutrition and the control of infectious disease (Sarewitz, 2010).

While AI may have fascinating powers and potentials, people are practically unaware of the ways in which it affects them. As he said, "most people do not realize how much of their lives are affected by AI..." He also stated that "bypassing human-to-human interaction entirely has proven to have negative effects for businesses as well. Many people find computerized systems" both "annoying and even alienating." However, in his words, "the real success of AI is that most people are simply unaware of how significantly it affects and enables the routines of daily lives"Sarewitz (2010), notwithstanding, made no effort to address the social and moral concerns of AI that he raised. The wide application of AI shows a glimpse of what the future holds, thus, left unregulated, it could become the spirit that the sorcerer's apprentice invoked but can no longer control. He nevertheless concluded with the remark that for better or worse, how people choose to use the powers of AI is entirely up to them.

In support, Michael C. Harris in his book, *Artificial Intelligence*, avers that AI is changing our world in exciting and amazing ways. He upholds that AI has made man's life less laborous, better and indeed fascinating. According to him, computers and artificial intelligence have made just everything in our world move faster. He emphasized on the successes of AI in the fields of medicine, commerce and business, communication, entertainment, transportation, defense and security etc. He asserts that the evolution of artificial intelligence has helped cut cost for businesses but he ignores the effects this could have on jobs and the future of work. As he notes that hiring people to handle customer requests is too expensive, they fails to recognize that substituting humans with "either automated voice systems; the use of chatterbox or Interactive Voice Response Systems," could also lead to labor displacement. Semmler and Rose in their essay *Artificial Intelligence: Application Today and Implications Tomorrow,* describe artificial intelligence as a disruptive technology (Semmler & Rose, 2017). The duo maintain that the application of AI to the legal industry could have disruptive impacts on law firms. According to them, while AI could be time saving for legal firms who could work for less hours for more money, it is capable of displacing jobs while making certain position obsolete.

McKinsey Global Institute (MGI) report holds that AI is capable of performing more efficiently, complex tasks associated with human minds (Mckinsey et al., 2017). With its ability to make autonomous decision and learn from experience, AI has the potential to dramatically boost productivity growth. However, that may come at a greater income inequality. MGI reveals that there will be job loss following wide application of AI. The vulnerable are more vulnerable to income disparity that AI would bring. More routine jobs will be automated leading to job loss. Neilson and Rossiter in their work *Theses on Automation and Labour*, had argued that mechanization of labour renders workers as mere linkages of machines and thereby robbing them of the human qualities of living labour (Neilson & Rossiter, 2019). Machines made human labour routinely and monotonous and thus creating the opportunity for designing machines capable of emulating man. The creation of these dehumanized workers and enables capital owners to replace workers with machines not because machine learning or any other artificial intelligence share the human intelligence of living labour but because the latter has been reduced to a level that it can now be artificially emulated, with the implication that we now live in a world more stupid than ever.

Neilson and Rossiter further contends that the scientists' effort at developing AI capable of reasoning and replacing human labour is a futile venture since in the case of machine failure, there would be need for human ingenuity for its repair, thus, human labour remains a viable alternative to machines. According to them, despite the trend toward automating data infrastructure, the constitution outside of labour remains as an externality not yet entirely congruent with the calibrated logic of automation. No matter that micro-contracting platforms corrode the distinction between automating task and the font of human labour, ingenuity persists in the human capacity to beaver out the root cause of a problem in the event of machine failure. In the pursuit of technical agency on par the neural networks of the human brain, research and development in AI and machine learning has still to conquer this last frontier that makes human labour a viable proposition in regimes of capital accumulation (Neilson & Rossiter, 2019).

A computer specialist, Martin (2019) believes that the traditional expectation of artificial intelligence to duplicate human intelligence is vastly unrealistic. Although artificial intelligence is faster with much more memory capacity than humans, it is yet to be on a par with humans. He thinks that, with all its potentials, the future AI should more properly be called alien intelligence, because the way computers "think" is vastly different from the way a human thinks. In agreement to Martin, D. H. Kelly (2020) in his work *Artificial Intelligence: A Modern Myth*, emphatically argues that artificial intelligence cannot be equated to human intelligence for it lacks of intelligence and intentionality which is the hallmark of human intelligence. According to him, it amounts to a 'category mistake' to consider computers intelligent. They are simply not the kind of entities of which it is valid to predicate knowledge or understanding or thinking or intelligence. Computers are merely symbol-processors that lack basic understanding of the symbols they are processing. This, as John Searle illustrates with the Chinese Room, formal symbol manipulations do not, by

themselves, have intentionality or intelligence.

D. H. Kelly (2020) further argues that the behaviorist approach to the definition of AI as the part of Computer Science that is concerned with designing intelligent computer systems, that is, systems that exhibit the characteristics we associate with intelligence in human behavior which in Ryle's terminology is, systematically misleading. D. H. Kelly (2020) avers that AI suffers acute limitations when it comes to ratiocination. Thus, the infamous claim by researchers that, if a computer behaves intelligently then it is intelligent, is yet another smokescreen used by AI researchers to avoid serious analysis of what it actually means to think. A machine is an assemblage of moving parts, constructed for the purpose of transmitting motion or force, and of modifying, in various ways, the motion or force so transmitted. This concept is extended to computers and even computer software. However, Kelly defines machines as having: a specific function; an explicit design; deterministic operation; automacity and mediacy. He contrasts this to man, highlighting the fact that emotion is fundamental to the human condition, but is not instantiated. In summary, Kelly attempts to meticulously examine the claims, achievements and underlying philosophy of the proponents of AI, highlighting the limitations of each theory.

Alan Wolfe (1991) in his article, *Mind, Self, Society, and Computer: Artificial Intelligence and the Sociology of Mind*, writes that software approaches to AI avoid the problem of modeling the human brain, but because they require through and unambiguous instructions, they cannot model how human brains understand external reality. Hardware approaches to AI, such as parallel data-processing models, do attempt to mode the brain but only in engineering sense. In submitting procedures for meaning, they again fail to account for how human brains, let alone human mind, work. On the contrary, Sanz, Matía, and Galán (2000) rejects the position that AI aims to duplicate human intelligence. According to him, the pursuit for the complete human-like mind was never an objective in the field of intelligent control. Only some atomic human capabilities were sought to improve localized control systems performance. Frederick Kile (2013) similarly upholds that, AI aims to extend and augment the capacity and efficiency of mankind in tasks of remaking nature and governing the society through intelligent machines, with the final goal of realizing a society where people and machines coexist harmoniously together. Morgan R. Frank et al in posits that amidst contrasting opinion on the impact of AI, it has the potential to drastically change employment and the nature of work. While some are wary of its effects on jobs, others are of the firm believe that AI is capable of creating more jobs through "creative destruction. They however concluded that, AI has the potential to reshape skill demands, career opportunities, and the distribution of workers among industries and occupations in the United States and in other developed and developing countries. The resulting alterations to skill demands diffuse throughout the economy, influencing occupational skill requirements, career mobility, and societal well-being (e.g., impacts to workers' social identity) (Frank et al., 2019).

Marx emphasized that human beings find fulfillment through creative and purposeful

work. However, in an AI-dominated system, creativity is increasingly outsourced to algorithms. From automated journalism to AI-generated art and music, the role of the human creator is being diminished. This poses deep philosophical concerns about the erosion of human self-expression and the commodification of intellect. When algorithms are designed to simulate or replace creative acts, humans may become mere consumers or supervisors, rather than originators, of meaningful content.

CONCLUSION

Marx's theory of alienation, though conceived in the 19th century, offers a powerful and enduring framework for analyzing the social and ethical implications of artificial intelligence in contemporary society. As AI technologies become more deeply embedded in workplaces, governance, and everyday life, they risk intensifying the very forms of alienation Marx described: the estrangement of individuals from their labor, the commodification of human creativity, and the disintegration of meaningful social relations. In the context of AI, workers are increasingly alienated not only from the products they help create but also from the processes that define their roles. Automation and algorithmic management strip labor of its humanistic and relational qualities, turning tasks into fragmented, surveilled, and depersonalized operations. AI-driven decision-making systems, often opaque and unaccountable, further alienate individuals by removing their capacity for agency, critical judgment, and participation in shaping the outcomes that affect their lives (Emmanuel & Nweke, 2025).

Additionally, the development and deployment of AI are largely controlled by a small number of powerful corporations and states, leading to a concentration of technological and economic power. This reproduces and amplifies capitalist alienation on a global scale, where the benefits of AI are privatized while the risks and consequences are socialized. The result is a system where human labor is no longer the central force of production but a marginal, extractable input devalued, and replaceable. Philosophically, this trajectory challenges fundamental notions of what it means to be human in a technologically saturated world. Marx's vision of overcoming alienation through collective ownership, meaningful work, and social cooperation becomes increasingly urgent. To counter the alienating tendencies of AI, societies must rethink the goals of technological innovation: shifting from efficiency and profit toward equity, transparency, and human development. In conclusion, applying Karl Marx's theory of alienation to the realm of artificial intelligence reveals profound philosophical concerns about the evolving nature of human labor, agency, and identity in the digital age. As AI systems increasingly mediate, replace, or control human labor, individuals risk becoming further estranged from the products of their work, the process of production, and even their sense of purpose and creativity core elements of Marx's alienation. Workers are not only displaced but often reduced to mere data points or supervisors of algorithmic systems, intensifying the detachment Marx warned against. Moreover, AI development itself, driven by corporate interests rather than collective well-being, reproduces capitalist structures that prioritize efficiency and profit over human flourishing. A Marxian critique, therefore, invites urgent reflection on how AI

technologies are shaped and deployed, and challenges us to imagine alternative frameworks where technological advancement aligns with human emancipation rather than alienation. Without such critical engagement, the promise of AI may deepen existing inequalities and further dehumanize labor in the 21st century.

Ultimately, this research does not merely critique the present rather, it calls for transformation. It demands that we envision AI not as a tool for perpetuating capitalist domination, but as a potential instrument for collective emancipation. Achieving this requires democratizing technology, centering ethics in design, and reasserting the value of human labor and creativity in an age increasingly shaped by machines.

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