Artificial Intelligence (AI) and Ideology

Purpose

Artificial Intelligence (AI) is embedded with different aspects of social, economic, political, cultural, religious, and technological lives of individuals and their everyday ideological interactions. Ideology continues to be the core of technological innovations and transformations. Therefore, AI is not free from ideological engagements. The paper outlines eleven level of conceptual framework to locate ideological foundations of AI.

Design/methodology/approach

This is a conceptual paper which follows the critical methodological tradition of Critical Discourse Analysis (CDA), particularly focusing on the concept of ideological interdiscursivity as outlined in the works of Algam and Jameel (2025), to analyse, understand, conceptualise and explain the ideological foundations of AI.

Findings

Through this multi-dimensional analysis, the paper constructs an ideological foundation and conceptual linkage between AI and ideology, offering an eleven-level conceptual framework to critically understand the capitalist ideological undercurrents embedded within AI.

Originality

This paper argues that AI interacts with ideology under two broad categories: essentialist and emancipatory aspects of AI. The essentialist aspects of AI come from its use value based on everyday functionality and requirements, whereas the emancipatory aspect of AI comes from its potential for the progressive transformation of society and the empowerment of individuals. Under these two broad categories, this paper explores the interactions between AI and ideology across eleven distinct but interrelated conceptual levels: abstraction, belief, critique, domination, facilitation, identity, integration, interpretation, process, and power.

Research limitations/implications

The paper constructs an ideological foundation of AI to critically analyse and locate the capitalist ideological undercurrents embedded within contemporary AI systems. In terms of future research, the paper offers an eleven-level framework for understanding and analysing the interplay between AI and ideology across local, regional, national, and international contexts.

Practical implications

In terms of policy implications, practical applicability and relevance, this paper situates itself within the domain of AI governance, ethics and policymaking, with a focus on the ethical and rational use of AI for the greater social good.

Social implications

The essentialist and emancipatory dimensions of AI, along with its ideological foundations, are central not only to understanding the power structures and ideologies shaping AI's trajectory, but also to developing inclusive, people-centered AI policies that prioritise the well-being of humans, animals, and the planet. This calls for a vision of emancipatory and human-centered AI—an AI that truly serves humanity.

Keywords: AI, Ideology, Essence, Emancipation, Automation, Power, Everyday Lives.

Introduction

Artificial intelligence (AI) has infused every facet of life, spanning across society, states, governments, and businesses, thereby eliciting diverse interpretations and emotions from individuals. Its presence invokes both a sense of predictability and a fear of unpredictability regarding its impacts and consequences. The growth of AI into different aspects of everyday lives have led to the rise of various perspectives and expectations among people. These perspectives encompass innovation, efficiency, advancement, and all its functionalist aspects of streamline processes, improve decision-making, and enhance overall quality of life, economy, society and communication. However, there are also apprehensions about the unpredictable nature of AI led technological progress and its impacts on human lives and societies across the globe. It optimises everyday lives and economy enabling societies and different cultures interact with each other in seamless way. It personalises everyday human and machine interactions that helps to enhance responsive states, markets and governance by creating conditions for deepening of digital democracy (Nayak and Walton, 2024).

In this context, the paper presents a distinctive eleven-part interrelated conceptual framework to examine the essentialist ideological foundations of AI, which tend to undermine the emancipatory potential of AI-driven technological knowledge and skills. Given the pervasiveness of AI in everyday human interactions with technology, it is crucial to understand, analyse, and conceptualise the capitalist ideological narratives embedded within AI. This is essential for building alternative conceptual foundations aimed at technologically empowering people and advancing their collective interests. The paper argues that the operational framework of AI, rooted in capitalist ideology, restricts the transformative and emancipatory

possibilities of AI-based knowledge traditions, ultimately impeding the development of human-centered AI.

This paper argues that AI interacts with ideology under two broad categories: essentialist and emancipatory aspects of AI. The essentialist aspects of AI come from its use value based on everyday functionality and requirements, whereas the emancipatory aspect of AI comes from its potential for the progressive transformation of society and the empowerment of individuals. Under these two broad categories, this article explores the interactions between AI and ideology across eleven distinct but interrelated conceptual levels: abstraction, belief, critique, domination, facilitation, identity, integration, interpretation, process, and power. Through this multi-dimensional analysis, the article constructs an ideological foundation and conceptual linkage between AI and ideology, offering an eleven-level conceptual framework to critically understand the capitalist ideological undercurrents embedded within AI. Artificial intelligence and ideology interact in eleven distinct ways, which are summarised in the table-1 below.

Table: 1 AI and Ideology Framework

AI and ideology	**Features**
AI as Abstraction	Technological abstraction, led by data inputs and models in AI-driven automation, functions as a form of mute algorithmic compulsion shaped by the owners' desires.
AI as Belief	Reproduce and digitalise biases embedded in existing religious, cultural, social, and political systems through data inputs and language models.
AI as Critique	Human-Centred AI (HCAI).
AI as Domination	AI led technological and digital supremacy
AI as Facilitator	AI-led technologies can facilitate both essentialist and emancipatory human desires and needs.
AI as Integration	Interconnectivity, command, control and communication.
AI as Interaction	Data driven interaction, and decision making.
AI as Interpretation	Process of analysing and understanding the meaning of data
AI as Identity	Technological and digital identity.
AI as Process	Taylorisation of work and programmable worker.
AI as Power	power of surveillance and control

These ideological foundations of AI penetrate into different spheres of life and raise ethical, social, and economic concerns. The fundamental questions arise around automation led job loss, rise of inequality, loss of privacy, and the potential for algorithmic biases to perpetuate discrimination. The prospect of AI surpassing human intelligence raises existential questions about the nature of consciousness, autonomy, and control in a world increasingly reliant on machines. These questions are not ideologically independent because they are shaped by social, economic, political, cultural, and technological conditions, even within the complex world of artificial intelligence (AI). Therefore, it is important to outline the ideological foundations of AI to address these questions. AI, as a product of human labour and natural resources, continues to evolve through human labour and its interactions with natural resources. Hence, it is neither artificial nor more intelligent than its producers (Crawford, 2021:8). AI is also "a manifestation of highly organised capital backed by vast systems of extraction and logistics, with supply chains that wrap around the entire planet" (Crawford, 2021: 18). It is important to identify the role of organised capital, as well as their systematic motivations and material and non-material relationships with individuals and societies, to better understand both the essentialist and emancipatory ideological foundations of AI from a historical perspective.

Historical Overview on AI and Ideology

Ideologies are not merely collections of interrelated thoughts and ideas; they also create processes and institutional structures that define, evaluate, prescribe, promote, organize, and mobilise people for collective action aimed at the social, political, economic, and cultural transformation of individuals, societies, states, and governments (Dumoulin, 2021; Anderson, 2024). Ideology possesses a normative, relativist, moral, and activist character (Gani, 2016),

providing narratives and offering alternative understandings of various social, political, and technological developments throughout different stages of human experience and societal evolution. These narratives form the basis for programs and organisations committed to specific ideas and modes of struggle (Cranston, 1979) directed toward social, political, and economic transformation. Historical reflections on AI and ideology reveal that AI, as a philosophical ideology (Anderson, 2024) of technology led social and economic progress which organises and transforms nearly every aspect of social, political, economic, and cultural life across the globe.

Historically, AI emerged from the military-industrial complex with the aim of protecting the defence and commercial interests of the United States (Berman, 1992). The ideological, technological and operational architecture of surveillance capitalism (Zuboff, 2019, 2015) is not an accidental outcome but a historically embedded inherent objective within the development of AI. This essentialist character of AI persists in various forms today, where platform companies shape the nature and trajectory of the AI-led technological revolution—often under the guise of rationalising work and improving efficiency to accelerate productivity and maximise profit. Nayak and Walton (2024) provide a comprehensive account of AI's history, tracing its ideological foundations and recent developments, including the rise of what many now describe as the "technofeudalism" of generative AI. This trend is contributing to the emergence of "neurocapitalism" (Stiefenhofer, 2025; Salerno, 2025), in which the human mind becomes increasingly dependent on—and compliant with—technology. Such developments align with the ideological imperatives of contemporary data-driven capitalism (Saura, 2024). Therefore, it is crucial to understand the historical and ideological trajectories of AI in order to critically assess its current and future impacts with clear conceptual and methodological narrative.

Methodological Outlook to Study AI and Ideology

This is a conceptual paper which follows the critical methodological tradition of Critical Discourse Analysis (CDA), particularly focusing on the concept of ideological interdiscursivity as outlined in the works of Algam and Jameel (2025), to analyse, understand, conceptualise and explain the ideological foundations of AI. CDA facilitates an exploration of how language constructs and reinforces power relations and ideologies. Specifically, this research draws on the concept of ideological interdiscursivity to examine how multiple discourses—scientific, corporate, and political, among others—intersect in artificially constructed texts. While these texts may initially appear smooth and neutral in tone, they often conceal ideological practices that legitimize certain worldviews while marginalizing others (Wodak & Meyer, 2016; Fairclough et al., 2011, as cited in Algam and Jameel, 2025: 321).

The texts and discourses were selected using the CABS and ABCD journal guides and interpreted through a critical lens of class analysis of AI and ideology. This analysis employed Critical Discourse Analysis (CDA), which "helps to examine linguistic strategies that naturalize power asymmetries in AI-generated content" (Böyük, 2025: 369). Thus, this paper employs CDA to analyse, explain, and conceptualize the ideological foundations of AI and its essentialist alignment with capitalist traditions. These traditions marginalise individuals on the fringes of the digital divide while simultaneously exploiting technologically skilled individuals. The data-driven, algorithmic, generative language of AI, along with its underlying ideology, aims to encompass all and integrate people into a framework that reinforces the ideological foundations of capitalism—often at the expense of the emancipatory potential of technological knowledge. For instance, many individuals uncritically accept information circulated on social media and WhatsApp groups, often failing to distinguish fraudulent propaganda from truth. This highlights the urgent need for digital literacy and broader access

to technological knowledge and skills, which are essential to counter the regressive effects of post-truth ideologies amplified by the data biases inherent in AI systems embedded with capitalism and its ideology (Crawford, 2021).

AI and Ideology

Ideology is "a representation of the imaginary relationship of individuals to their real conditions of existence" (Althusser, 2001:109). The material foundations of life in the real world are shaped by technological developments driven by machines. The ideological apparatus of capitalism "possesses in the machine system an entirely objective organization of production, which confronts the worker as a pre-existing material condition of production" (Marx, 1977:508). This system is "embodied and material, made from natural resources, fuel, human labour, infrastructures, logistics, histories, and classifications" led by AI (Crawford, 2021:8). Therefore, AI, in both its imaginary and real-world forms, is neither free from subjective ideological conditions nor from capitalism.

The AI led mechanisation and rationalisation of work is a way of controlling the processes of production, consumption, distribution and labour power concomitant with the requirements of capitalism. However, AI as an ideology normalises its social necessity and naturalises its existence by metaphors like ‘the brain is like a computer’ to facilitate human life. (Berman, 1992). ‘An intelligent computer can do anything a human mind can do” (ibid: 111). The development of intelligent machines driven by AI undermines the value of the human mind while presenting itself as essential for organising work and society. This operational ethos, grounded in the ideological principles of efficiency and productivity, continues to be a driving force behind the AI revolution.

Essentialist Ideological Foundation of AI

Historically, American military and commercial interests laid the essentialist groundwork for the emergence of AI during the 1980s. Major platform companies had their AI projects based at the Industrial Relations Center of the California Institute of Technology (Clavin, 2025). The AI project was further accelerated by funding from the Pentagon and the U.S. Department of Defence. The military-industrial complex and commercial capitalism funded research on technological automation, robotics and AI for its performative usefulness (Berman, 1992). The performative aspect of AI establishes its essentialist foundations by enhancing the efficiency and productive power of machine-led labour (chatbots, efficiency tools, operations, coordination, management, customer service, etc.). This functionalist nature of AI contributes to its expansion across various sectors of the economy and human life. AI-led automation and its efficiency align with the productivist ideology of capitalism, which is accelerating the "commodification of life and the environment" (Fumagalli, 2024: 44).

The AI-led platform economy has further intensified the commodification of interpersonal relationships, driven by its narrow essentialist and utilitarian outlook. Automated essentialism has reduced human identity to mere numbers, eroding cultural and social constructs within its object recognition software and databases like ImageNet, where an image defines a person's essence (Scheuerman et al., 2021a; Luccioni and Crawford, 2024). This reductionist auto-essentialism has its roots within colonial project (Scheuerman et. Al, 202b) which is propagated by the AI regime without considering its broader social, economic and cultural ramifications.

The AI led capitalist productivist ideology shapes technological transformation where human progress means increasing productivity in terms of profit. The logic of accumulation based on surplus value drives AI (Crawford, 2021) as an instrument of production, consumption and distribution. Data commodity and capital only accelerates such a transformation where "the contemporary AI proletariat is similarly a commodity valued only for its ability to produce capital as data" (ibid:8).

Essentialism in terms of human needs and desires is different from essentialism in terms of utilitarian reductionism; these should be separated ideologically within the AI regime. AI encompasses both forms of essentialism. Its use in medical and space research exemplifies how AI can fulfil everyday human needs and desires, which should be celebrated and expanded. However, the use of AI for data gathering, storage, and managing human beings and nature merely as numbers needs to be reevaluated beyond the logic of capital and requirements of capitalism. Historically, the essentialist ideological foundation of AI led to hegemonic transformations in all aspects of human life in terms of Taylorisation, mechanisation, routinisation and rationalisation, aiming to contain labour and limit radical alternatives to capitalism (Berman, 1992).

The rational organisation and scientific management of individuals, societies, states, governments, and resources in the processes of production, distribution, and consumption of commodities and services continue to be the driving force behind AI. These essentialists ideological foundations of AI continue to exist and shapes further developments in AI for the growth and reconstitution of capitalism, where AI is replacing human labour and increasing workplace efficiency (Henriksen and Blond, 2023: 740). The valorisation of data capital and vulgarisation of labour are the twin outcomes of material conditions shaped by the growth of

AI and its ideology, where productivity, pauperisation and dehumanisation move together within the regime of data algorithms. Historically, such conditions of marginalisation and precarity of gig economy have produced opportunities for emancipatory struggles.

Emancipatory Ideological Potential of AI

The emancipatory ideology promotes conditions for "the process through which individuals and groups become freed from repressive social and ideological conditions, in particular those that place socially unnecessary restrictions upon the development and articulation of human consciousness" (Alvesson and Willmott, 1992: 432). The progressive disruptive potentials of AI shows that it can "increase human understanding and emancipate people from undesirable social and physical constraints, distorted communication and misapplied power" (Lyytinen and Klein, 1985: 207) led by AI and its technological determinism. The critical AI studies and information systems (IS) research "opposes technological determinism and instrumental rationality underlying IS development and seeks emancipation from unrecognised forms of domination and control enabled or supported by information systems" (Cecez-Kecmanovic, 2005:19).

There are attempts to bypass the corporate techno-feudal character of AI in terms of corporate dominance and ownership through decentralization (Zarkadakis, 2022). The potential growth of democratic and decentralized Data Unions and Data Trusts, governed by the people whose data is stored, managed, and used via Decentralized Autonomous Organizations (DAOs), could promote greater transparency and advance digital democracy (Zarkadakis, 2020). These emancipatory ideals related to AI need to be streamlined and communicated to the public to raise collective technological consciousness for digital democracy, where AI serves human

needs and autonomy across personal, professional, political, social, cultural, and economic spheres, rather than being a tool of surveillance capitalism. The democratisation, availability, accessibility and collective ownership of AI-driven technology can transform the dominance of techno-feudalism and liberate people from the drudgery of working with technology merely to survive in their everyday lives.

AI as Abstraction

Artificial intelligence (AI), in its simplest form, is intelligence performed by machines, especially computers. It is a technology that enables computers and machines to simulate human intelligence and problem-solving capabilities. The projected evolution of AI has been broken down into three stages: weak or narrow artificial intelligence (ANI), general artificial intelligence or strong AI (AGI) and artificial superintelligence (ASI). Weak, narrow artificial intelligence (ANI) exists where intelligent machines are designed to perform a specific task or range of tasks. However, at this stage, AI doesn't posses understanding or consciousness but follows pre-programmed rules or learns patterns from data. This is the current stage of AI as we know it today and it is used in various applications such as face, speech and image recognition, natural language processing (NLP) and recommendations systems etc. Strong, general artificial intelligence (AGI) exists where intelligent machines are indistinguishable from the human mind. However, similar to a child, the artificial intelligence machine would still need to learn through inputs and experiences to develop its abilities. Artificial superintelligence (ASI) is the third stage, and it will be reached when machines possess intelligence which surpasses human beings (Nayak and Walton, 2024).

Artificial intelligence is growing exponentially (Kurzweil, 2001; Azhar, 2021) and this has been supercharged by new technological breakthroughs such as the transformer learning

architecture (Vaswani *et al.,* 20017) that underpins generative artificial intelligence. This has been the driver behind Open AIs ChatGPT (Chat Generative Pre-Trained Transformer) – `Chat` referring to chatbot. This became the world's fastest growing application of all time in 2023, generating 100 million users in 2 months (Hu, 2023). It is not possible to accurately predict when the next stage of AI will be reached although based on the existing growth trajectory, artificial generative intelligence could be achieved within 5 – 10 years (Kurzweil, 2024).

Until very recently, AI had failed to be recognised as an essentialist or emancipatory ideology for two reasons: (1) AI was considered by many to be a problem looking for a solution (2) it had failed to deliver reliable and tangible results. For example, artificial intelligence is a radical technology-push innovation where R&D drives the development of new applications (Hotte, 2023) rather than being an expressed need by citizens for an application to solve an identified problem (demand-pull). Meanwhile, it has taken more than three quarters of a century for AI to move from its initial concept stage to its current level of development (Nayak and Walton, 2024).

In these new developments, the process of technological abstraction in AI-driven automation functions as a form of mute compulsion, reproducing existing forms of social abstraction that fetishise wage labour to sustain the exploitative nature of capitalism—now embedded within the neural networks of digital platforms led by AI and controlled by their owners. This technologically mediated mute compulsion, a historical feature of capitalism, continues to persist and replicate new formations of exploitation, inequality, and domination under technologically advanced, AI-led various forms of capitalism (Hunter, 2025). In this context, AI as a form of abstraction undermines the emancipatory potential of knowledge traditions,

aligning itself instead with the everyday logic of capital—often at the expense of working people.

However, the "objective abstraction" (Adorno, 1969:148) embedded in AI-driven platforms is neither natural nor a reflection of the limits of human cognitive abstraction. Rather, it represents an abstraction error inherent in the everyday technological operations of AI, designed to sustain capitalist exchange relations (Hunter, 2025). Within the context of digital and platform capitalism, this abstraction reproduces various forms of marginalisation that affect the social and economic lives of working people in their daily existence. To overcome this inherent crisis, technology functions in a way that constructs AI as a belief system—one that is relational and subjective, grounded in beliefs of the strengths and limits of data and algorithms which undermines emancipatory material conditions.

AI as Belief

Artificial intelligence challenges and reproduces a range of beliefs established over decades, centuries and even millennia. From a Christian and religious perspective, the substitution of humans with humanoid and software robots raises ethical concerns regarding the origins of mankind where humans were created by God. God created humans so that they could think naturally and feel and make choices for themselves. Automating a wide range of work carried out by blue-collar and white-collar workers also undermines the protestant work ethic (Weber, 2012). However, Islam accepts all forms of technological progress including artificial intelligence although it must be used widely regarding its impact upon human life. Furthermore, according to Muslims who believe in the Koran, learning to develop science and technology is an attribute of their faith.

AI is also introducing a new ideology and paradigm regarding how organisations should be run and how they should compete. This challenges beliefs and ideologies from earlier periods such as the first and second industrial revolutions. This requires paradigm shifts in beliefs about the nature of the firm, the factors production and the need for ongoing innovation (Iansiti and Lakhani, 2020). AI also has its own belief system and can be understood as a machine that supports the formation and valuation of beliefs. When training large language models through reinforcement learning, the algorithms need to know what is right or what is wrong when solving problems which carry certain rewards. This process has the potential to introduce human bias. Human belief systems vary broadly due to cultural differences, so this can create conflicting belief systems that become incompatible over time and result in conflict. These biases could also be introduced intentionally by malevolent actors to exploit a system or cause harm to others (Vestrucci, 2021).

Finally, beliefs are at the route of the acceptance or rejection of AI. There are both utopian and dystopian views of AI as a technology with many stakeholders occupying different positions along this continuum (Naude, 2021). Some stakeholders fear that they may miss out on the essentialist and emancipatory benefits of AI whilst others can only see the risks to employment, privacy and the potential for "big brother" surveillance (Orwell, 2021). Like capitalism, AI operates as a belief system under various forms of digital capitalism (Murphy and Largacha-Martinez, 2024). This ideological apparatus of belief sustains AI-driven capitalism, allowing it to persist despite its inherent limitations**.**

AI as Critique

Traditional AI has been criticised partly due to the approach taken towards its development and adoption. The traditional AI process has involved a "technology push" rather than a "demand pull" approach (Hotte, 2023) with AI technologies being enforced in a top-down manner giving rise to fears of a dystopian future thereby raising questions as to whether the technology is simply a problem looking for a solution. Traditional AI has also tended to focus on task automation to improve efficiency and productivity in firms.

However, an alternative approach to AI has emerged known as Human-Centred AI (HCAI). This refers to the development of artificial intelligence technologies that prioritise human needs, values and capabilities at the design stage. This creates AI that enhances human abilities and well being rather than replacing or diminishing human roles (Carrico, 2018). With HCAI, development teams involve users in the design process to create solutions to real world needs. This also adopts an ethical perspective that addresses transparency, fairness, privacy and accountability by removing biases (Van Berkel *et al.,* 2022). The HCAI systems also adapt and learn from human behaviours and are context-aware with a holistic understanding of human-AI interaction (Ryan, 2025). HCAI is based on seven fundamental principles. These include empathy and understanding of the user, ethical considerations and bias mitigation, user involvement in the design process, accessibility and inclusivity, transparency and explainability, continuous feedback and improvement plus a balance between automation and human control.

Two ways of critiquing AI are that the technology *per se* should not be seen as a threat. However, how it might be used is where the dangers really exist. For example, the dual use of AI in commercial and military scenarios are potentially threatening. The use of AI to prioritise national security and nationalistic power plus the goal of profit maximisation by powerful

companies, need to be considered and how these behaviours might off-set any essentialist and emancipatory benefits that would flow from its application (Carrico, 2018). If AI implementation is to gain full acceptance and succeed over the long-term, a human centred AI (HCAI) approach must not be ignored in order to deepen the emancipatory technological knowledge traditions.

AI as Domination

Artificial intelligence is a general-purpose technology GPT) (Bresnahan and Trajtenberg, 1995) so corporations and countries that are successful in launching and utilising AI will wield significant levels of power (Nayak and Walton, 2024). There are already signs of large corporations and nation states positioning themselves to achieve dominance in AI technology. To succeed in AI and train and develop large language models, companies require access to large amounts of data, high computing power (compute), hardware (AI computer chips) and large language models. The companies that possess all of these resources in abundance are the large technology platforms, including Microsoft, Google and Amazon in North America and to a lesser extent, Alibaba, Tencent and Baidu in China.

These companies already have vast troves of data because they are platforms. They have large data centres and cloud computing businesses; they have their own LLMs or have formed partnerships with start-ups developing LLMs such as Microsoft and Open AI and Google and Anthropic etc. The North American Platforms have also developed their own AI chips as well as having access to Nvidia's most advanced AI microprocessors. They are the world's most profitable and valuable companies with large amounts of capital to spend on AI model development (Nayak and Walton, 2024).

The major superpowers are also competing to achieve AI digital supremacy. This has led to significant geopolitical developments and rivalry between China and the US. In order to stymie China's progress in AI, the US - under former President Donald Trump and current President Joe Biden - have banned the export of high-end microprocessors (needed to train AI models) and the equipment used to make them. This makes it extremely difficult for China to build and develop its own large language models to compete with the US companies. America also passed the Chips and Science Act in 2022 which was designed to bring semiconductor manufacturing back to the US and reduce America's dependence upon Asian chip manufacturers in Taiwan (TSMC) and South Korea (Samsung). This particularly applied to TSMC which makes over 90% of the world's most advanced chips including Nvidia's GPUs – the leading AI microprocessor. These developments gave rise to the "chip wars" and a fight for the world's most critical technology (Miller, 2023).

AI dominates both technologically skilled and unskilled labourer as part of its abstractive nature and character of its operational and abstract error which reproduces different forms of existing exploitative and unequal structures and processes (Hunter, 2025). The dismantling the apparatus of AI domination is central to uphold emancipatory power of technological skills and critical knowledge traditions. (Aradau and Bunz, 2022).

AI as Facilitator

One of the core benefits of AI at its current stage of development (narrow AI) is its role as a facilitator from both an essentialist and emancipatory perspective (Kane *et al.,* 2021). AI provides a range of innovative tools that facilitate collaboration. These include consumer facing

virtual assistants and chatbots that can organise users personal and work diaries and connect data across different apps and devices. Apple, Google and Microsoft are currently embedding AI into all aspects of their technology ecosystems in order to help schedule meetings, take minutes and keep track of important information requiring further action. The AI-powered virtual assistants can also provide real-time analysis and insights into group dynamics and assist in identifying areas where team performance can be improved. Furthermore, AI is changing the way managers approach decision-making by using predictive analytics and machine learning algorithms to make more informed decisions based on data and trends, rather than relying on intuition and heuristics (Moulaei *et al.,* 2024).

Meanwhile, in the enterprise sector and in Industry 4.0, the ability of cyber-physical systems to physically support humans by conducting a range of tasks that are unpleasant, too exhausting or unsafe for human workers has evolved rapidly in high technology companies. This includes the use of collaborative robots (co-bots) that enable workers to be redeployed to undertake more cognitive roles within the company. Moreover, cyber-physical systems are able to make decisions on their own and to perform their tasks autonomously with minimal human intervention.

It can also be gleaned from the above examples that once the artificial general intelligence stage is reached, human facilitation will be superseded by the elimination of humans and their ultimate displacement (Sorrell, 2022). Finally, generative AI has been a transformative facilitator within companies by providing a range of invaluable benefits such as automating creative content generation, helping to personalise customer interactions (often using different languages), optimising product designs, strengthening cyber security protection, streamlining

business processes, enhancing research and data analysis capabilities and improving customer service etc. (Moulaei *et al.,* 2024).

In this way, AI continues to facilitate various forms of digital and platform capitalism, along with its all-encompassing, market-driven mass consumer culture—while simultaneously marginalising workers (Engster & Moore, 2020). To gain mass acceptance and greater legitimacy, both the essentialist and emancipatory dimensions of AI-driven knowledge traditions must be directed toward human empowerment, the deepening of digital democracy, and the advancement of citizenship rights.

AI as Integration

Integration is at the core of AI success. Connected homes, connected cars, connected offices and factories and connected people are only possible through Application Progamming Interfaces (APIs) and AI. This process of integration has accelerated following the launch of generative AI and ChatGPT in 2022. The next stage of integration involves the embedding of AI into software and hardware products such as apps, personal computers and smart phones. The major technology platforms such as Microsoft, Apple and Google are embedding AI into all their software and hardware products and they have developed small language models to run these AI applications on smart phones. This will localise data on handsets and remove the need to transfer data to the cloud, except for back-up purposes. This is known as edge or “fog” computing rather than cloud computing. This also enhances data security and privacy (Yousefpour *et al.,* 2019).

AI integration is also playing an important role in the enterprise sector through Industry 4.0. Industry 4.0 refers to the Fourth Industrial Revolution or the second machine age (Brynjolfsson and McAfee, 2016). This involves automation and data exchange in manufacturing technologies and processes which include cyber-physical systems (CPS), the Internet-of-Things (IoT), the Industrial Internet of Things (IIoT), cloud computing and cognitive computing. The catalyst that makes it all happen through integration is artificial intelligence (AI). This is the essence of smart manufacturing and smart factories (Qi and Tao, 2019).

It is through AI integration that essentialist and emancipatory benefits are achieved. In the consumer sphere of AI. Use value is enhanced by digital assistants that can organise business and home life through data integration across devices by drawing on the users digital footprint. This also has the potential to empower individuals with additional knowledge and therefore emancipatory benefits. However, many stakeholders may view this as an intrusion of privacy and a security threat. In the enterprise sphere, AI will improve industry efficiency and productivity and create greater overall wealth and standards of living. It will achieve this by automating – removing - low skilled work and replacing it with more cognitive roles for the workforce through upskilling. However, some stakeholders will view this as an intermediary stage that finally leads to full automation and job removal (Kane *et al.,* 2021).

However, AI has successfully integrated and enabled digital capitalism across all aspects of life, embedding capitalist ideology into the everyday experiences of working people (Moore, 2020). The pervasiveness of capitalist propaganda surrounding AI reveals its ideological commitment to profit over people, raising fundamental questions about the viability of capitalism's future (Alakbarov, 2021). This situation underscores the need for a new system beyond capitalism—one in which AI does not merely integrate people into existing structures

but actively empowers the working masses and facilitates greater human interaction for a shared global prosperity.

AI as Interaction

Interaction with AI is already commonplace in the everyday lives of global citizens. A broad range of interactions include those that occur using smart assistants, through customer relationship management (CRM), satellite navigation and travel, security and surveillance, recommendations systems on e-commerce platforms, healthcare and medical apps and smart watches, smart home devices (doorbells, thermostats and speakers), banking and finance and social media and communication etc.

However, where earlier AI systems were designed to process data and make decisions based on pre-defined rules and algorithms, a newer sub-set of AI has now emerged referred to as interactive AI or conversational AI. Interactive AI refers to artificial intelligence systems that can engage in two-way communication with users, allowing for real time interaction and personalised responses. These systems are designed to understand and respond to user input thereby creating a dynamic and engaging experience. Conversational AI deploys an interactive chatbot. Although these are not new, the most recent conversational agents are powered by large multi-modal language models and have become more human-like. The way these computer programmes simulate human conversation with an end user using NLP to understand user questions and automate responses are so effective that users are starting to view them as companions rather than mere assistants (Hussain *et al.,* 2019).

These AI-driven assistants can simulate human-like conversations, making them feel more natural and intuitive and can express empathy and provide emotional support, thereby reshaping how we engage with technology on a social level (Guingrich and Graziano, 2024). As these conversation agents develop further this is likely to significantly increase the level of human interaction with AI and the ecosystems that underpin it. According to Gartner, by 2025, 50% of knowledge workers will use AI virtual assistants daily for tasks ranging from data analysis to content creation (Plummer *et al.,* 2023). A survey by PwC revealed that 72% of business executives consider AI virtual assistants as essential for their company's competitiveness (PwC, 2018).

Through interactions ranging from market competition to everyday social relations and economic assemblages, AI not only reproduces the routines of daily life but also facilitates capitalist mediation, contributing to various forms of capital accumulation that are essential for the survival and expansion of capitalism (Fox, 2024).

AI as Interpretation

Interpretation in AI is the process of analysing and understanding the meaning of data in order to draw conclusions from it and ultimately make decisions. AI-powered text analytics involves using Natural Lanaguage Processing (NLP) to work through huge volumes of text data and extract deep qualitative insights that can be used to make business decisions. Meanwhile, computer vision enables computers and systems to interpret and analyse visual data and derive meaningful information from digital images, videos and other visual inputs.

However, since AI systems are trained using human generated data, largely scraped from the world wide web, they are vulnerable to bias from the source material and the proliferation of misinformation. This can result in stereotyping or poorly represented cultural contexts. Overcoming such problems requires careful data selection and model training to ensure linguistic accuracy plus the absence of bias and cultural sensitivity. This involves a rigorous process of curating and vetting data and the continuous monitoring and updating of AI models to keep pace with evolving changes. This is both a technical necessity and a moral imperative (John-Matthews, 2022).

Moreover, the supply of quality data from the Internet is now running low. It has been forecast that quality Internet data could run out by 2026 (Xu, 2022). This data depletion is forcing companies to find new sources of data, even synthetic data. Synthetic data is created by Generative AI models trained on real world data samples. When they have been trained, it is possible for the Generator to produce statistically identical synthetic data. A drawback of this approach from an interpretation and decision-making perspective is that it doesn't always relate well to the real world. This means that the synthetic data does not generalise effectively due to the disparities between the synthetic and actual data. Where there is insufficient training data, biases in the data and/or incorrect assumptions are also made by the model, this may lead to incorrect or misleading results known as "hallucinations". Hallucination rates vary based on the models used. For example, Open AI's models had the lowest rate at 3% whereas Meta's score was approximately 5% but Google's was as high as 27% (Metz, 2023).

Finally, the power of AI to accurately interpret data and avoid hallucinations is currently being constrained by AI's lack of consciousness and the ability for humanoid and software robots to think for themselves. However, as advances are made in the development of AI applications,

this is likely to change in Stages 2 and 3 of AI development at the artificial general intelligence and superintelligence stages. This is when human displacement and disruption will increase exponentially and where AI models and robots will be capable of experiencing self-awareness, subjective experiences, emotional understanding and real decision-making capabilities (Haikonen, 2020).

AI as Identity

Using search engines, ecommerce and social media platforms; citizens globally have contributed to a digital footprint of themselves thereby providing insights into specific preferences, habits, interests, behaviours and beliefs that serve as an individual's identity. This identity is not only used by companies wanting to sell legitimate products and services but also by "bad actors"- often from the dark web – who perform identity theft or scam innocent users into revealing banking details and other confidential information. The use of AI technologies by criminals has meant that these activities have become increasingly sophisticated. The use of deep fakes to mimic individuals has become commonplace through the extraction of voice and image data from peoples' digital footprints (Mir *et al.,* 2022).

Meanwhile, generative AI companies that scrape the Internet to gather data to train large language models, have been accused of theft and copywrite abuse. The use of creative works and intellectual property such as songs, art, videos, research reports and journalistic articles, without citing the sources of these materials, obscures the identities of the creators. Over time, large language models will be able to recreate intellectual and artistic works thereby removing individual identities altogether (Epstein and Hertzmann, 2023).

Moreover, as machines substitute humans as decision-makers, accountability for bad decisions are longer attributable to an individual identity but an algorithm instead. This illustrates the dangers of algorithmic management where machines undertake recruitment and hiring and firing activities in organisations. Not knowing who the true originators of creative or academic work are or whose decision delivered which results also has financial implications. Automation and the removal of human identities also dehumanises the nature of work (Jarrah *et al.,* 2021). The loss of identity also makes users more gullible to misinformation including cyberthreats from social engineering and ransomware attacks etc.

AI as Process

Each industrial revolution in history has been driven by a new technological paradigm and ideology regarding how firms should compete. This is what Berman (1992) referred to as the ideology of capitalist reconstruction. The first and second industrial revolutions were the result of new technologies such as the steam engine and electricity that gave rise to the factory system, the moving assembly line, mass production and scientific management or Taylorism (Wagner-Tsukamotoo, 2007). The capitalist ideology during the industrial era was to lower unit costs through high economies of scale and enhanced efficiencies from a narrow division of labour using land, labour and capital as the main factors of production. This resulted in workers being turned into semi-programmable robots according to Gary Hamel (Hamel and Breen, 2007; Grant, 2008).

During the third industrial revolution, a new technological paradigm and ideology emerged regarding how firms should compete. This was driven by technologies such as ICT, main frame computers and personal computers, microprocessors, the Internet and the worldwide web,

digitisation and smart phones and apps etc. The new factories of this era were the platform companies, and the factors of production were no longer land, labour and capital but data. Meanwhile, innovation and big data analytics replaced economies of scale and mass production as the new capitalist ideology.

However, the world is now embarking upon a fourth industrial revolution or second machine age (Brynjolfsson and McAfee, 2016). The fourth industrial revolution – which some observers regard as an extension of the third industrial revolution – builds on the technological infrastructure created during the third industrial revolution. It has also benefited from the falling costs of computer power, computer storage and bandwidth (Deloitte Centre for the Edge, 2013). This made it affordable for the large technology companies (platforms) to develop large language models (LLMs). AIs factor of production is therefore data and computing power and economies of scale in both are critical.

The goals and aims of the companies developing AI are no different to those of the earlier industrial era firms, namely achieving enhanced productivity and profitability through the automation of work. However, unlike the industrial era, where labour in factories and supply chains were turned into self-programmable robots (Hamel and Breen, 2006), the workforces in the AI era will be replaced by fully programmable and eventually self-programmable humanoid and software robots. Another key difference will be the inclusion of white collar as well as blue collar workers in the automation and displacement process. The ideology of capitalist reconstruction in the AI era might therefore be characterised using Schumpeter's (1942) "gale of creative destruction".

AI and Power

Domination of a general-purpose technology such as AI will endow an incumbent firm, country or leader with significant power and control. AI is likely to become the world's most pervasive technology entering all aspects of the economy and human lives. Due to its pervasiveness, it will be very difficult to control and regulate the behaviour of dominant players (Bresnahan and Trajtenberg, 1995)

AI power may be exhibited in several different ways such as enhanced commercial and economic power, military power and the power of surveillance and control. When discussing "AI as Domination" earlier, artificial intelligence is likely to further increase and reinforce the huge power of the platform companies. Their control of data, analytics and large language models will have a highly disruptive impact upon multiple markets and industries due to their ownership and/or control over critical AI resources. This is likely to enhance the concentration, power and competitive advantage of the US and Chinese companies. Although there has been regulation on a global scale to reduce this power, it has hitherto failed to yield any significant results. AI is therefore likely to reinforce the concentration of the platform companies that have become "natural monopolies" (Ducci, 2020) and gatekeepers.

There have also been huge investments in AI technology by the US and Chinese military. One of the reasons for the embargo on the sales of high-end microprocessors and chip manufacturing equipment to China was national security and the blocking of China's strategy to develop AI-enabled military technologies. The US has prioritised hegemony over the control of AI weapons. Dangers include autonomous weapons such as "killer robots" and drones, cyber warfare and deep fakes on the battlefield (Bachle and Bareis, 2022).

AI also empowers corporations and states to undertake a heightened level of surveillance. Surveillance capitalism (Zuboff, 2015), where platform companies monetise user data, is already being enhanced as Google (Alphabet), Microsoft, Apple and Meta embed AI in all of their software apps, smartphone, laptop and PC hardware and integrate these with digital assistants. AI therefore allows more detailed profiling and tracking of individuals' activities, movements and behaviours than was ever possible before these developments. The power of state surveillance is also increased by AI. This has both positive and negative implications. For example, AI increases the efficiency of surveillance systems designed to protect citizens, but it might also be misused by an authoritarian state to control anti-government, dissident behaviour and therefore breach important human rights (Fontes *et al.,* 2022).

AI and its hidden power and control mechanisms function as a form of elite populism, leveraging algorithms to justify and normalise rationalised unaccountability (Vesa & Tienari, 2022). Such an ideological framework and foundation of AI is not only dangerous for the masses but also undermines the deepening of democracy and democratic culture within society. In the name of disruptive technology (Lindebaum, Vesa & Hond, 2020), it gains social legitimacy as if AI disrupts power for human emancipation, but it serves the interests of the elites rather than empowering the masses in an emancipatory sense.

Diverse Ideological Perspectives on AI and Ideology

The eleven-level conceptual framework connecting AI and ideology moves beyond the Eurocentric Descartesean duality, bringing together diverse ideological narratives by engaging with both essentialist and emancipatory perspectives from the Western and non-Western

worlds (Nayak, 2025). It aims to advance conditions that promote human-centered AI, placing human and social concerns "at the centre of AI development and use" to mitigate various forms of technological bias (Ryan, 2025: 1303). However, the process of embedding human-centeredness within the development of legal regimes led by the European Commission (2023) simultaneously reinforces European regimes of technological consciousness, language, law, approaches, understandings, and perspectives on AI development and use. These European legal language creates ideological regimes on AI influence the policies of various international organisations—such as the OECD, World Economic Forum, G7, World Bank, UNESCO, and numerous NGOs—which help to internationalise the European understanding of AI and its underlying essentialist ideological narratives (Ryan, 2025). These narrow narratives emphasise reducing time, enhancing skills, and improving performance (Grudin, 2005: 47) to increase productivity and profit for the capitalist classes.

From the perspective of Critical Discourse Analysis (CDA), the ideological foundations of AI are also shaped by an environment of techno-polarisation and the digital hegemony of platform companies and AI-driven applications. Furthermore, "the content produced by AI models, rather than being neutral and objective, may carry certain worldviews and value systems as a reflection of the datasets they are trained on, their algorithmic structures, and potentially the cultural and ideological backgrounds of their developers" (Böyük, 2025: 371), as well as their geographical and institutional locations.

Non-European and non-Western perspectives on the ideological foundations of AI are rooted not only in the cultural, institutional and geographical location of the developers but also in questioning European worldviews surrounding the burgeoning field of AI and its monolithic reproduction, which centralises power and marginalises working people. For example,

platform capitalism empowers platform owners and exploits both producers and consumers. These non-Eurocentric ideological narratives challenge the "tendencies towards imposing a neo-colonial monoculture," emphasising that "a critical inclusion of the global diversity of ontologies, epistemologies, and traditions of thought is likely to be crucial" (Eddebo, 2021: 7). Therefore, the ideological foundations of AI need to address cultural gaps in the development, governance, and use of AI-led technologies by upholding the vocabularies of decolonization and decarbonisation, wherein "each culture can share at the level of theory itself" (Hongladarom and Bandasak, 2024: 2031) within the governance praxis of AI and its technological impacts on people and the planet. Therefore, incorporating non-Western or non-European perspectives into the ideological foundations of AI is essential for ensuring its development and application meet the needs, aspirations, and emancipatory goals of people and the planet beyond Europe.

Conclusion

The ideologies behind the AI-led technological and digital revolution affect everyone but are controlled by a few techno-feudal corporations that dominate and decide the future of social, economic, cultural, scientific, and technological developments, shaping everyday human lives. Such an undemocratic technological culture led by AI is detrimental to the progressive transformation of society. While outlining various ideological trends, affiliations, and foundations of AI within the essentialist landscape of AI and its capitalist lineages, the article demonstrates that there is room to establish emancipatory ideals for AI. It argues that current trends in AI constitute an ideological discourse that is concomitant with the requirements of capitalism, which controls work, workers, and the working environments through the power of automation. AI-led technological automation, as a process, facilitates the power of capitalism by integrating and dominating people and natural resources.

In such a context, it is ideologically imperative to explore the emancipatory potential of AI which can mitigate its risks and ensure the ethical and equitable deployment of technology to harness human potential and creative abilities. This necessitates interdisciplinary and philosophical outlooks, robust regulatory frameworks, and ongoing dialogue among stakeholders and the public to shape a future where AI serves as a force for sustainable peace, progress, prosperity, and human empowerment.

Practical Implications and Future Research

In terms of theoretical contributions, the paper offers an eleven-level conceptual framework for understanding the interplay between AI and ideology. This framework captures both the essentialist practices and the emancipatory potentials of technological consciousness, aiming to humanise AI beyond its capitalist functionality of efficiency, performance, and governance through a multidimensional analysis. The paper constructs an ideological foundation of AI to critically analyse and locate the capitalist ideological undercurrents embedded within contemporary AI systems.

In terms of policy implications, practical applicability and relevance, this paper situates itself within the domain of AI governance, ethics and policymaking, with a focus on the ethical and rational use of AI for the greater social good. It highlights the importance of understanding ideological undercurrents of AI and its capitalist logic to shape alternatives based on philosophical praxis within the regulatory framework of governance and public policy. AI has potential to create conditions for digital participation of citizens in policymaking as a means to promote digital citizenship, deepen digital democracy, and advance AI-led, people-centered governance. Such governance should be grounded in evidence-based policy praxis enabled by

AI (Newman & Mintrom, 2023), with the aim of achieving the emancipatory potential of human life and society on a global scale.

The essentialist and emancipatory dimensions of AI, along with its ideological foundations, are central not only to understanding the power structures and ideologies shaping AI's trajectory, but also to developing inclusive, people-centered AI policies that prioritise the well-being of humans, animals, and the planet. This calls for a vision of emancipatory and human-centered AI—an AI that truly serves humanity.

In terms of future research, the paper offers an eleven-level framework for understanding and analysing the interplay between AI and ideology across local, regional, national, and international contexts.

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