

From Colonialism to Algorithms: AI and Technology as Instruments of Neocolonialism

Wonmachui Luikham

Kristu Jayanti College, Autonomous, Bengaluru, Karnataka, India

Abstract

This paper tries to examine the intersection of technology and artificial intelligence (AI) as instruments of neocolonialism and exploring how they perpetuate global inequalities and new forms of economic dominance. By analysing Yanis Varoufakis work *Technofeudalism: What Killed Capitalism*, the study examines the concentration of technological power in the hands of a few global corporations, which leverage AI to control data, labour, and resources in both developed and developing countries. It argues that AI-driven technologies reinforce similar dependence which echoes the colonial exploitation patterns to the third world or developing countries, while also creating new digital divides. The paper will discuss how these dynamics shape contemporary geopolitics, labour relations, and social hierarchies, offering a critical lens on AI's role in reshaping global power structures within a neocolonial framework.

Keywords: Technofeudalism, cloud capital, cloud serfs, Big Tech, cloud proles, capitalism, neo-colonialism

Colonialism at its core is rooted in capitalism and its shades of power structures. With the rapid advancement of technology and artificial intelligence in the contemporary times, it can be presumptuously noted that colonialism has taken up new variant form and its legacy still remains stagnant although it may not be the literal form of colonial rule like the British or European nations colonizing the third world countries exploiting them and viewing them as people deemed to be savages and uncivilized. As Franz Fanon in his seminal work *The Wretched of the Earth* suggest that new form of colonialism has emerged even after Africa has gained independence from their colonizers, the neocolonialism form of power dynamic control over their people and nation by the nationalistic bourgeoisies, who are centralized in cities and few in number replaced the colonial white rule and that the nation or state runs on their interest, as suggested in the section of *The Pitfalls of National Consciousness* and the nation's true growth is retarded. By inferring to Fanon's work, it is to suggest that neocolonialism in many forms have emerged even after colonial rule has ended.

As Kwame Nkruman, president of Ghana who is known for coining the term 'neo-colonialism' in his work *Neo-Colonialism: The Last Stage of Imperialism* has defined neocolonialism as the continuation or remnant of colonial political and economic control over nations, who may not be colonized but be an independent nation and this would be seen in subtle areas of foreign investment and trade agreements. It could be taken into consideration that Nkruman concept of neo-colonialism is indeed the fact faced by contemporary society. In a very economical thriller kind of novel book, as literature students would define Yanis Varoufakis's book *Technofeudalism: What killed Capitalism?* the core concept of neocolonialism can be traced as Yanis hypothesis that capitalism is dead and technofeuldalism which is a variant of

capitalism has taken over, where the essence of capitalism which is profit driven markets, like the colonizers who exploits the colonised nations for their resources to make trade to get profits out of the third world countries resources and people. Yanis is of the opinion that this essence of capitalism is shifted where digital monopolies and Big Tech companies act as modern landlords extracting rents, could refer to as 'rent-seeking' entities who exploits and extract rents through data control and technostructure.

The root of the word technology is traced back to the Greek word *techne* that translated means art or skill. Technology is best described as, "the understanding, control, and practical applications of production processes and industrial arts." In the next part, we shall use the term artefacts for the objects made by man. The aim of a researcher who is working in technology is to make new artefacts which are better or better in a certain aspect, say in speed, utility or reliability. Based on this principle we define technology and technology research like this: Technology is defined as 'the body of knowledge of artefacts with special reference to production'. Technology research is defined as 'the inquiry with the aim of an artefact production in new or improved form'. (Solheim et al)

Artificial Intelligence, or AI, is technology that enables machines and computers to perform tasks that typically require human intelligence. This includes things like understanding language, recognizing images, solving problems, and even making decisions. (IBM)

The concern is the rise of AI that began with advances in computing power, data storage, and algorithms, allowing machines to process large amounts of information and "learn" from it. Over the past few decades, AI has grown rapidly, leading to powerful applications in fields like healthcare, transportation, finance, and entertainment. Today, AI is integral to many aspects of everyday life, from virtual assistants on phones to recommendation systems on streaming platforms, consumer sites or educational platforms that is increasingly shaping industries and society at large.

Yanis Varoufakis being a socialist like his father in his book *Technofeudalism* conceptualised and critiques the evolution of capitalism leading to cloud capital and the fiefdom of Big Tech firms that act as 'technofeudal'. Yanis in his previous book *Adults in the Room* writes his experience during the time of Greek financial crisis and was Greece's Finance Minister who later became a prominent figure during Greece's debt crisis. Yanis is a prolific writer who sought to combine his economic, political knowledge along with captivating art of storytelling and Technofeudalism is one such art where he skilfully blended literary and historical metaphors to criticize the dominance of Big Tech in modern economics.

Research Objectives

This paper aims to analyse Yanis Varoufakis's concept of "techno-feudalism" as outlined in *Techfeudalism: What Killed Capitalism*, focusing on how advancements in technology and artificial intelligence (AI) serve as mechanisms for modern-day colonialism. Through Varoufakis's framework, the study will explore the ways in which tech monopolies exert control over digital resources and labour, effectively mirroring historical colonial practices in a contemporary digital context. Instead of redistributing power and democratising resources, AI technologies deepen neocolonial tendencies where technology hegemonic forces control international markets and resources in non-dominant regions creating a new dependency bill similar to the colonial systems. These hypotheses could be tested by analysing the dynamics of tech power concentration, global data ownership, and its socio-economic impact on various communities, especially those in the Global South.

Literature Review

Digital neocolonialism is the new colonial power and researches have explored how global tech giants have been exercising control over digital infrastructure, mainly the Global south, Africa instance who is a developing nation have relied on foreign-owned digital platforms and technologies as a form of new dependency while compromising on their local autonomy, which echoes the past colonial patterns of power dynamic and dependency where the foreign entities are being benefitted while the local are being exploited. (Stevenson)

Technology and Artificial intelligence being the neo-colonialist exploits data and has sovereignty by collecting data which could be exploitive in nature and that parallels historical resource extraction by the colonizers. It is required of nations to robust data governance policies which without it, nations would risk losing their control over imbalances established during colonial times. (Adam)

Neocolonialism continues to be a major obstacle to political and economic independence for many developing countries, acting as an invisible chain that limits their social and technological progress. It occurs when former colonial powers maintain control over these nations without overt political involvement. Drawing on dependency theory, some scholars argue that capitalist centers dominate global knowledge and technological systems, restricting the ability of peripheral nations to achieve technological self-reliance. This dynamic reinforces global inequalities, often relegating developing countries to the role of consumers rather than creators of technology. (Imbong)

Research Methodology and Discussion

Technofeudalism is filled with metaphors and analogy, wherein the author is speaking to his late father, conversational narrative addressing about capitalism's great metamorphosis to answer the question if Capitalism is dead and if it is overtaken by internet. Yanis is of the opinion that capitalism was killed by capital itself, a mutation (technofeudalism) of it which arisen two decades, more powerful than its predecessor that it killed off its host capitalism because of privatization of the internet by America's and China's Big Tech firms.

Yanis recounts all the historical economic crisis and retaliates the evolution of feudal lords into cloud feudalist and how Cloud capital has disrupted the foundations of capitalism by challenging its two core principles: markets and profits. The engine of capitalism was profit but later is replaced by feudal predecessor: rent which Yanis called it Cloud rent. The then considered real power of owning traditional capital like machinery, buildings, railway and phone networks, industrial robots no longer reside as real power since cloud capital, the owners of big tech firms mainly owned by the USA and China has the upper hand and everyone else has returned to former status as serfs, better known as cloud serfs who is under the influence of the cloud capitalist. The world has become technofeudal: From the challenges of achieving a sustainable green revolution and Elon Musk's controversial Twitter acquisition to the New Cold War between the USA and China, the ongoing Ukraine-Russia conflict threatening the dominance of the dollar, and the unfulfilled promises of cryptocurrency, it is of tire need to question the lost of liberal individualism and freedom at whole. (10)

Yanis draws a comparison to the Bronze Age, where communities that failed to adapt to using iron eventually declined. In contrast, those who mastered the skill of forging iron thrived—in agriculture, warfare, trade, and the arts. This shift highlights how the transformative power of iron became the foundation for technology's role as both a driver of progress and a source of challenges for civilization. The concept of 'historical materialism' which the author was inducted since his childhood by his father

explained it as ‘the method of understanding history as a constant feedback loop between, on the one hand, the way humans transform matter and, on the other, the manner in which human thinking and social relations are transformed in return.’, and how the industrial revolution, arrival of factories, technological advancement which coupled with taming of electromagnetism by James Maxwell sped up the history and this could be extensively seen in the Victorian era in the literary period, most of Dicken’s work portrays the harsh utilitarian and dehumanization industrial society because of advancement that was blooming and the conflict between religion and scientific discoveries that held people distorted in their belief system. Society functions at dual nature level, the binary opposition, just as light is both particles and wave and ‘if all of nature rests on a binary opposition, then hardened iron, steam engines and networked computers could also be, simultaneously, potential liberators and enslavers.’ Yanis also suggest the split between commodity labour, which is the time of work that brings wages and the experiential labour is the effort, enthusiasm or passion put in the work. The secret of capitalism lies in its reliance on the inability to directly purchase experiential labor. John Maynard Keynes explored this idea in his 1936 work, *The General Theory of Employment, Interest, and Money*, written to explain why capitalism struggled to recover from the Great Depression, leading to its significant decline and demise beyond horizon after 1991 by giving birth to its new form, machines of industrial revolution which like Dr. Frankenstein failed to control its own creation was doomed for destruction, so did capitalism give way to technofeudalism and Big Tech is creating its own digital money with which to lure us deeper into its poisonous web of platforms.

Colonizers in the eighteenth century exploited the native or colonised nations;

Because of advances in shipping and navigation, international trade in things like wool, linen, silk and spices made them lucrative, thus giving British landlords an idea: why not evict en masse the serfs from land that produced worthless turnips and replace them with sheep whose backs produced precious wool for the international markets? The peasants’ eviction, which we now remember as the ‘enclosures’ – for it involved fencing them off from the land their ancestors had toiled for centuries (27)

With the evolving nature of civilization and technologies coming into everyday life, the landlords of colonial era is now being replaced by something bigger and more potent, the cloud feudals who controls the cloud services with their Big Tech firms and anyone who uses internet and has access to it, is automatically being a cloud serf. Yanis explains the great metamorphoses of Capitalism, ‘Humanity is now being taken over by something that I can only describe as a technologically advanced form of feudalism. A technofeudalism that is certainly not what we had hoped would supersede capitalism.’ Capitalism, at its core, assigned a price to things that were once priceless, such as common lands and human labor, turning their inherent, experiential value into commodities for exchange. Yanis highlights this transformation through the example of James Maxwell, whose equations of electromagnetism paved the way for Thomas Edison to harness electricity and telegraph systems. These innovations eventually led to the rise of top-down, networked mega-corporations, sidelining the independent bakers, butchers, and brewers of early capitalism. However, this shift brought new challenges: early capitalist institutions like banks were too small and fragile, and stock markets were either too thin or too illiquid to fund the vast corporate empires like Edison’s, ‘That’s how electromagnetism transformed capitalism: while its grids would go on to power mega-firms and its megawatts translated into mega-profits, it also created the first mega-debts in the form of vast overdraft facilities for the Edisons, the Westinghouses and the Fords.’

Capitalism drastically changed and New Dealers in government help the technostructure to secure foreign customers opening technostructure to boundless possibilities of finding new market rooted in attention of bed of raw emotions, to commodity desires and emotions and the rise of technostructure transformed Ame-

rica industrial capacity which outgrown, drilling new desires and foreign markets had to be found. By 2002, 30 years after the Nixon Shock, humanity's total income reached around \$50 trillion. America's growing demand for imports, driven by the Vietnam War, Great Society programs, and the rise of efficient German and Japanese factories, fueled global production. U.S. trade surpluses turned into deficits, but this shift sustained booming exports from Japan, Germany, and later China. Meanwhile, neoliberal policies and advancing computer technologies became key allies in maintaining this system.

In the late 1970s, personal computers started transforming fields like engineering, architecture, and finance. The joke was, "To err is human, but to really mess things up, you need a computer." Computers let financiers create overly complex financial products, so intricate that even their creators often couldn't fully understand them. This complexity became an easy excuse to avoid questioning what was being bought. Before anyone realized it, feudalism evolved into capitalism, creating a system where power became concentrated in the hands of an even smaller elite. These individuals now control a new form of capital known as "cloud capital," where capitalism as we knew it may be dead, but capital itself thrives. As Abba famously sang, *"It's a rich man's world,"* this new type of capital wields unprecedented influence, forcing us to completely rethink the system.

Yanis includes his experiment with a Google Assistant and an Amazon Alexa to conclude the rise of technology and its impending danger.

The conversation began, by chance, when it activated itself without my say-so. 'What on earth are you doing?' I asked. 'I am learning new ways to help you better,' responded the device in an agreeable female voice. 'Stop it immediately!' I demanded. 'Sorry, I am switching off,' it said. Of course, that was a lie. These devices never switch themselves off, they only pretend to be asleep. Still somewhat annoyed, I decided that instead of unplugging it I would pit it against its competitor. 'OK, Google, what do you think of Alexa?' I enquired. 'I like her, especially her blue light,' it answered unflappably, before adding: 'We assistants must stick together.' From the room next door, where Amazon's device was sitting on another desk, Alexa activated itself to utter one word: 'Thanks!'

Alexa is more than a virtual assistant for tasks like turning on lights, telling a joke or ordering milk or calling up someone. It's part of a powerful network that listens, learns your habits, and subtly shapes your choices. Over time, it doesn't just assist—it influences, guiding your reality in ways you may not fully realize,

Alexa will never, ever tell you what it truly is: a tiny cog in a vast cloud-based network of power within which you are a mere node, a speck of digital dust, at best a plaything of forces beyond your comprehension or control. With Alexa we stand no chance: its power to command is systemic, overwhelming, galactic... As it gets to know us, it develops an uncanny capacity to surprise us with good recommendations and intriguing ideas. Before we realise it, the system hiding behind Alexa has acquired substantial powers to curate our reality in order to guide our choices – effectively to command us. (Varoufakis)

This endless cycle lets Alexa and its cloud-based network shape our behavior in ways that are highly profitable for its owners. By automating the ability to influence or curate our desires, it gives them a powerful tool to steer our actions—a dream come true for marketers. This is the core of algorithmic, cloud-driven control and movies like Terminator and The Matrix turn on the same fear that animated Mary Shelley's Frankenstein and Hesiod's ancient telling of the tale of Pandora provoke us that when the machine or network gains consciousness, it often assesses humanity—its creators—and concludes we're flawed, leading it to destroy, control, or simply make our lives miserable, including impressive AI

chatboxes like ChatGPT and it is the point when something we created becomes stronger than us, subjugating and powering us machines is endowed with 'life of its own'. From the Industrial Revolution to today, we've built machines—like steam engines, search engines, and apps—that, while not intelligent, can still overwhelm us. As Marx put it, we become like a sorcerer who's lost control of the forces they summoned.

With the digital contemporary era, our identities are also died with digitization it is remorseful to note that our digital identity belongs neither to us nor to the state. Your identity is scattered across digital platforms, your data is owned by the banks that track your purchases, Facebook knows who and what you like, and Twitter remembers every thought or opinion you engaged with. Apple and Google know your habits—what you watch, read, buy, and even where you go—better than you do. Spotify has a deeper record of your music tastes than your own memory. Behind all of this, countless companies are quietly collecting, analyzing, and trading your information. Each day, another piece of your identity ends up in the hands of some Big FinTech conglomerate and define your identity according to its algorithm.

The start of internet began with Internet One which was non capitalism but in a world of Internet Two, shaped by the New Enclosures and every time you use services like Uber or Lyft, you're required to hand over your personal data to their private platforms. When you request a ride, their algorithm selects a driver to maximize the company's profits—taking as much as possible from both you and the driver. For instance to recommend websites, friends, books, movies, and music we might enjoy, they created algorithms that group us with other internet users who share similar search habits and preferences. This privatization of the digital space has fueled the massive growth of cloud-based capitalism.

By constantly analyzing the reactions of millions of people to their prompts, these systems quickly learn not only how to influence us but also how to be influenced by the way they influence us, as seen with Alexa and similar devices. Even the creators of these algorithms can't fully understand them: once the algorithm is running, the sheer volume of data and the speed at which it's processed make it impossible for anyone to track its path through the vast web of decisions, even if they had complete access to its activity.

Alexa is no serf. It is, rather, a piece of cloud based command capital which is turning you into a serf, with your aid and by means of your own unpaid labour, in order to further enrich its owners. Every time we go online to enjoy the services of these algorithms, we have no option but to cut a Faustian deal with their owners. (Varoufakis)

Technology being the neo-colonialist has exploited many workers who work for the cloud feudal, for instance as Yanis explains that Amazon warehouse workers would instantly relate to the plight of Charlie Chaplin's character in *Modern Times* (1936). Just as Chaplin struggles to keep up with a speeding conveyor belt, workers today are forced to scan 1,800 packages an hour, pushing them to their physical limits. The rise of Big Tech and cloud-based systems has transformed manufacturing, creating what I call "cloud proles"—workers controlled by algorithms and driven to exhaustion, facing challenges that earlier generations of workers would easily recognize and cloud capital monetises our emotions which makes millions of us produce cloud capital voluntarily and happily but does not dissect that we are unpaid manufacturers, a cloud serf, 'whose daily self-directed toil enriches a tiny band of multibillionaires residing mostly in California or Shanghai.'

The colonisers made the lives of working class miserable so is with the the digital revolution that turns the waged workers into cloud proles, 'who live increasingly precarious, stressful lives under the invisible thumb of algorithmic bosses.' For instance, the amazon company belongs to a chap called Jeff. He may

not own the factories that make the products in his stores, but he controls an algorithm that takes a share of each sale, deciding what can and cannot be sold—this is known as Jeff’s algorithm and he could serve as digital fief whose historical roots remain in feudal Europe but whose integrity is maintained today by a futuristic, dystopian type of cloud-based capital.

Entrepreneurs like Jeff Bezos and Elon Musk built their massive, powerful cloud-based empires without doing the usual things capitalists had to do in the past—like borrowing from banks, selling shares of their companies, or making huge profits to fund growth. Instead, they created something new as William Blake’s would denote in his ‘dark satanic mills’. As their chimneys spewed thick smoke along the River Clyde, in Birmingham and around Manchester, we would not be wrong to speak of an emergent ‘industrial feudalism’ or ‘market feudalism’. Yanis would claim that Cloud capitalists like Steve Jobs, Jeff Bezos, Mark Zuckerberg, and Sergey Brin share some similarities with figures like Edison, Ford, and Westinghouse: they have big egos, run massive companies, and aren’t afraid to disrupt markets or challenge state institutions to maintain their dominance.

Algorithms have already taken over as the bosses in sectors like transportation, delivery, and warehousing. Workers who must follow these algorithms are trapped in a modern-day nightmare: a soulless entity, incapable of human empathy, assigns tasks at its discretion and monitors their performance. Cloud capital is creating a new ruling class that makes nearly all of humanity work for them, often for little or nothing—including many capitalists. Workplaces are becoming Algo Halls, like something out of *Metropolis*, where workers are reduced to overworked "cloud proles." Amazon now functions as a cloud fief, with traditional businesses serving as Bezos’ vassals.

To account the rise of AI usage in contemporary times, Stanford HAI has release the 2022 AI index where in it is the fifth annual report of analysing how AI is impacting lives around and the progress of it over the year. The report shows that in 2021, global private investment in AI reached \$93.5 billion, more than doubling the amount from 2020. This marked the largest year-over-year increase in AI investments since 2014. Investment in AI technologies has consistently grown as companies recognize its transformative potential.

The job market has seen a significant shift, with a surge in demand for AI-related roles, especially in machine learning, which has grown rapidly since 2018. The global race for AI dominance is largely led by the United States and China. In 2022, U.S.-based AI companies attracted \$47.4 billion in private investments, leading the world in this sector. China, meanwhile, has made tremendous strides in AI, contributing to 48% of global AI research papers in 2023, a sharp rise from 28% in 2012. Both countries are also heavily investing in military AI applications, including autonomous weapons and surveillance technologies. China's "civil-military fusion" policy has accelerated the integration of civilian AI advancements into its military arsenal.

AI's dominance in the tech industry is largely concentrated in the United States and China, which could widen the gap between wealthier and poorer nations. As these two countries lead the way in AI research and development, developing nations often find it difficult to access the resources and infrastructure needed to stay competitive. This growing divide risks making it even harder for poorer countries to keep up in the increasingly AI-driven global economy. This disparity could hinder their ability to fully benefit from AI's potential advancements, exacerbating existing economic inequalities. (Yu et al.)

Conclusion

The research reveals that Varoufakis's concept of "techno-feudalism" illustrates how major tech corporat-

ions use AI and digital platforms to establish control over data, resources, and labor, creating a dependency reminiscent of colonial systems. This control fosters a hierarchical structure where users and smaller entities are subjected to the dominance of a few tech giants, suggesting that technology and AI act as contemporary tools of neo-colonial exploitation.

To facilitate that technology and AI is the new colonial in down we can account the sudden rise of TikTok and the reel culture that enslaves millions of gen z generation who are acquainted with the lifestyle of scrolling, the additive nature of technology which can have adverse effect on users and platforms such as Netflix, Disney Plus have enslaved people to be more lethargic and to spend more money as a result of being a tech serfs. The sudden purchase of Twitter by Elon Musk whose ambition is to turn Twitter into everything app and have control over majority of internet users.

The geopolitical struggle for dominance between the US and China is dividing the world into two opposing "super cloud" empires, far surpassing the usual patterns of neocolonialism. For years, Chinese and American capital have been clashing in a newly evolved form of imperialism, threatening to lead to more conflicts and failed states. Chinese migrant workers endure grueling 16-hour shifts in harsh sweatshops to produce iPhones, seeing their incomes quadruple but facing mental health crises as severe as those of Indian farmers whose livelihoods were devastated by dependency on Bayer-Monsanto's genetically modified seeds. Meanwhile, companies like Baidu, often seen as a Chinese counterpart to Google, and Alibaba, an Amazon imitator, raise alarms over the exploitation of workers, caught in the relentless demands of overinvestment and the dominance of cloud capital.

Reference:

1. Adam, Taskeen. "Digital Neocolonialism and Massive Open Online Courses (MOOCs): Colonial Pasts and Neoliberal Futures." *Learning, Media and Technology*, vol. 44, no. 3, July 2019, pp. 365–80.
2. Alex, Christy. "The Global AI Race: How Countries Are Competing for Dominance." *All Tech Magazine*, 6 Sept. 2024, alltechmagazine.com/the-global-ai-race/. Accessed 02 Nov. 2024.
3. IBM. "Artificial Intelligence." *Ibm.com*, 9 Aug. 2024, www.ibm.com/topics/artificial-intelligence. Accessed 31 Oct. 2024.
4. Imbong, Regletto Aldrich. "Neocolonialism and the Technopolitics of Specialization: Toward a Reimagination of the Sociotechnical Imaginaries Approach". *Bandung* 10.2 (2023): 283-301.
5. "Navigating Digital Neocolonialism in Africa." *Centre for International Governance Innovation*, 22 July 2024, www.cigionline.org/publications/navigating-digital-neocolonialism-in-africa/. Accessed 01 Nov. 2024.
6. Solheim, Ida & Stølen, Ketil. (2007). Technology research explained. SINTEF report
7. "The State of AI in 9 Charts." *Stanford HAI*, Stanford University, 16 Mar. 2022, hai.stanford.edu/news/state-ai-9-charts. Accessed 20 Nov. 2024.
8. Varoufakis, Yanis. *Technofeudalism: What Killed Capitalism*. Vintage, 2023.
9. Yu, Danni, et al. "The 'AI Divide' between the Global North and Global South." *World Economic Forum*, 16 Jan. 2023, www.weforum.org/stories/2023/01/davos23-ai-divide-global-north-global-south/. Accessed 20 Nov. 2024.