

The Political Economy of Digital Platform Monopoly: A Contemporary Extension of Lenin's Theory of Imperialism

Haocheng Ling*, Yu Wang

School of Electrical Technology, Guangdong Mechanical and Electrical Polytechnic, Guangzhou 510550, China

*Corresponding email: 1633166232@qq.com

Abstract

This paper extends Lenin's theory of imperialism to analyze digital platform monopolies. It argues that platform capitalism reproduces Lenin's five features - monopoly, finance capital, capital export, international alliances, and territorial division - through data-driven accumulation. Core concepts include data rent (extraction from user activity), data-fictitious capital (valuation based on speculative data), and digital colonialism (value extraction without territorial occupation). Using cases like Meta, Google, and Apple, the paper demonstrates how digital platforms amass monopoly power via network effects and algorithmic control, export capital through infrastructure and data flows, and form new alliances while bypassing traditional sovereignty. It identifies three inherent contradictions: between user value creation and platform appropriation, between data commodification and privacy rights, and between global digital expansion and regulatory fragmentation. The conclusion offers a Leninist-inspired critique of digital monopoly as a stage of capitalist imperialism, contributing to critical political economy literature on digital capitalism.

Keywords

Digital platform monopoly, Political economy, Data rent, Data-fictitious capital, Digital colonialism, Platform capitalism

Introduction

The rise of digital platforms has reshaped global capitalism. Dominant firms like Meta, Google, and Amazon exhibit monopoly tendencies reminiscent of the early 20th-century trusts analyzed by Lenin. However, contemporary platform monopolies differ from industrial-era cartels in their reliance on data as a means of production and their ability to extract value without territorial occupation [1].

Entering the second decade of the 21st century, digital platforms have completely reshaped the operational logic and capital accumulation model of the global economy. Digital technology represented by the Internet, big data, artificial intelligence and cloud computing is no longer just a tool for improving productivity. It has evolved into the underlying infrastructure for restructuring the whole chain of production, distribution, exchange and consumption.

Platform monopoly as a new institutional form

Giant digital entities such as e-commerce platforms, social media platforms, lifestyle service platforms,

content traffic platforms, and travel logistics platforms are no longer traditional market-oriented enterprises. They are composite digital power entities with multiple functions including commercial operation, resource allocation, social governance, and traffic control.

Compared to the traditional monopoly form formed in the era of industrial capitalism relying on physical means of production such as factories, machines, raw materials, and labor, the platform monopoly in the digital age relies on new mechanisms. These include data elements, algorithm systems, bilateral market network effects, flow entry barriers, and ecological closed-loop locking. These mechanisms construct a monopoly system that is different from traditional industries.

This has formed the latest form of contemporary monopoly capital. It has become a core frontier topic of interdisciplinary research in political economy, industrial economics, law, and sociology in the past five years [2].

Real-world manifestations and governance challenges

From the perspective of real economic operation, the

global digital economy presents typical characteristics of extreme centralization, oligopoly, and monopoly. Cross-border leading digital platforms, with their advantages in first-mover technology, massive user base, continuous capital injection, and cross-border ecological expansion, have quickly occupied the core track of digital markets in various countries. This has formed a market pattern of “one dominant player, winner takes all”. In China, as the digital economy shifts from high-speed growth to high-quality development, the phased problems of brutal growth and disorderly expansion of the platform economy are exposed [3].

At the market level, there are competition disorder problems. These include choosing between two, big data killing, algorithm price discrimination, predatory mergers and acquisitions, stifling innovation, flow monopoly, and merchant exploitation. At the labor level, there are new types of labor relationship contradictions. These include the de-employment of gig workers, lack of labor protection, high-intensity algorithmic training, and the continuous expansion of the scale of unstable proletarians. At the distribution level, there are structural imbalances. These include platform excess rent monopoly, squeezed profits of small and medium-sized business entities, decreased proportion of labor income, and rapid concentration of digital wealth towards top capital. At the governance level, there are systemic governance challenges. These include the expansion of platform private power, algorithmic black box governance, manipulation of public opinion, challenges to digital sovereignty, and regulatory systems lagging behind technological iteration [4].

In 2021, the State Administration for Market Regulation released the “Guidelines for Antitrust in the Field of Platform Economy”. This marked the official entry of China’s platform economy into a new development stage of strong regulation, regulation, prevention of disorder, and promotion of fairness. A series of anti-monopoly administrative penalties, compliance rectification, capital governance, and data governance policies have been implemented. This has directly promoted the research on digital platform monopoly in the domestic academic community to shift from simple phenomenon description and institutional reference to the deep mechanism analysis of political economy rooted in Chinese practice.

Evolution of academic research: Three stages

From the perspective of the evolution of academic research, the study of digital platform monopolies can be roughly divided into three stages.

The first stage is the embryonic stage (2010-2015). The research focuses on the business model, network effect characteristics, and bilateral market operation mechanism of the Internet platform. It mostly follows the western industrial organization theory and focuses on traditional dimensions. These include market structure, competition efficiency, and consumer welfare. It has not yet formed a critical reflection on the nature of monopoly.

The second stage is the development period (2016-2020). With the rapid expansion of platform capital and the frequent occurrence of various monopolistic chaos, the academic community has begun to pay attention to issues. These include unfair competition, data privacy infringement, and employment disputes on platforms. Research results in law and management have emerged in large numbers. However, overall research still tends to apply countermeasures and lacks underlying theoretical construction. This is especially true for the systematic interpretation of value creation, surplus value distribution, capital accumulation, and production relations reform. This interpretation should be from the perspective of Marxist political economy [5].

The third stage is the period of deepening prosperity (2021-2025). This is the research stage of the past five years that this article focuses on. With the global platform regulatory wave and the promotion of domestic anti-monopoly governance practices, research has entered the theoretical innovation stage. This stage is dominated by the political economy paradigm. Domestic and foreign scholars generally realize that relying solely on traditional anti-monopoly economics is no longer sufficient. The “price standards” and “efficiency standards” cannot explain the complexity of platform monopolies. The biggest harm of platform monopolies is no longer the traditional profit from price increases. It is the monopoly of digital means of production, the gratuitous possession of digital labor, and the reconstruction of the social distribution system. It also includes the suppression of market innovation ecology and the erosion of public governance power.

Core theoretical breakthroughs in the past five years

The core breakthrough of research in the past five years lies in completely breaking free from the constraints of the single efficiency perspective of neoclassical economics, returning to the core analytical paradigm of political economy, and analyzing digital platform monopolies within the macro framework of capitalist stage evolution, digital production relations transformation, contemporary monopoly capital accumulation, and global digital capital expansion [6].

The Western academic community continues to iterate around core theories such as platform capitalism, surveillance capitalism, technological feudalism, digital rent, and digital labor alienation, profoundly revealing the new characteristics of capital monetization, financialization, and de production in the digital age.

Domestic Marxist political economy scholars are based on the position of socialist political economy with Chinese characteristics, combined with the development characteristics and regulatory practices of China's platform economy, focusing on solving the problem of Western theories not adapting to the local conditions. They systematically explain the formation mechanism, special manifestations, economic and social contradictions, and Chinese style regulatory paths of China's digital platform monopoly, forming research results that combine theoretical depth and local adaptability.

New characteristics, research gaps, and the value of this review

Compared to traditional industrial monopolies, digital platform monopolies exhibit completely differentiated institutional characteristics and accumulation logic. This is also the core starting point of academic discussions in the past five years.

Firstly, there has been a fundamental change in the means of production relied upon by monopolies. Traditional monopoly capital relies on physical means of production to form barriers, with increasing marginal costs and competitive products. The digital platform relies on three new types of production materials: data, algorithms, and traffic. Data has the characteristics of non competitiveness, unlimited replicability, zero marginal cost, and continuous iterative value-added. Algorithms have the governance ability of automated

control, hidden exploitation, and precise matching. Traffic imports have exclusivity, lock-in, and ecology. The combination of the three forms a natural monopoly endowment. This makes the digital market inherently have structural attributes that tend towards concentration and monopoly.

Secondly, the monopolistic profit model shifts from productive profits to non productive rents. Traditional enterprises obtain industrial profits by producing goods and creating use value. Most top digital platforms do not directly participate in physical production. Instead, they monopolize digital circulation infrastructure and extract excess platform rent from merchants, workers, and consumers in all aspects. This forms a typical form of for-profit capital [7].

Thirdly, the exploitation targets of monopoly have expanded from industrial workers to all digital users and gig workers. Traditional capitalist exploitation is concentrated in the factory production process. The monopoly of digital platforms extends the exploitation scenario to the daily life of the whole society. Ordinary users' daily behaviors such as browsing, liking, sharing, and information authorization are transformed into unpaid digital labor. Gig workers are trained by algorithms, risk transfer, and rights stripping. This forms a new distribution pattern of nationwide digital supply and capital monopolizing digital benefits.

Fourthly, the attribute of monopolistic power has been upgraded from economic power to governance power intertwined with public and private interests. Giant platforms are no longer simply market operators. They are private domain governance entities that master the formulation of digital space rules, resource allocation, subject rewards and punishments, and content control. This forms a special pattern of private capital and public power, and creates complex game tension with national public governance power.

Fifthly, the expansion boundary of monopoly breaks through geographical limitations and forms a global digital monopoly system. Digital capital relies on the borderless nature of the network to achieve cross-border flow, arbitrage, and tax avoidance accumulation. It reconstructs the global digital industry division of labor and wealth distribution pattern. It exacerbates global digital inequality and digital hegemony.

It is precisely based on the above new characteristics that the academic community has deeply realized in the past five years that digital platform monopoly is not a simple digital upgrade of traditional monopoly. It is a phased transformation of capitalist production mode in the digital age. It is a concentrated carrier of contradictions in capital accumulation, labor capital, market competition, state and capital, and global development.

Research achievements, gaps, and the value of this review

Existing research has achieved fruitful results in digital land rent theory, platform rent distribution mechanism, algorithmic Taylor system, digital labor alienation, meta platform monopoly, gatekeeper governance, technological feudalism analysis, and platform capital financialization [8].

However, there are also many research shortcomings. Some studies excessively apply Western theories and ignore the institutional constraints and development characteristics of China's platform economy. Quantitative empirical research is relatively scarce, mostly staying at qualitative speculation. Research on the monopoly of new platforms arising from artificial intelligence, big models, and computing economy lags behind. Further research is needed on the institutional roots, distributive justice, and mechanisms related to common prosperity behind digital monopolies.

In this context, systematically reviewing the research results of the political economy of digital platform monopolies from 2021 to 2025 is valuable. It clarifies the progress of core theories, core controversies, practical contradictions, and research shortcomings. This has important academic value. It can improve the theoretical system of Marxist political economy in the digital age. It can also make up for the shortcomings of traditional monopoly theory.

At the same time, it has strong practical value. It can provide theoretical support for the normalization of platform economy regulation. It can help prevent disorderly capital expansion and standardize digital income distribution. It can protect digital workers' rights and interests. It can also help build a fair and orderly digital market order. This, in turn, supports inclusive and sustainable digital growth. This promotes high-quality development of the digital economy in China.

Based on this, this article systematically summarizes the theoretical innovation, contradiction mechanism, regulatory debate, and research prospects of digital platform monopoly political economy. It draws on core journal articles, monographs, and cutting-edge theoretical achievements at home and abroad in the past five years. It also identifies key gaps for future inquiry. This aims to promote the deepening and localization development of research in this field.

Analytical framework and conceptual tools

This paper applies Lenin's framework to digital platforms.

First, monopoly arises from network effects and algorithmic gatekeeping. Meta's social graph, for instance, locks users into a closed ecosystem, creating barriers to entry. Second, finance capital plays a central role - venture capital and stock markets enable platforms to sustain low-profit operations while accumulating speculative value. Apple's \$200 + billion cash reserve exemplifies financialized accumulation. Third, capital export takes the form of data flows and cloud infrastructure. Amazon Web Services (AWS) profits from renting data processing power globally. Fourth, international monopolistic alliances emerge through Standard Essential Patents (SEPs) and cross-licensing agreements among tech giants. Finally, territorial division operates via data localization laws and regulatory boundaries, yet platforms exploit jurisdictional gaps.

To capture these dynamics, we introduce three concepts: (1) Data rent refers to the extraction of surplus value from user-generated data, akin to land rent in classical political economy.

(2) Data-fictitious capital denotes the speculative valuation of data assets, where future rent streams are capitalized into current stock prices.

(3) Digital colonialism describes the extraction of value from peripheral economies without physical colonization, as seen in data-center placement and algorithm-mediated trade [9].

Lenin's five features and digital analogues

Lenin identified five features: (1) production concentration → monopoly, (2) industrial + bank capital → finance capital, (3) capital export, (4) international monopoly alliances, (5) territorial division of the world.

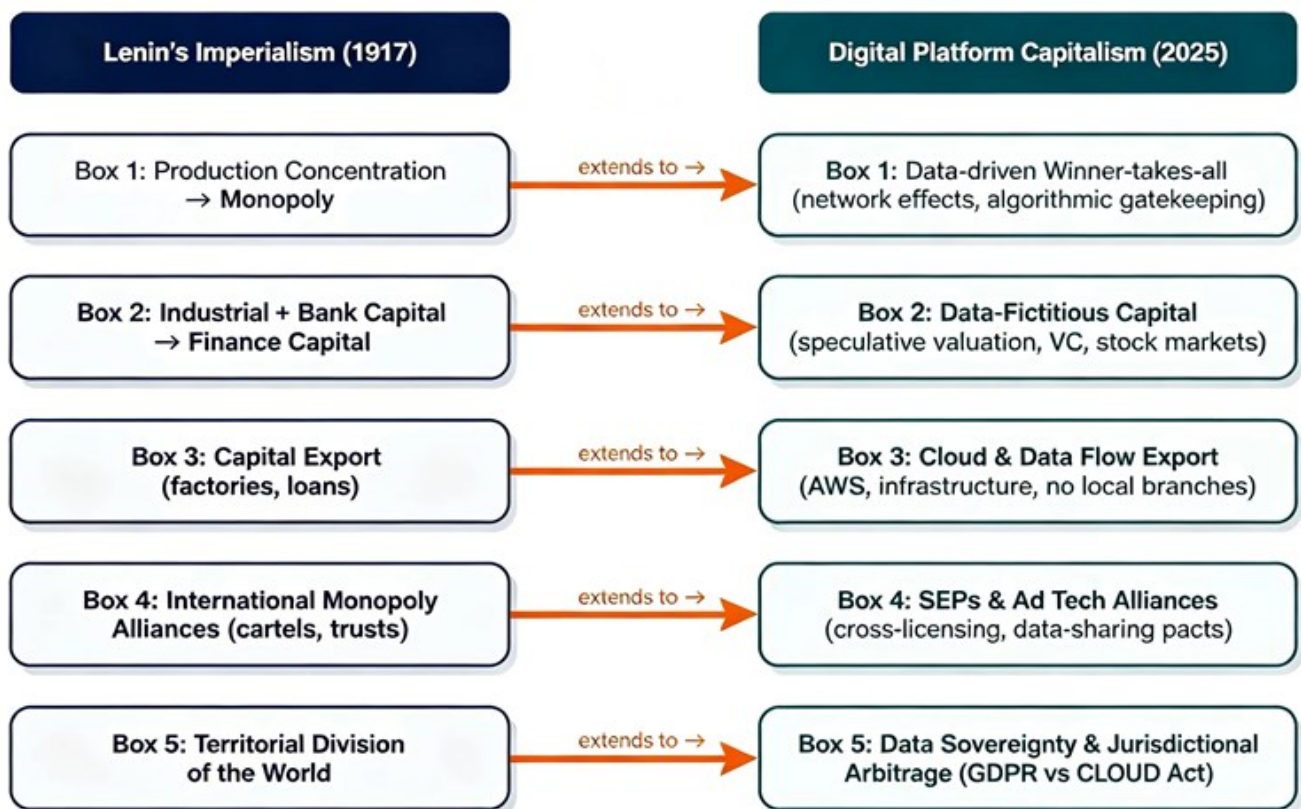


Figure 1. Imperialism and digital platform capitalism: A conceptual mapping.

(1) Monopoly: Digital platforms exhibit monopoly through network effects. Meta's control of social graphs - over 3 billion users across Facebook, Instagram, and WhatsApp - creates a self-reinforcing user base. Google's search algorithm, processing 8.5 billion queries daily, sets de facto industry standards. This concentration yields data rents that exceed normal profits.

(2) Finance capital: Platform firms rely on external finance capital - venture capital and stock markets. Amazon's early losses were funded by speculative equity, enabling it to undercut competitors. Today, Apple's cash reserves (\$200 + billion) allow research and development (R&D) and acquisitions without debt, mirroring finance capital's dominance.

(3) Capital export: Traditional capital export involves physical factories or loans. Digital platforms export capital as data flows and cloud services. AWS, with 33% cloud market share, generates \$100 + billion revenue by renting computing power globally. This enables extraction from developing economies without local branches.

(4) International monopoly alliances: Unlike Lenin's cartels, digital alliances form through SEPs and cross-licensing. Firms like Qualcomm, Apple, and

Samsung exchange patent rights to avoid litigation, creating quasi-monopolies in 5G technology. Data-sharing agreements between platforms (e.g., Google and Meta's ad exchanges) also constitute alliances.

(5) Territorial division of the world: Territorial division manifests through data sovereignty. The European Union (EU)'s General Data Protection Regulation (GDPR) restricts data flows, while the United States (US) Clarifying Lawful Overseas Use of Data (CLOUD) Act enables cross-border data access. Platforms exploit these differences - Google locates data centers in low-regulation jurisdictions (e.g., Ireland, Singapore) while complying minimally.

Capital export and digital colonialism

Digital colonialism extends Lenin's capital export thesis. Platforms extract data from peripheral economies through infrastructure and algorithmic control. For instance, AWS hosts data in India and Brazil but repatriates profits to the US. Data rents are extracted without local value creation [10].

A case is Google's presence in Africa. Through Android and YouTube, Google captures user data for advertising,

paying minimal taxes. The company's "Next Billion Users" initiative expands this extraction, echoing colonial enclaves. Similarly, Meta's Free Basics program in Asia provides limited internet access.

Data-fictitious capital amplifies this dynamic.

Speculative valuations of platform giants (e.g., Meta's \$1 trillion peak) capitalize on expected future data rents.

When expectations fall, as in Meta's 2022 stock decline, fictitious capital devalues. This volatility mirrors Lenin's analysis of finance capital bubbles.

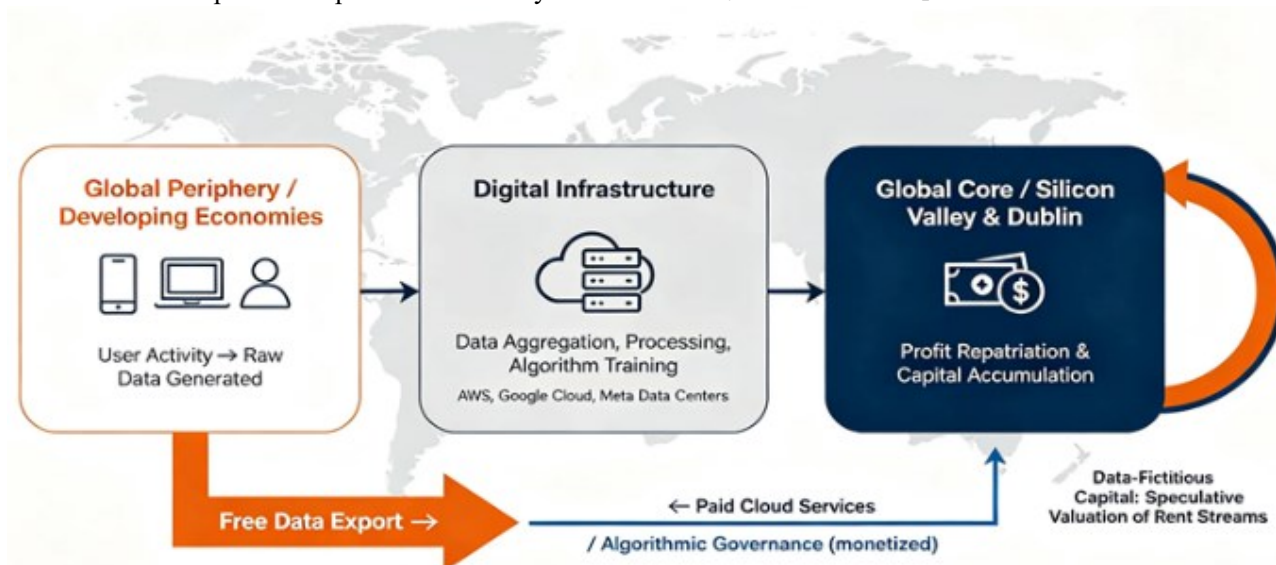


Figure 2. Digital colonialism as a global value extraction system.

Contradictions

Three contradictions define digital platform imperialism: (1) User value creation vs. platform appropriation: Users generate data but receive no compensation, leading to sharp class polarization. Over 70% of digital ad revenue accrues to Google and Meta, while content creators earn only marginal income. This severely undermines consumption demand. This imbalance also significantly weakens broader economic growth. It concentrates wealth further in platform owners' hands. This trend ultimately threatens long-term social stability.

(2) Data commodification vs. Privacy rights: Platforms exploit user data, but privacy regulations (e.g., GDPR) force compliance costs. Firms such as Apple experience tension between privacy advocacy and data-driven profits. Regulatory pressure is growing worldwide. Companies must adapt their business models accordingly.

(3) Global expansion vs. Regulatory fragmentation: platforms seek uniform data flows, but jurisdictions impose conflicting laws. The US CLOUD Act and EU GDPR clash, creating operational friction and legal costs.

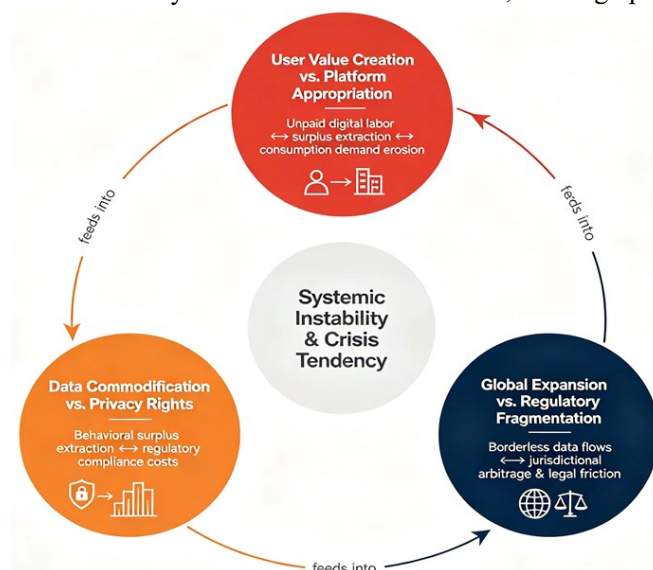


Figure 3. Three contradictions of digital platform imperialism.

Conclusion

This paper contributes a Leninist framework to analyze digital platform monopolies. It shows that Lenin's theory, while historically specific, illuminates monopoly formation, finance capital dominance, and capital export in digital capitalism. The concepts of data rent, data-fictitious capital, and digital colonialism extend Marxian political economy to the platform era. The three contradictions identified point to systemic instability, suggesting that digital monopoly, like its industrial predecessor, generates crises of accumulation and legitimacy.

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Conflicts of Interest

The authors declare no conflict of interest.

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