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Spatialization of Digital Platforms

Lianrui Jia

Abstract

This article challenges the common tendency to pinpoint a "nationality" to a multi-national capitalist platform company. It calls for a close examination of how platform companies, as capitalist enterprises, organize themselves legally and spatially. The article first reviews how platforms have been studied in relation to space. I then use the case of the Sina model, also known as the Variable Interests Entities (VIE) model, to challenge the meaning of the "Chinese" prefix. This example illustrates that, Chinese or not, capitalist platform companies engineer a composite geography to guarantee maximum flexibility and mobility for the accumulation of private wealth and, in the process, generate great power differentials. In short, this commentary is a call to study digital platforms over the course of capitalism permutations as well as its interpolation and interdependence with existing systems of power.

Keywords

digital platform, spatialization, VIE, legal arbitrage, platform capitalism

Launched in 2022, Temu is an online shopping app owned by e-commerce platform company Pinduoduo Holdings (PDD Holdings) as part of its global expansion efforts. Soon after its debut, Temu quickly claimed top spots on most-downloaded apps charts in several countries, making its parent company, PDD Holdings, China's third most valued platform company, surpassing Alibaba. In May 2023, news reported that the U.S.-listed PDD Holdings changed its headquarter location from Shanghai to Dublin in its annual filing to the United States Securities and Exchange Committee (Matsakis, 2023). This reported move soon stirred up public confusions. Later, PDD Holdings issued a statement denying the "seriously inaccurate and purely misinterpreted" coverage and reiterated that the company was "born in Shanghai and grew up in China" (Fan, 2023). It further reassured that the move to Dublin was simply for Temu to expand into the European market and to comply with U.S. laws and regulations (Cheng, 2023).

PDD Holdings' headquarter relocation just went on to show the knotty identities politics that multi-national platform companies are caught up in. What makes a multinational e-commerce platform "Chinese"? Does it even matter how platform companies identify themselves? After all, what exactly does being a "Chinese" platform mean? Is it decided by ownership, major markets, user base, places of registration, or something else? Perhaps rather than a tick-box exercise, the meaning of "Chinese-ness" is always relative and in flux: Sometimes they are not Chinese enough (as in the case of Temu), while other times, being "Chinese" is an original sin (as in the case of TikTok). The politics of positionality in and of itself says much about complex political economy and multi-sited "placefulness" and embeddedness of platforms (Graham, 2020) as they transact and mediate within designated geocultural and geopolitical contexts of specific regions (Steinberg & Li, 2016).

Taking cues from regional platform approach (Steinberg & Li, 2016; L. Zhang & Chen, 2022), legal studies, and geographies, this commentary calls for attention to critically study the spatialization of digital platforms in the institutional world, with a focus on uncovering how (uneven) space and spatial relations are produced, arbitraged and exploited in the political economy of digital platforms as capitalist enterprises. Platform companies are agentic capitalist institutions that draw on existing networks of power, elites, and protection of nation-states to engineer and operate a composite geography. Within such composite geography, value is created, extracted, and captured to expedite frictionless flows of money, capital, people, goods, and data to maintain the façade of platform as an ideological project: lean, efficient, placeless, and global. Therefore, to probe the spatialization of digital platforms is to unsettle platform capitalism as a totalizing ideological project by investigating its historically and geographically specific happenings.

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As the regional model of media foregrounds the territorialized inquiry of the "where" of media, the same question should be asked for digital platforms. What is often overlooked is that digital platforms are commercial and legally coded persons that must "live" somewhere: They need to be registered as legal entities, booked for accounting purposes, contracting and conducting businesses somewhere. Rarely do these jurisdictions in which a platform company domiciles overlap. So, to consider the spatiality of digital platforms is to consider the intricate webs of (inter)connections, (dis)connections, and (dis)embeddedness that digital platforms operate in, together with the assemblages of political and economic actors that enable such conditions.

As digital platforms are being geopoliticized (Qiu, 2023) and deadlock tech-rivalries increasingly widen the chasms along inter-state competitions, to consider the spatiality of digital platforms is to think about how digital platforms, as a particular conjuncture of capitalism development in the long durée (Peck & Phillips, 2020), reinforce or challenge existing political and economic ordering. In what follows, I call for an examination of the spatialization of digital platforms as capitalist enterprises and their interlocking relationships with existing systems of power, drawing on the role of global finance networks. I first review how digital platforms have been studied in relation to space. Then, I illustrate with a specific example of Variable Interests Entities (VIE), a widely adopted corporate structure by publicly listed China-based platforms. This example shows that the becoming of platforms, as capitalist enterprises, are heavily dependent on an assemblage of actors. Their power is closely anchored in and derives from the assemblage of space.

Digital Platforms and Space

Digital platforms are now powerful economic, social, and political actors and their power is simultaneously tethered and untethered to space. Deeply integrated into urban life, asset-light platforms, such as Uber, Airbnb, and DoorDash, need to embed themselves in local settings to grow and expand. Yet, *how* they become embedded in the local is never predetermined. van Doorn and colleagues (2021) term the "actually existing platformization" to describe how platforms interact with the urban and its pre-existing uses of space through performing boundary work such as building partnership. In addition to these partnerships, platforms also latch on to affective and emotional values to produce a certain type of urbanism, such as Wanghong urban economy that materializes emotions in the urban environment (Cao, 2024). A. Zhang et al. (2022) further conceptualize the cyclical production of Wanghong urbanism as an assemblage of human-generated, algorithmically supported processes that loop in previously non-related actors such as legacy media, local residences, city authorities, and private enterprises. Such co-production between urban spaces and digital platforms shows how platform and capital concomitantly drive the production of space (digital and physical) and value (monetary and data) as digital platforms integrate into the urban environment (Sadowski, 2020).

The platformization of urban space shows that platforms consolidate power by embedding in the local, yet they are opportunistically absent when held publicly accountable—what Graham (2020) terms the "conjunctural geographies." Pollman (2019) shows that such conjunctural geographies are achieved through regulatory arbitrage—a form of legal gamesmanship to engineer an optimal balance between regulatory costs (such as circumvention or strategic legal avoidance) and transactional costs by design and jurisdiction choices, however not without limits. For example, ByteDance manages its structure to exploit more lenient regulatory regimes outside of China to hasten its global expansion (Li, 2024). In addition to minimizing regulatory costs, digital platforms such as Airbnb, Uber, and Bird leverage spatial scaling and legal affordances, such as the absences, ambiguities, and arbitrage of laws to increase control and capacity to exploits assets (Grasten et al., 2023). Economic geographers demonstrate that as a new organizational form, digital platforms reshuffle and further concentrate the geographies of value extraction to a few firms located on the U.S. West Coast (Kenney & Zysman, 2020). In sum, these studies show the disjuncture and contradictions between platformization as a promise of standardization and scaling through eradicating frictions in various forms, and the actually existing and instantiation of platformization in diverse and stubborn localities (Popiel & Vasudevan, 2024).

Yet, platform urbanism is but one instance where platforms encounter the local. Rural China, for example, is digital platforms' "techno-spatial fix" (Harvey, 2014) as frontiers to secure new markets (Zhao, 2024) and labor dynamics (Wang et al., 2022). Drawing on the case of a handicraft e-commerce village, L. Zhang (2021) shows the uneven and limited process as global platform capitalism reconfigures rural China. In these minor and glitch-y registers of platform-space configurations (Leszczynski, 2020), arbitrage of space could also provide moments of opportunity. Space and spatiality is strategized and contested, for example, by delivery workers to carry out protest against casualization (Briziarelli, 2019) or managed through arbitraging temporality to meet platform's algorithmically generated "expected delivery time" (J. Y. Chen & Ping, 2020). In the live-streaming sector, users and creators also co-construct and negotiate the meaning of a certain space, such as "rurality" (Hou & Zhang, 2022; Zhao, 2024).

The above studies all illustrate that the actually existing platformization is a path-dependent process. It unevenly impacts different actors given existing institutional configurations and constellations of power. While platform studies scholars show how platforms devise contingent strategies to navigate and eradicate frictions, legal scholars and geographers offer valuable insights into the specific mechanisms and consider their impacts on different localities. While

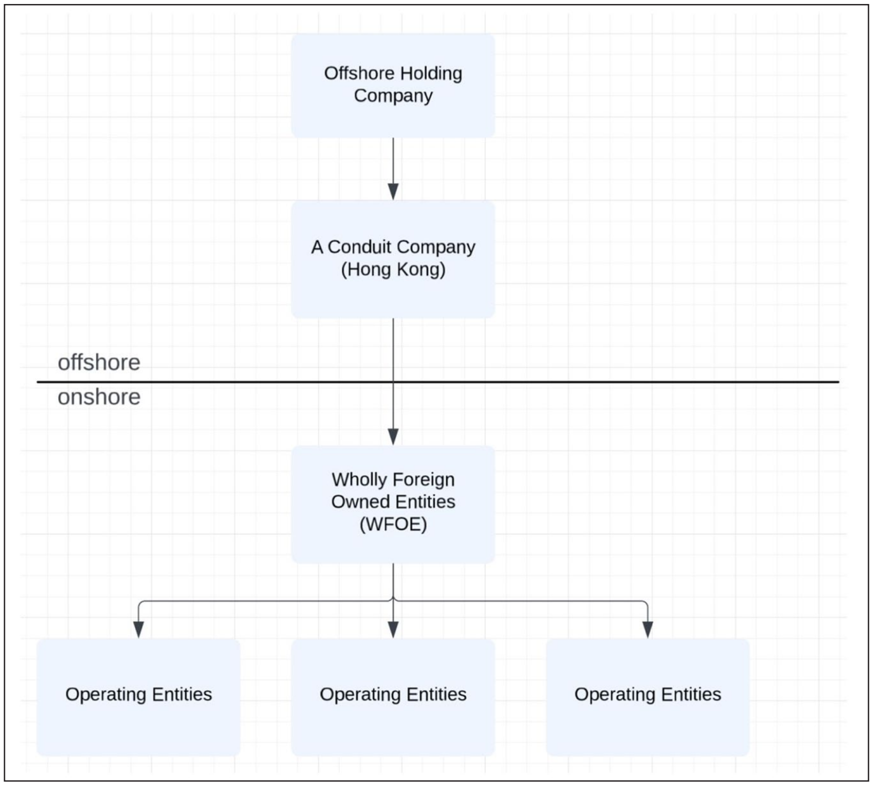

Figure 1. A simplified version of VIE.
Source. Author's own summary.

much is said about how platforms establish and expand their power by operating conjunctural and composite geographies (Graham, 2020; D. W. Hill, 2021), little has been written about how capital expanded into and valorized platform as capitalist enterprises in the first place (largely due to the fact these processes are also less visible and difficult to study). In the reminder of the commentary, I turn to the contradictory case of China, where at the turn of the 21st century, internet companies engineered a special corporate structure to bypass barriers to capital's entry despite national restrictions on foreign investment. With this case, I argue for further situating platform capitalism not only in the embedded local and distant global but also in the in-between and transient "global in the local" (Sassen, 2008).

VIE: (Productive) Frictions to Capital Flows and Spatial Scaling

To understand how China-based digital platforms organize themselves legally and spatially requires us to first understand the historical substrates of political and economic conditions of China's information and communication technology development. Expedited by the accession to the World Trade Organization in 2001, China hastened the liberalization and commercialization of its media and communications sector. It opened up its telecommunications sector to foreign investment and allowed up to 50% stake in joint venture arrangements. Yet, with limited state-financing and investment options, the capital-intensive telecommunications industries were starving for capital. Under the aegis of the Chinese state, they turned to stock market financing. China Telecom later became the first state-owned company listed on the stock exchange (Wójcik & Camilleri, 2015).

China's foreign ownership cap, together with sporadic, guerrilla-style regulation and limited infrastructure buildout can be viewed as "frictions" to capital's entry and expansion at the turn of the 20th century. However, as Tsing (2005) puts it, friction can lead to new arrangements of culture and power. To salvage the thirst for investment capital, the Sina model was created to circumvent the cap on foreign investment in China's value-added telecommunications sector. Engineered by Sina—the country's first internet business that went for floatation in 1999, the model is also known as VIE. This particular instrument (as shown in Figure 1) comprises several key components and spans across different jurisdictions, which include the establishment of a holding (shell) company registered in offshores, a conduit company domiciled in Hong Kong, a wholly foreign-owned enterprise (WFOE) based in China, and many onshore operating entities that actually hold the operating permits and licenses to conduct businesses in China (F. Chen, 2021).

The deployment of VIE is an example of legal arbitrage through spatial scaling to kill many birds with one stone: maximizing flexibility, skirting taxation and domestic listing regulations, and bypassing cap on foreign investment. In such multi-sited organizational labyrinth, each unit serves a specific purpose: The holding company is a financial vehicle for raising capital without violating China's foreign investment restrictions because they are registered in offshore jurisdictions for their common law systems, political stability, secrecy, and low taxation. The conduit company domiciled in Hong Kong allows the company to secure preferential tax rate as compared with the mainland. Meanwhile, domestic operating entities need to steer clear from direct ownership by the Hong Kong conduit company, which is treated as foreign ownership according to the Chinese law. Therefore, the WFOE adds another necessary layer to ensure "creative legal compliance." Through contractual agreements, not equity ownership, profit sharing (often in the form of service fee) is guaranteed between the onshore operating entities and (transnational) investors who invested in the offshore shell company.

Despite public debates to outlaw VIE, such corporate structure has been stabilized and ambiguously permitted by state regulators since its creation. It has become the prototypical way of structuring assets for all publicly listed China-based platform companies. So, to return to the story of PDD Holdings at the beginning of this commentary, PDD Holdings is anything but a Chinese entity, as it states in its annual report:

> Pinduoduo Inc. is not a PRC resident enterprise for PRC tax purposes . . . Pinduoduo Inc. is not controlled by a PRC enterprise group . . . Pinduoduo Inc. is a company incorporated outside China. As a holding company, its key assets are its ownership interests in its subsidiaries, and its record are maintained, outside China. (PDD Holdings, 2022, p. 118)

The VIE structure is an ingenious creation by internet companies in China at the turn of the 21st century as workaround to access a larger pool of capital resources. More importantly, the state's vacillation at regulating VIE paved the vital conditions for the capitalization and financialization of the commercial internet and platform development in China. This multi-jurisdictional structure essentially demonstrates the arbitrage of legal affordances, where platform companies combine the opportunistic use of bodies of law (or absence of it), the spatial demarcation of the firm's corporate structure (in different localities), and economic activities occurring in bounded local spaces (Grasten et al., 2023). In PDD Holdings' case, the relocation of its principle office from China to Ireland is much more than just achieving proximity to the European market, but also to make use of Ireland's status as an offshore jurisdiction with its low-tax regime, capital allowance on intangible assets (Murphy, 2024) and as capital exits. In the toolboxes of transnational capital investors, offshore jurisdictions play critical role in providing the multidimensional legal, regulatory, and fiscal flexibility (Haberly & Wójcik, 2022). Yet despite much debates and discussions, especially in China's platform anti-monopoly campaign, the Chinese state has remained ambiguous and permissive in regulating VIE, as outlawing it would significantly dent foreign investors' interests and tarnish the entry of transnational capital.

The VIE and its legal-spatial arrangement demonstrate how platform capitalism builds and thrives on a shaky and gray legal basis. The hypermobility of capital assets and the legal "shopping" around is jarringly juxtaposed with many lived and on-the-ground "injuries" incurred along the platform value chain (D. W. Hill, 2021). In mapping the spatialization of platforms could we connect the promises that made by platform capitalism to the messy, actually happening platformization. We could trace an even more compressed history if we take into consideration the power rested in the Anglo-American-dominated postcolonial financial relationship, offshores that are often the imprints of the sticky power of the British Empire, and an interpretative community of professionals that channel investments, offer legal advices, underwrite asset liquidity and vouch for their valorization (Haberly & Wójcik, 2022). They form what Saskia Sassen (2008) describes as the ***global inside the national***—specialized assemblages between each individual state in producing an operational space for standardized global operations of firms and markets. Not just a distinct phenomenon for China-based platforms, we can observe similar patterns of legal and spatial scaling in other platform giants such as Apple (Palan et al., 2023), Uber, and Airbnb (Grasten et al., 2023).

Conclusion

Taking VIE as an example, this commentary makes a case to challenge the tendency to equate national interests (in so far as the "Chinese" or "U.S." prefix encapsulates) with those of a particular platform company. Looking at how platforms spatialize by asking the "where" question of platform offers an empirical entry point to map digital platforms' interpolation within existing political-economic orderings and the emerging patterns of power geometries and differentials. The geographies of platform capitalism are to be expanded, for example, to the increasingly important yet less visible role of offshores, which is very much a continuation from their historically sizable presences in telecommunication sectors such as in China (Wójcik & Camilleri, 2015) and India (D. Hill & Athique, 2017). Worse still, despite public scrutiny, countries leverage tax competition and intangible assets allowance as economic development strategies (Murphy, 2024; Pistor, 2019).

Furthermore, to think about how digital platforms spatialize is to think about the "becoming" of platforms, which is gestated over an assemblage of variegated evolutionary processes (Athique, 2019) across various temporal and spatial scales. VIE is but one exemplar of how capital works out differences in China's specific institutional setup. As these companies are often heralded as a global force, probing the spatialization of platforms unravels how these capitalist enterprises exploit space and spatial relations to enact and cement extractive logic for private wealth accumulation and market dominance.

As an ideological project, platform capitalism requires work and workaround to conjure up its mesmerizing lean, distinct, "smart" images; while in operation, they are often messy, uneven, chaotic, patched together, and anchored in localities and localized realities. Through looking at how platforms spatialize, we can connect the various forms of precarity, creativity, and agency ***fixated*** in micro, lived experiences that make platform worthy of "value" in the first place, to the articulation of platform capitalism as speculation device conjured up by a slew of highly ***mobile*** specialized service providers such as financial, accounting, and legal professionals. The dialectics between fixity and mobility in different capital forms has resulted in highly uneven and hierarchal platform value chains: As PDD Holdings' share price skyrocketed nearly 450% over the past 5 years, the global-facing Temu is forcing local sellers and suppliers to operate at a loss on its platform, or otherwise risked being ban from the platform, by extension, access to overseas markets (Liu, 2023).

Joining the call to think platform capitalisms in the plural forms by considering state-capital relations (Steinberg et al., 2025), dissecting the spatialization of digital platforms also highlights that nation states are far more than just as a "feature" or a variation of different breeds of platform capitalism. In fact, platform companies exploit differences between jurisdictions to (re)produce, maintain, and service an operational space for them to function free from frictions. They are linked to and dependent on state power (Pistor, 2019). These are not new patterns of development ushered in by digital platforms per se, but rather recurring dynamics in globalization broadly speaking, and over the course of the historical formation of global media dating back to the submarine cables in the 1800s (Winseck, 2012). After all, As Julie Cohen (2019) reminds us: "technology is not a monolith, irresistible force but . . . are highly configurable, and their configurability offers multiple points of entry for interested and well-resourced parties to shape their development (p. 1)."

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References

Athique, A. (2019). Digital emporiums: Platform capitalism in India. *Media Industries*, *6*(2), 67–87.

Briziarelli, M. (2019). Spatial politics in the digital realm: The logistics/precarity dialectics and Deliveroo's tertiary space struggles. *Cultural Studies*, *33*(5), 823–840.

Cao, L. (2024). From online to onsite: Wanghong economy as the new engine driving China's urban development. *EPA: Economy and Space*, *56*, 1061–1076.

Chen, F. (2021). Variable interest entity structures in China: Are legal uncertainties and risks to foreign investors part of China's regulatory policy? *Asia Pacific Law Review*, *29*(1), 1–24.

Chen, J. Y., & Ping, S. (2020). Temporal arbitrage, fragmented rush, and opportunistic behaviors: The labor politics of time in the platform economy. *New Media & Society*, *22*(9), 1561–1579.

Cheng, L. (2023, May 4). Pinduoduo denise relocation of headquarters from China to Ireland: A serious misrepresentation, always rooted in China. *拼多多否认总部从中国迁至爱尔兰：严重失实，始终在中国*. https://www.jiemian.com/article/9345397.html

Cohen, J. E. (2019). *Between truth and power: The legal constructions of informational capitalism*. Oxford University Press.

Fan, F. (2023, May 5). PDD Holdings denies moving HQ to Ireland. *ChinaDaily*. https://www.chinadaily.com.cn/a/202305/05/WS6454a20aa310b6054fad13f3.html

Graham, M. (2020). Regulate, replicate, and resist–the conjunctural geographies of platform urbanism. *Urban Geography*, *41*(3), 453–457.

Grasten, M., Seabrooke, L., & Wigan, D. (2023). Legal affordances in global wealth chains: How platform firms use legal and spatial scaling. *EPA: Economy and Space*, *55*(4), 1062–1079.

Haberly, D., & Wójcik, D. (2022). *Sticky power: Global financial networks in the world economy*. Oxford University Press.

Harvey, D. (2014). *Seventeen contradictions and the end of capitalism*. Oxford University Press.

Hill, D., & Athique, A. (2017). The role of offshore financial centres in Indian telecoms. In A. Athique, V. Parthasarathi, & S. Srinivas (Eds.), *The Indian media economy–volume 1: Industrial dynamics and cultural adaptation* (pp. 66–92). Oxford University Press.

Hill, D. W. (2021). Trajectories in platform capitalism. *Mobilities*, *16*(4), 569–583.

Hou, J., & Zhang, Y. (2022). "Selling poverty" on Kuaishou: How entrepreneurialism disciplines Chinese underclass online participation. *Global Media and China*, *7*(3), 263–282.

Kenney, M., & Zysman, J. (2020). The platform economy: Restructuring the space of capitalist accumulation. *Cambridge Journal of Regions, Economy and Society*, *13*(1), 55–76.

Leszczynski, A. (2020). Glitchy vignettes of platform urbanism. *EPD: Society and Space*, *38*(2), 189–208.

Li, L. (2024). The specter of global ByteDance: Platforms, regulatory arbitrage, and politics. *Information, Communication & Society*, *27*, 1–17.

Liu, W. T. (2023, May 26). Temu is losing millions of dollars to send you cheap stocks. *Wired*. https://www.wired.com/story/temu-is-losing-millions-of-dollars-to-send-you-cheap-socks/#:~:text=Temu%20will%20often%20ask%20him,your%20product%20from%20their%20listings

Matsakis, L. (2023, May 3). Chinese e-commerce giant behind Temu moves HQ from Shanghai to Ireland. *Semafor*. https://www.semafor.com/article/05/03/2023/pinduoduo-ireland-dublin-temu

Murphy, K. (2024). Ireland, intellectual property and the political economy of information monopolies. *European Journal of Communication*, *39*(4), 343–359.

Palan, R., Petersen, H., & Phillips, R. (2023). Arbitrage spaces in the offshore world: Layering, "fuses" and partitioning of the legal structure of modern firms. *EPA: Economy and Space*, *55*(4), 1041–1061.

PDD Holdings. (2022). *2022 annual report*. https://investor.pddholdings.com/financial-information/annual-reports

Peck, J., & Phillips, R. (2020). The platform conjuncture. *Sociologica*, *14*(3), 73–99.

Pistor, K. (2019). *The code of capital: How the law creates wealth and inequality*. Princeton University Press.

Pollman, E. (2019). Tech, regulatory arbitrage, and limits. *European Business Organization Law Review*, *20*, 567–590.

Popiel, P., & Vasudevan, K. (2024). Platform frictions, platform power, and the politics of platformization. *Information, Communication & Society*, *27*, 1–17.

Qiu, J. L. (2023). Three approaches to platform studies: Cobweb, billiard balls, and ant societies. *Social Media + Society*, *9*, 20563051231193304.

Sadowski, J. (2020). Cyberspace and cityscapes: On the emergence of platform urbanism. *Urban Geography*, *41*(3), 448–452.

Sassen, S. (2008). Neither global nor national: Novel assemblages of territory, authority and rights. *Ethics & Global Politics*, *1*(1–2), 61–79.

Steinberg, M., & Li, J. (2016). Introduction: Regional platforms. *Asiascape: Digital Asia*, *4*, 173–183.

Steinberg, M., Zhang, L., & Mukherjee, R. (2025). Platform capitalisms and platform cultures. *International Journal of Cultural Studies*, *28*, 21–29.

Tsing, A. L. (2005). *Friction: An ethnography of global connection*. Princeton University Press.

van Doorn, N., Mos, E., & Bosma, J. (2021). Actually existing platformization: Embedding platforms in urban spaces through partnerships. *The South Atlantic Quarterly*, *120*(4), 715–731.

Wang, W., Xu, H., & Liu, Y. (2022). Platform ruralism: Digital platforms and the techno-spatial fix. *Geoforum*, *131*, 12–19.

Winseck, D. (2012). Submarine telegraphys, telegraph news, and the global financial crisis of 1873. *Journal of Cultural Economy*, *5*(2), 197–212.

Wójcik, D., & Camilleri, J. (2015). 'Capitalist tools in socialist hands'? China Mobile in global financial networks. *Transations*, *40*(4), 464–478.

Zhang, A., Roast, A., & Morris, C. (2022). Wanghong urbanism: Towards a new urban-digital spectacle. *Mediapolis*, *7*(4). https://www.mediapolisjournal.com/2022/11/wanghong-urbanism/

Zhang, L. (2021). Platformizing family production: The contradictions of rural digital labor in China. *Economic and Labor Relations Review*, *32*(3), 341–359.

Zhang, L., & Chen, J. Y. (2022). A regional and historical approach to platform capitalism: The cases of Alibaba and Tencent. *Media, Culture & Society*, *44*(8), 1454–1472.

Zhao, L. (2024). Selling rural China: The construction and commodification of rurality in Chinese promotional livestreaming. *Media, Culture & Society*, *46*(3), 481–499.

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