Essays – *peer-reviewed*
https://doi.org/10.6092/issn.1971-8853/11613
Sociologica. V.14 N.3 (2020)
ISSN 1971-8853

The Platform Conjuncture

Jamie Peck* Rachel Phillips†

Submitted: October 21, 2020 – Revised version: January 20, 2021
Accepted: January 22, 2021 – Published: January 29, 2021

Abstract

The paper engages the problematic of platform capitalism in the company of Fernand Braudel. Platform capitalism is accordingly located in the opaque zone of the so-called antimarket, "where the great predators roam," with its characteristic conditions of monopolization, concentrated economic and political power, and cultures of systematic regulatory evasion. The Braudelian schema requires that platform capitalism is situated, both historically and geographically, in this case both as a distinctive conjunctural moment and as an epiphenomenon of variegated and globalizing processes of financialization and neoliberalization. The paper offers an antidote to the mainstream treatment of platforms, with its technological exuberance, its preoccupation with internally generated dynamics, and its exaggerated claims to novelty and indeed revolutionary significance. Thinking conjuncturally about platform capitalism *qua* Braudelian capitalism does not just counter these problems, it represents a constructive supplement to extant political-economy accounts. It accentuates and problematizes non-repeating historical continuities (against presumptions of a radical technological-organizational break). And it points to constitutive conditions of coexistence (against the imaginary of a separate, self-propelling, and distinct innovation economy). To pose the platform question along with Braudel is to begin with problematics of monopoly power and antimarket behavior, rather than with technological affordances, network capacities, or the market.

Keywords: Platforms; capitalism; monopoly; market; antimarket; Braudel.

Acknowledgements

This paper began life as a sympathetic rejoinder *cum* supplement to Grabher and König's (2020) post-Polanyian treatment of platform economies, subsequently morphing (somewhat to our surprise) into a more extended thought experiment around the potential of the Braudelian framework. We are grateful to Ivana Pais and David Stark for the invitation that prompted this paper, and to Ester Cois for her assistance. Thanks also to Brett Christophers, Neil Coe, Albina Gibadullina, Gernot Grabher, Mark Graham, Paul Langley, Matt Vidal, Henry Yeung, and anonymous referees for *Sociologica* for their advice and suggestions, although none bear any responsibility for our arguments here. The support of the Social Science and Humanities Research Council of Canada is gratefully acknowledged.

* Department of Geography, University of British Columbia (Canada); jamie.peck@ubc.ca; https://orcid.org/0000-0002-1425-9705

† Department of Geography, University of British Columbia (Canada); rachel.j.phillips@gmail.com

1 Introduction: Confronting Platform Capitalism

In this paper we make common cause with those developing critical readings of platform capitalism from vantage points grounded in heterodox political economy. This work has provided a much-needed antidote to some of the most problematic features of mainstream commentary on the platform moment, with its self-regarding technological hubris, its excitable assertions of unprecedented novelty, and its tendency to minimize both historical precedents and constitutive conditions of (co)existence with financialized capitalism. Political economists of various stripes have offered a series of alternative interpretations, many of them highlighting the remarkable powers and extensive reach of Big Tech, the pervasive exploitation of gig workers and other so-called independent contractors, the routine circumvention by platform corporations of regulatory frameworks and taxation systems, the everyday abuses of market power, and much more.

In one such alternative account, recently published in this journal, Grabher and König (2020) mobilize a post-Polanyian approach to cut a distinctive and productive path between binary readings of the platform-mediated future, which have become polarized between sunny premonitions of a post-capitalist "sharing economy" and grim portents of an uber-capitalist condition of undiluted corporate rule. Working creatively with the Polanyian legacy, Grabher and König make the case for a substantivist engagement with platforms as "emerging modes of socioeconomic coordination that cannot be mapped onto the existing register of governance mechanisms," tracing the roots of the platform economy to a "complex alchemy of political, societal, institutional, and technological ingredients" (Grabher & König, 2020, pp. 96–97). They deflate the bubble of techno-futurism that has done so much to obfuscate assessments of this significant phenomenon, while also deconstructing pervasive discourses of "revolutionary" disruption. Yet there is an aspect of their framing question — post-capitalism or uber-capitalism? — that promptly recedes from view: the question of *capitalism* itself. Now, Polanyi's own critique of capitalism was also incomplete in some respects, notwithstanding his significant contributions to the understanding of marketization, liberalization, and socioeconomic transformation (see Peck, 2013; Block & Somers, 2014; Dale, 2016; Fraser, 2017). For these and other reasons, the search for a complete, discrete, and unified Polanyian method seems destined to remain a frustrated one. Considerably more generative, however, has been the practice of reading Polanyi *alongside others*, and in the spirit of and/also conversations rather than either/or debates. It is in this spirit, that of a supplement rather than a replacement, that we proceed here, proposing to complement the post-Polanyian framing proposed by Grabher and König, with which we broadly sympathize, with a parallel reading that takes its cues from the work of another heterodox and somewhat idiosyncratic theorist, Fernand Braudel.

Not unlike Polanyi, Braudel combined original and capacious thinking with a rather undisciplined writing style and sometimes inconsistent formulations, marrying encyclopedic inquiries with a reluctance to totalize or systematize. Neither Polanyi nor Braudel had any time for stage models, teleology, and economism, both instead practicing "exchangist" modes of analysis and tending to favor rhetorical exegesis, indexed to concrete historical situations, over rigorous abstraction or theoretical dogma. Crucially, both Polanyi and Braudel understood the economy to be a house of many rooms, but if the Polanyian triptych (market exchange, reciprocity, redistribution) presents as a horizontal one, Braudel's is more hierarchical (material life, market economy, capitalism). For Braudel, the material economy of everyday life represents a base of sorts ("the soil into which capitalism thrusts its roots but which it can never really penetrate"), over which is layered the more familiar and indeed

https://doi.org/10.6092/issn.1971-8853/11613

"favored terrain of the market economy," but atop of *all of* which stands, at the apex of this pyramidal conception, the shadowy "zone of the anti-market [...] the *real home* of capitalism" (Braudel, 1982, pp. 229–230, emphasis added). This hierarchical conception is joined with a subtle sense of the dynamic "social geographies" of the globalizing economy, which Braudel understands to be "neither homogenous or straightforward" (Germain, 1996, p. 205), comprising a mutating plurality of "world-economies" (*Weltwirtschaft*). In dialogue with these vivid formulations, the present paper considers how the platform moment, rather than representing some revolutionary break, reflects and refracts *rhythmic* currents in the historical geography of (monopolizing) capitalism. Taking cues from Braudel, we argue that the real home of platform *capitalism* is the zone of the antimarket, a murky but dominating layer located above the competition, where it operates as a new machine with an old purpose: that of controlling markets from above and, in the process, generating significant concentrations of political-economic power.

Since our goal here is to supplement rather than supplant the productive array of political-economic treatments of platform capitalism (see, for example, Kenney & Zysman, 2016; Langley & Leyshon, 2017; Srnicek, 2017a; Montalban et al., 2019), we set out to explore the distinctive potential of a Braudelian approach, which can be read as both affirming and adding to these extant treatments. We offer this Braudelian perspective not as partisans of longue-durée historical analysis, but on the grounds that it brings something distinctive to what should remain a heterodox, plural, and open conversation. Asking the platform question in the company Braudel is to *begin with* problematics of monopoly power and antimarket behavior, rather than with technological affordances, network capacities, or (distortions of) the market. It is categorically not to say, we emphasize, that the platform phenomenon can simply be retrofitted into some standard-issue model of capitalism, understood as a universal and unchanging system, less still that Amazon and Facebook are but new iterations of the Dutch trading houses Sixteenth Century. It is, instead, to take inspiration, and a series of conceptual cues, from the Braudelian system of thought. Braudel's approach to capitalism is certainly expansive, but great store was also set by attending to its shape-shifting mutations over time and across space. To the extent that capitalism exhibits a "certain unity," he argues, this is realized through a constellation of recurrent tendencies grounded in "its unlimited flexibility, its capacity for change and *adaptation*" (Braudel, 1982, p. 433, original emphasis). "The worst error of all," he reflects, "is to suppose that capitalism is simply an 'economic system,' whereas in fact it *lives off* the social order, standing almost on a footing with the state, whether as adversary or accomplice" (Braudel, 1984, p. 623, emphasis added). To think about platforms along with Braudel, then, is to problematize both their conjunctural specificity and their positions on the moving terrain of an always-mutating capitalism.

Engaging especially with the striking image of the antimarket, the home of the big beasts of capitalism, "where the great predators roam and the law of the jungle operates" (Braudel, 1982, p. 230), we set out in this paper to develop a Braudel-inspired sketch of the platform conjuncture, drawing on three conceptual devices borrowed from the historian's analytical repertoire. The following section begins with the antimarket, the *contre-marché*, confronting the decidedly anticompetitive culture of the platform economy, with its new modalities of monopoly rule. The second part of the paper takes as its point of departure Braudel's image of *zones d'opacité* — his portrayal of capitalism as a dimly-lit overworld — exploring how pervasive discourses of technological futurism, novelty, incommensurability, and endogenous, self-propelling dynamics continue to obscure the ways in which platform modes of (corporate) organization are coproduced with (and coexist dynamically with) entrenched features of contemporary capitalist development, including deep financialization and dysfunctional regulation. Then, in the third section of the paper, we turn to the emergent spatialities of platform capitalism as a variegated and conjunctural form(ation), insinuated as it is into everyday life and various (de)regulatory settlements, while at the same time residing in the ethereal space of the "cloud." Here, Braudel's novel conception of "world-economies" — as the coexisting fragments of an emergent globality, each with their own power centers and patterns of concentrated control — once again prompts some searching questions. The paper is concluded with some comments on the nature of platform power.

2 Where the Great Predators Roam

Immanuel Wallerstein once wrote that Braudel "viewed capitalism in a way that, in the eyes of most of his colleagues, could only be termed seeing it 'upside down' " (1991, p. 354). The Braudelian schema upends dominant understandings of capitalism in two ways. First, in contrast to conventional expectations of a prevailing trend towards competitive markets, Braudel holds that the recurrent tendencies in capitalism are for concentration and monopolization, culminating in his contrarian formulation of the antimarket. Second, against the presumption that capitalist development entails ever-more intricate divisions of labor, he maintains that capitalists are characteristically averse not just to competition but also to specialization, while displaying promiscuous appetites for "avaricious speculation." His rendering of the antimarket as the "real home of capitalism" is not just different to the orthodox tale of the market economy, with its self-regulating laws of competition, it (co)exists in a parasitic fashion with this "sunlit world" of appearances, relying upon but at the same time looming menacingly above the "transparent" domain of market exchange and the economies of everyday life as well. Apprehended as a world "out of the ordinary," the capitalist antimarket is "a shadowy zone, a twilight area of activities [that is nevertheless positioned] at the very root of what is encompassed by the term capitalism" (Braudel, 1982, pp. 405, 22). The real home of capitalism, then, is not an extension of markets and market rationality, not even a *distortion* of competitive logics. For Braudel, it is more like an inversion, an overworld of concentrated power and superprofits, located on the other side of an opaque mirror; *la zone du contre-marché* is where the big beasts roam, their powers largely unchecked. This is an "anti-market in the sense that it can only exist and prosper through continual disruption from a distance of the circular flow of economic life" (Arrighi, 2001, p. 121).

Braudel's graphic portrayal of capitalism does not imply singularity in form or indeed unilateral dominance. Capitalism is understood as a "predatory" system, *living off* the layers of economic life below, but also a polymorphic one: the "plurality of capitalism [goes] back a long way" (Braudel, 1984, p. 604). The uneven and episodic effects of finance capitalism figure prominently in this historically constructed understanding, but Braudel's longue-durée reading of the transformations of capitalist power is particularly concerned with the activities of the trading classes, and with the interrelationships between merchant capital, market economies, and states. Historically, the merchant-capitalists, notably those that came to dominate long-distance trade by stitching together smaller and localized markets in search of the highest rates of return, derived their uniquely profitable positions from "the *concentrations* [that these arrangements] made possible," generating in the process "an unrivalled machine for the rapid reproduction and increase of capital" (Braudel, 1982, p. 408, original emphasis). These traders (*les négociants*) were in the business of intermediation, but hardly mere go-betweens. They were aggregators, positioned above the fray:

> The great "merchants" of the past never specialized: they went in indiscriminately, simultaneously or successively, for trade, banking, finance, speculation on the Stock Exchange, "industrial" production, whether under the putting-out system or more rarely in manufactories (Braudel, 1984, p. 621).

The merchant capitalists reaped "the fruit of monopoly," in Maurice Dobb's terms, by way of extractive and predatory actions articulated with the market sphere (an arena of "small profits," for Braudel), but once removed from quotidian worlds of the everyday economy: "the remarkable gains of merchant capital in the fourteenth and fifteenth centuries [...] were acquired by an exclusion of the mass of the producers from sharing in the benefits of an expanded volume of trade rather than by any actual depression of the general standard of life" (Dobb, 1950, p. 119). Banaji (2020, pp. 120–121) likewise observes that, over the centuries, "there [has been] practically no sector or type of investment that [merchants] did not invade, exploit, or monopolize."

The remarkable ascendancy of the platform monopolies in recent decades has also been predicated on the exploitation of positions that bear little resemblance to those of ordinary market participants down below. While it has been common for platform operators to style themselves as enablers and intermediaries, the most successful have gone on to amass powers, capacities, and privileges commensurate with a jurisdiction-spanning, *infrastructural* presence in the economies of market exchange and everyday life (see Bratton, 2016; Kornberger et al., 2017; Plantin et al., 2018; Clarke, 2019). As Rahman and Thelen (2019, p. 180) observe, "the very idea of the 'platform' reflects an aspiration to be the foundational infrastructure of a sector — whether it is Uber's attempt to dominate transportation services from taxis to shipping or Amazon's dominance of the online retail market as a whole." As platforms have engaged in the insinuative practices of "infrastructuralization," they have reshaped not just the terms of trade but the very terrains on which it is practiced. More than this, as some platforms have morphed into low-cost, widely accessible systems, they have come to fulfill "basic" societal functions (Larkin, 2013), relied upon and even "loved" by their customers (Khan, 2017; Zuboff, 2019).[1]

Platform operators "are not generally buyers and sellers of goods themselves, as in a traditional production market [but instead] produce networked 'marketplace platforms' which in turn provide opportunities to buy and sell — skimming a percentage of each transaction as a middleman" (Castelle, 2016, p. 14). Since platforms are also positioned so as to exploit market intelligence derived from these transactional spaces (a resource now conventionally described as big data), within which they establish, maintain, and police rules of participation, their multifaceted roles clearly amount to "considerably more than just intermediation" (Christophers, 2020, p. 190). Thousands of third-party (or "complementor") firms now conduct their business *on* platforms, and according to the rules of those platforms, doing so in the context of constrained agency and asymmetrical power relations. While some have portrayed this as a new mode of competitive cooperation or "coopetition" (Ritala et al., 2014), third-party firms that do their business on platforms are routinely subject to the risk of being picked off, absorbed, or consumed by the platforms themselves, while it is common for transactional rules and even prices to be effectively dictated by the platform operators too. It has been said that complementor firms are, by definition, "dancing with wolves" (Lan et al., 2019).

Rather than simply entering conventional markets, platforms "remake (and rematerialize) them" (Cohen, 2019, p. 133), engendering transformative effects that exceed the meaning of

1. This calls to mind one of Joan Robinson's (1962, p. 130) famous aphorisms, that might be modified for these digitally mediated times: platform capitalism may be "cruel, unjust, turbulent, but it does deliver the goods, and, damn it all, it's the goods that you want."

https://doi.org/10.6092/issn.1971-8853/11613

the commonly used term "disruption." As Zysman and Kenney (2018) have argued, platforms effectively function as "regulatory structures," enabling and dictating the terms of the interactions they facilitate, and shaping the behavior of users in a fashion "geared toward the systemic collection, algorithmic processing, circulation, and monetization of user data" (van Dijck et al., 2018, p. 4). This capacity to extract and capitalize on the new "resource" of big data, a defining feature of platform capitalism, enables its corporate giants to position themselves above the market economy's ordinary fray. As the United Nations Conference on Trade and Development report *Power, Platforms and the Free Trade Delusion* explains:

> Using a combination of strengthened property rights, first-mover advantages, market power and other uncompetitive practices [...] platforms control and use digitized data to organize and mediate transactions between the various actors, and have the capability of expanding the size of such ecosystems in a circular, feedback-driven process (UNCTAD, 2018, p. vi).

In other words, the intelligence that platforms routinely collect on users — referring to personal characteristics, transaction histories, behavioral patterns, attitudes, and orientations — is the fuel for those "network effects," or demand-side economies of scale, that are said to animate the "new economics" of the platform era (Gawer, 2014, p. 1240). Platforms "become more valuable to each user as more people use them," which in turn attracts more users, after which lock-in effects heavily favor incumbents (McAfee & Brynjolfsson, 2017, p. 140; Parker et al., 2016; Cusumano et al., 2019). These network effects subsequently propel a "virtuous feedback loop that produces monopolies" (Parker et al., 2016, p. 6), most mature platform markets being ultimately dominated by "one or two giants" (Lynch, 2017, p. 802).

Management gurus and even critical commentators are wont to ascribe network effects with almost magical properties, stressing their boundless capacities for generating growth, deepening market dominance, and (eventually) turning a profit. In an early projection of the platform imaginary, venture capitalist Marc Andreessen (2011, p. C2) declared that "software is eating the world," as part of a "dramatic and broad technological shift in which software companies are poised to take over large swaths of the economy." Today, platform evangelists offer a small but significant amendment to Andreessen's claim, contending that it is not software *per se* that is eating the world, but a new and effectively contagious business model. What Sangeet Paul Choudary (2015, p. 15) conceives as platform *scale* is "powered by the ability to leverage and orchestrate a global connected system of producers and consumers toward efficient value creation and exchange," a new corporate model that has been rippling across sector after sector of the (globalizing) economy. It is argued that, in contrast to the vertically integrated corporations of the Fordist era, platform operators tend to capture and consolidate markets in a more horizontal fashion, capitalizing on what Srnicek (2017b, p. 256) describes as a "rhizomatic form of integration." Neither hierarchy nor market, the platform mode of organization deviates from the (classic) network form too, combining as it does distributed regimes of control (which some have dubbed "putting out 2.0") with the centralization of power (see Kornberger et al., 2017; Watkins & Stark, 2018). Such are their capacities to co-opt, to cross-subsidize, to loss lead, to monitor and police, and to leverage new modalities of commerce, platforms are able to surround and swallow competitors and even entire markets. And yet these predatory practices are "often hidden from view" (Rahman & Thelen, 2019, p. 180), including under the benign cloak of network economics and horizontalist metaphors.

There appears to be no stopping the platform wave. The MIT Initiative on the Digital Economy proclaims that "everywhere there *can* be a platform, there *will* be a platform" (MI-

TIDE, 2018, emphasis added), while somewhat more soberly Peter Evans and Annabel Gawer observe that "platform ecosystems"

> are gaining ground through the digitalization of products, services and business processes and in the process are reshaping the global landscape [...] online platforms have upended numerous brick and mortar chains and are making deep inroads into other industries from television to transportation. Although it is still early days, they have the potential to be equally disruptive to traditional approaches to banking, healthcare and energy services (Evans & Gawer, 2016, p. 4).

As Kenney et al. (2019, p. 877) astutely remark, however, ecosystem metaphors of this kind serve an ideological purpose in that they work both to misrepresent and to conceal "power dynamics that more closely resemble those for serfs on a feudal manor — always at the mercy of the lord who can expropriate their business without any compensation."

The explosive growth and colonizing effects of platform capitalism have been likened (even by its advocates) to land grabs, in which first-movers race to secure new territories and to build scale through the exploitation of so-called network effects, subsequently to erect daunting barriers to entry. Sometimes starting off in specialist or newly created niches (as in Amazon's initial foray into bookselling, or Uber's original focus on ride-hailing), the engine of platform economics is this relentless drive to scale, often juiced by significant injections of venture capital, generating secular trends towards diversification, consolidation, and hybridization, as dominant platforms leverage (market) power in one sector to override competition in others (Evans & Gawer, 2016; Cusumano et al., 2020). Writing in the *Sloan Management Review*, Michael Cusumano and colleagues predict that as the platform sector continues to proliferate laterally, across markets, the cumulative outcome will be deepening corporate concentration, such that "even more market power [is] concentrated in a smaller number of large platform companies" (Cusumano et al., 2020, p. 50). Furthermore, the platform giants can be expected to develop increasingly tangled and symbiotic relations with states, (would be) regulatory agencies, and political elites — echoing the recurrent fusions of capitalist and state-political power described by Braudel.

Already, the largest platforms "exercise a level of market dominance that inspires comparison to classic monopolies of the nineteenth and twentieth centuries" (Rahman & Thelen, 2019, p. 178), albeit with a new twist. This new manifestation of monopoly power is neither acquired nor maintained through traditional forms of direct ownership — as in the monopolies of the Gilded Age — but has instead accrued through distinctive, digitally-enabled capacities to *control* and *manipulate* markets, including in a host of more distantiated and mediated ways. In the words of digital futurist, Tom Goodwin:

> Uber, the world's largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate. Something interesting is happening. Since the Industrial Revolution, the world has developed complex supply chains, from designers to manufacturers, from distributors to importers, wholesalers and retailers, it's what allowed billions of products to be made, shipped, bought and enjoyed in all corners of the world. In recent times the power of the Internet, especially the mobile phone, has unleashed a movement that's rapidly destroying these layers and moving power

> to new places [...] The new breed of companies [is] the fastest-growing in history. [They occupy] *indescribably thin layers that sit on top of vast supply systems (where the costs are) and interface with a huge number of people (where the money is)* [...] The interface layer is where all the value and profit is (2015, p. 1, emphasis added).

What the platform operators *do* own, of course, is the platform itself, over which they "have a great deal of discretion" (McAfee & Brynjolfsson, 2017, p. 165).

We are unambiguously in the precincts, it would seem, of the "real home of capitalism," in which an overclass of traders and financiers "inserts itself into the chain leading from production to wholesale trade, *not seeking to take over entire responsibility for them, but to occupy the strategic points controlling the key sectors of accumulation*" (Braudel, 1984, p. 65, emphasis added). For Braudel, capitalists are defined not by their direct ownership of the means of production (as in the conventional Marxist sense), or their supply of financial resources (as neoclassical models have it), but instead by their privileged positioning, and behavior, as an elite (over)class with the power "to manipulate the market economy and create conditions of unequal exchange" (Bakker, 2007, p. 543). In the Braudelian account, the true capitalists are a breed apart; they are the big beasts operating at the very top of the food chain, "where the law of the jungle operates," like apex predators roaming above (and preying upon) small-time traders and ordinary market participants below. As Samuel Kinser says of this Braudelian conception, the "big speculators [are] another animal entirely," their privileged preserve being

> [t]he capitalist's proper sphere [...] the international world of long-distance trade and banking, the sphere of historical grandeur and of grand profits where kingdoms and fortunes are made and unmade, by virtue of the ability of the capitalist to cross frontiers and to profit from regional and national differentials in supply and demand (1981b, p. 674).

Masters of arbitrage and makers of monopolies, these arch-capitalists have long been renowned for their "power, cunning, and intelligence" (Braudel, 1982, p. 418).

One does not have to look far to see Big Tech portrayed in similar terms. In *Surveillance Capitalism,* for example, Zuboff (2019, p. 9) castigates the platform giants for staging "an unprecedented market operation into the unmapped spaces of the internet, where [they have] faced few impediments from law or competitors, like an invasive species in a landscape free of natural predators." Similarly, Maya McGuineas — president of the Committee for a Responsible Federal Budget, a Washington-based think tank closely allied to the primary circuits of financial and political power in the United States — warns that Big Tech's "addiction economy" represents a mortal threat to the free-market capitalism that her organization seeks to defend:

> [T]he new powers in the digital age have built their business models on strategies— enabled and turbo-charged by self-improving algorithms — that actively undermine the principles that make capitalism a good deal for most people. Their aim is not merely to gain and retain customers, but to create a dependency on their products [...] The capitalism that is taking shape in this century — predatory, manipulative, extremely effective at short-circuiting our rationality — is a different beast from the classical version taught in university classrooms. It cannot be regarded as beneficent and should not be given the benefit of the doubt. Profit motive and the means to create dependency is too dangerous a combination (MacGuineas, 2020, p. 12).

Big Tech has indeed been a pioneer of a "predatory, manipulative" style of capitalism, and there is no question that it is a "different beast" to the entrepreneurial firm of the (neo)classical imagination. In the 1990s, for example, Microsoft gained some notoriety for its "embrace, extend, and extinguish" (EEE) strategy, a corporate ruse intended to deter startups and other competitors from the company's theater of operations. In 2001, *United States v. Microsoft* recommended the breakup of the corporation, charging the company with abusing its market position in the so-called "browser wars," leading to the creation of a "kill zone" for would-be competitors. The ruling against Microsoft was overturned on appeal, but the findings of fact in the case were not.

For industry insiders like Albert Wenger, an early investor at Twitter, "[t]he kill zone is a real thing," representing a powerful deterrent not only to would-be competitors but also to innovation, since the evidence suggests that the rewards in winner-take-all markets now systematically favor capital and scale, rather than innovation *per se* (Schechter, 2018; Kamepalli et al., 2020).[2] The existence of kill zones — predatory spaces located around (or "under") the reserves of the platform giants — has become a socioeconomic fact of life. In fields like enterprise software and online retail in particular, platforms have practically *become* the market, such that successful third-party firms can be monitored, stalked, and picked off at will (Economist, 2018). According to Margarethe Vestager, executive vice president at the European Commission, the pivotal question has become "whether or not these markets will be open and contestable and innovative, or if they will just be governed by these walled gardens of de facto monopolies" (quoted in Satariano, 2020, p. A1). Zuboff maintains that an appropriate response to the problem of tech companies gone "rogue" is the restoration (or establishment) of a more competitive market order, supplemented by consumer protections (see Morozov, 2019). But the implication seems to be that anticompetitive and predatory behavior is somehow aberrant. On the contrary, "many platforms *by their very nature* prove to be winner-take-all markets" (Kenney & Zysman, 2016, p. 3, emphasis added; Parker et al., 2016; Lynch, 2017). Or as Christophers (2020, p. 206) succinctly puts it, "monopolization is a feature, not a bug." The antimarket does indeed seem to be the true home of platform capitalism.

3 *Zones d'Opacité*

For Braudel, the home of capitalism was a hidden abode of sorts, an occluded realm of hegemonically embedded power relations scarcely "discernible to the naked eye," the favored subjects of which practiced a "sophisticated art open only to a few initiates at most" (Braudel, 1982, p. 455; 1981, pp. 23–24). Capitalism is seen as a "world of privilege and monopoly" (Day, 1980, p. 510), in which socioeconomic elites "are engaged in circuits and calculations that ordinary people [know] nothing of," such as foreign exchange, long-distance trade, and exotic credit arrangements (Braudel, 1981, p. 24). The operations of platform firms — with their algorithmic manipulations, expert workforces, and unprecedented surveillance capacities — are by no means out of place on such a list. In fact, as Shira Ovide remarks, "tech companies [have been constructed] around software that is designed *not* to be understood by outsiders."

> Few people on the outside can truly understand how Amazon influences the prices of products we buy on its site or at other retailers; assess fears that Google funnels people to its own websites or that Apple steers people to its own apps; or peer into

2. Note that today, capital, scale, and therefore monopoly power are commonly (mis)represented as "innovation" in the technology-saturated discourse that surrounds Big Tech and the platform phenomenon.

https://doi.org/10.6092/issn.1971-8853/11613

> Facebook's strategy to squash rivals in their cribs. *All of this is, by design, shrouded in secrecy and mystery* (Ovide, 2020, pp. 1–2, emphasis added).

Even though this is a world that Braudel never got to see, and could scarcely have conceived, its pervasive culture of secrecy and obfuscation would have come as no surprise. As Wallerstein (1991, p. 355) observes, Braudel held that the stratospheric layer that was capitalism's true home was opaque "because the capitalists wanted it so," complete (market) transparency being "unthinkable." In contrast to the sunlit world of the market, "*real* capitalists," with their power plays, predatory behaviors, and monopolistic practices, are creatures of the shadows. The platform corporations — with their ubiquitous presence in everyday life and pervasive reach across highest reaches of culture and politics — may be hidden in plain sight, "right in front of our faces" (Wu, 2018, p. 11), yet the dimensions, depth, and full implications of their powers remain largely beyond grasp, if not view, not least for those with an interest in curtailing, regulating, or countering those powers. Again, this is a form of "dominance [...] *hidden from view*" (Rahman & Thelen, 2019, p. 180, emphasis added). Tim Wu consequently joins those that equate the platform era with the Gilded Age, portraying the powers of the digital moguls as new-age manifestations of "kingly prerogative."

That corporations occupying monopoly positions, and operating at the fringes of regulation, should have an interest in discretion, if not secrecy, is hardly unfathomable, and neither of course is it limited to the platform giants. While cultures of detachment and secrecy are, as Braudel emphasizes, as old as capitalism itself, these cultures exhibit a particular form in the platform era. The masters of the digital universe have been especially scrupulous, indeed effective, in their defenses of the principle (and space) of self-regulation, being shielded not only by well-resourced lobbying operations, but also by thick curtains of technological determinism and futurism, sustained by (new) cultural circuits of capitalism (see Thrift, 2005).

One of the things that digital capitalism is particularly good at, Evgeny Morozov (2019, p. 2) observes, is "cover[ing] its tracks," the giants of the technology sector having "developed a panoply of rhetorical and political tricks that insulate them from any pressure from below." The imaginary of the platform itself plays a role here, suggesting the provision of support (from below), like a Twenty-First Century utility service, and calling to mind a level playing field for "open, neutral, egalitarian" exchange (Gillespie, 2010, p. 352). Indeed, the word platform connotes "something singularly anodyne and innocuous: an operator providing a forum for others [...] while itself remaining outside the fray" (Christophers, 2020, p. 191). Meanwhile, the matrix-like capacities of platforms mean that they can appear to be everywhere but at the same time remain curiously placeless — their preferred address, appropriately enough, being "the cloud." At least prior to the "techlash" of recent years (see Atkinson et al., 2019), platform moguls were frequently lionized as entrepreneurial mavericks, as the fearless shapers of new paradigms, and as the seers (and makers) of alternative worlds. Pervasive cultures of technophilia sustain these performative mystifications, the dominant discourses of which variously obfuscate and misdirect from the black-boxed interior operations of the digital corporations, which are concealed behind proprietary software systems, functionally illegible (and practically uncontestable) user agreements, and vast arsenals of legal and lobbying firepower.

Hallmarks of platform discourse, like epochal rhetoric, narratives of digitally-enabled novelty, and celebrations of new-found economic capabilities, also function to detract attention from underlying continuities and constitutive contexts. A relevant point of reference, yet one that is frequently overlooked, is the "new economy" moment of the late 1990s, a time of irrational exuberance when romanticized notions of recession-proof economic expansion were purposefully circulated, as "heroic adventure[s] in innovation" (Feng et al., 2001, p. 468; Frank, 2000; Cassidy, 2003), through an increasingly integrated financial, business, and technological media complex. For Thrift (2005, p. 124), "the new economy story worked, and worked to the extent that it began to re-describe market fundamentals," including new registers of valuation yoked to enabling narratives of enigmatic novelty, incommensurability, and unprecedented growth potential, which inflated an historically large stock-market bubble, while deflecting arguments for regulatory intervention, on the grounds that it would kill the golden goose. Also symbolically anchored in the technology-finance nexus of the United States, the new-economy moment combined deregulationist fervor, ideological hubris, and corporate narcissism with a radical ahistoricism. But soon it was over (at least in this pre-conjunctural form). As Karel Williams (2001, p. 41) remarked at the time of the new-economy crash, it would be a mistake to bracket the preceding period off as some aberrant "episode of limited significance which can now be left to the historians of the internet," this was also "business as usual, acting out changes and continuities which are part of our future as much as our past and which have as much to do with finance and politics as with technology."

If the new-economy moment can be seen, in retrospect, as a prelude to the platform conjuncture, the latter arguably represents something beyond mere continuity, instead marking processes of extension, intensification, and normalization (see Montalban et al., 2019). As Rahman and Thelen have argued, "rather than displace previous corporate forms, platform firms actually often embrace and extend features of those models," effectively *recombining* lean, networked, and financialized modes of organization in conjunction with an augmented bundle of capacities, affordances, and orientations:

> Platform firms such as Uber and Amazon were facilitated by previous developments such as the emphasis on shareholder value, financialization, and labor-shedding. But they combine these elements with new features to produce a distinct model of the firm that poses even more extreme challenges to the social contract [...] The shift to the platform firm [...] was enabled by technologies that lowered the cost of monitoring outsourced or franchised operations. Technology thus allowed lead firms to get the "best of both worlds" — slashing labor costs and escaping regulatory oversight while at the same time exercising enormous control throughout their networks of outsourced, franchised, or contract labor, production, and manufacture (2019, pp. 179, 183).

Langley and Leyshon (2017, p. 14) strike a similar balance, portraying the platform model as a "distinct mode of sociotechnical intermediary and business arrangement," actively coproduced with ongoing processes of capitalization, that melds novel features with extant (and extended) capabilities: the platform corporations, having transcended the so-called stage of "market disruption," are now leveraging winner-take-all positions in "digital turf wars."

Contrary to the image of a digitally powered revolution, driven from within, the supply lines for these wars of maneuver and attrition unambiguously run back to the venture-capital industry and the extended apparatus of (U.S. style) financialized capitalism, which has been hooked on (and into) speculative opportunities in the platform sector in ways that do not just rhyme with but practically repeat the dynamics of the new-economy bubble. As Langley and Leyshon point out, U.S. venture-capital funds made nearly $60 billion in investments in 2015, disproportionately targeted on the software sector, the second highest annual total since the birth of the new economy in 1995. Venture capitalists have positioned themselves, once again, as sponsors of innovation-rich development, indeed as "knowledge brokers" working to "fuel the economy of tomorrow" (Zook, 2005; NVCA, 2020). Correspondingly, the platform business model has been predicated on unprecedented injections of cash, not just favoring but bankrolling strategies of long-run market dominance, most conspicuously in the celebrated "mega-deals" (exceeding $100 million) that are structured so as to capitalize "on the potential of platforms to realise monopoly rents" (Langley & Leyshon, 2017, p. 11; NVCA, 2020).

Figuring out the internal financial structure of this new new-economy has proved to be something of a challenge, not least because "[o]ne of the most remarkable things about the platform-rentier business is that the revenue model is so frequently opaque" (Christophers, 2020, p. 188). Themselves creatures of lax and forgiving regulatory environments (a.k.a. neoliberalism), the big beasts of the platform world have been consolidating monopoly positions in the face of precious few impediments. Proactively occupying that "thin layer on top" (Goodwin, 2015, p. 1), high up in the clouds, they have remained largely beyond the reach of earth-bound regulators. Most conspicuously, the framework of antitrust laws, inherited from the last century has proved to be largely toothless:

> [C]urrent law underappreciates the risk of predatory pricing and how integration across distinct business lines may prove anticompetitive. These concerns are heightened in the context of online platforms for two reasons. First, the economics of platform markets incentivize the pursuit of growth over profits, a strategy that investors have rewarded. Under these conditions predatory pricing becomes highly rational — even as existing doctrine treats it as irrational. Second, because online platforms serve as critical intermediaries, [they] control the essential infrastructure on which their rivals depend. This dual role also enables a platform to exploit information collected on companies using its services to undermine them as competitors (Kahn, 2017, p. 803).

That the platform operators remain largely impervious to meaningful regulation is a *produced* condition, and one that is being vigorously defended. The evasiveness and lobbying power of the platform corporations — what Braudel would have called their cunning — have become matters of public record and political concern. Yet as pressures for regulatory reform have been building, in Europe, the United States, Japan, and elsewhere, the defenders of corporate freedom have been mobilizing to run new kinds of interference. For example, Big Tech now has its own think tank, the Global Antitrust Institute (GAI), with an address in one of the suburban capitals of neoliberal policy advocacy and a mission to avert regulatory incursions into the space of the digital economy (see GAI, 2020; Wakabayashi, 2020). Established in 2014 at George Mason University's Antonin Scalia Law School with funding from leading tech companies like Amazon, Google, and Qualcomm, the GAI purports to advocate for "sound economic analysis" by means of legislative lobbying and "educational" efforts, including a program of institutes for judges and "competition enforcers," the reach of which is practically global (GAI, 2019).[3] Protesting rather too frequently that its own position and perspective are "balanced," its motivations merely those competition-friendly contributor to the "marketplace of ideas," the GAI (2020, p. viii) is proving to be a doughty defender of Big Tech's digital turf, contesting what it portrays as the "revolutionary zeal" of regulators, while concealing its vested interests and ideological commitments behind a veneer of scholarly, evidence-based analysis.

3. The programming of the GAI extends far beyond its U.S. base of operations, to Andalusia, Argentina, Australia, Brazil, Canada, Chile, China, Chinese Taipei, Costa Rica, the Dominican Republic, Germany, Honduras, Hong Kong, India, Japan, Luxembourg, Malaysia, Mexico, Mongolia, New Zealand, Pakistan, Peru, the Philippines, Portugal, Singapore, Slovenia, South Korea, Spain, Thailand, Vietnam, and the courts of the European Union.

Like many of the institutions that have been working in the shadows to protect and advance the interests of the platform giants, the GAI is not simply a creature of the platform moment itself, but has deeper roots in the neoliberal political project known as law and economics. Advocating for the application of orthodox economic analysis to legal cases, the law-and-economics movement established one of its beachheads in the Manne Institute for Federal Judges, with its intensive programs of education in antitrust restraint and regulatory rollbacks (Ash et al., 2019). The GIA's training program borrows this model, promulgating a "simplistic vision of markets" in tandem with a disciplined and consistent message that "the best way to foster competition is to maintain a hands-off approach to antitrust law" (Wakabayashi, 2020, p. B1).

4 Worlds of (Platform) Capitalism

Braudel reads global capitalism as a pluralized order, "going back a long way" (1984, p. 604), one shaped by an array of structural logics, organizational principles, cultures, and patterns of wealth creation. He sees capitalism as a "hydra with a hundred heads," the protean powers of which are gathered in and projected from particular places — with world cities serving as geographical anchoring points for prodigious capacities and "vast orientations," extending to the horizon (Braudel, 1982, p. 10; Braudel, quoted in Kinser, 1981b, p. 674). Once again, Braudel is standing on common ground with Polanyi, with his recognition of socioeconomic diversity and coexistence, married with a concern to "place" economies in relation both to their others and to their more-than-economic contexts. Yet whereas Polanyi proceeds by documenting different modes of economic integration and their variously "instituted" forms, Braudel travels a different path, reserving a special place for mapping the rise, fall, and interaction of various "world-economies," tied to the programmatic goal of understanding the dynamic spatialities of historical capitalism (see Helleiner, 1990; Germain, 1996; Harris, 2004). Disinclined to theorize around an allegedly axial moment of history (such as the apogee of industrial capitalism or the great-transformationalist threshold, less still the vantage point of the restructuring present), Braudel seeks to trace rhythms and patterns across an encyclopedic array of conjunctures and configurations, in search not only of recurrent processes and practices, but also inflection points, along with moments of discord, dislocation, and contradiction. The irreducibly complex outcome does not resemble a linear sequencing of stages, but instead sets up "a continuing tension between the forces of monopoly (so-called real capitalism) and the forces of liberation [...] through self-controlled activities within a complex of competitive markets" (Wallerstein, 1991, pp. 360–361). Braudel's (dis)position is that

> critics and observers generally fail to adopt the spatial-temporal horizon needed to grasp the rules of capitalist game and the ever-changing combination of disparate local conditions under which the game is played out (Arrighi, 2001, p. 116).

Extending the spatiotemporal horizons of analysis to the point of commensurability with the globalizing rules of the capitalist game amounts to an undeniably demanding remit, to theorize across conjunctural difference, to situate and to historicize, and to engage with plural and multipolar worlds always in (relational) transformation. This is not a recipe for the refinement of narrowly-drawn ideal types or extrapolation from putatively paradigmatic sites, but for searching inquiries across the "components" (or "fragments") of an evolving and variegated world economy, with an eye to the "continual reshuffling of the components with which the key capitalist players become temporarily and instrumentally identified in their ceaseless pursuit of profit" (Arrighi, 2001, p. 119).

Braudel is careful to specify what he calls "world-economies" (in a particular translation of the term *Weltwirtschaft*), each of which "only concerns a fragment of the world, an economically autonomous section of the planet able to provide for most of its own needs," the internal linkages and exchanges around which endow "a certain organic unity" (Braudel, 1984, p. 22). World-economies each have their own structural logics and organizational principles, indeed their own rhythms of operation (or "world times"); they each exhibit characteristic patterns of practice, culture, and consciousness (*mentalité*), displaying different fusions of capitalist and state power. Revealed in the "vibrating surface" made by international trade and commerce, world-economies function in the fashion of an "arterial system [that] distributes blood throughout a living organism" (Braudel, 1984, p. 83), each projecting what amount to different modalities of strategic monopoly rule (Helleiner, 1990; Webb, 1992). World-economies are each structured around a distinctive spatiality, typically anchored to a dominant city-region (the "logistical heart of its activity"), radiating out through various "lines of force" to "middle zones" and more distant peripheries. Each in their own way, world-economies concentrate economic power in the hands of capitalist elites, "powerful merchants [who] lay down the law, sometimes becoming extraordinarily wealthy," denizens of the world cities, which in turn become control points for the flow of "[n]ews, merchandise, capital, credit, people, instructions, [and] correspondence" (Braudel, 1984, p. 27). In the process, a "relative handful of *hombres de negocios*" emerge as the "high rollers of economic history" (Day, 1980, pp. 514, 512).

Platform capitalism has hardly broken with these longue-durée patterns. The highest of rollers of today's global economy today are the heads of the digital fiefdoms, commanding fortunes variously derived from online trading zones, infrastructures, and marketplaces. Jeff Bezos of Amazon, Jack Ma of Alibaba, Mark Zuckerberg of Facebook, Ma Huateng of Tencent, Bill Gates of Microsoft, Larry Page of Alphabet/Google, and others of this not-quite-so-new breed are redefining the very meaning of wealth, while the products and services of their respective operations now reach (regular) customers and (repeat) users numbering in the billions. Notwithstanding the flat-earth ideology that accompanied the globalization of the digital economy (after Friedman, 2005), its distinctive geographies of concentrated control and pervasive reach also bear a more than passing resemblance to Braudel's world-economies, and their contoured spheres of influence. Yet the task of mapping the power-geometries of platform capitalism is really only just beginning.

In one of the few comprehensive studies of the spatial structure of the platform economy, Evans and Gawer's (2016) survey of 176 of the biggest corporate players reveals a headquarters geography dominated by a handful of world-regional control centers, reaching 22 countries in total, but with intense clustering on the West Coast of the United States. With 64 of the world's leading platform corporations, the United States accounts for fully 73% of the sector's global market capitalization and 63% of sectoral employment. A distant but not insignificant second is China, with 63 lead firms and a 22% market share, with Europe and other parts of Asia accounting for the remaining (relatively modest) balance. These massive concentrations of platform power, control, and wealth can be properly described as historic; their world-facing staging grounds in San Francisco, Seattle, Beijing, Shanghai, and Shenzhen echo the hierarchical geographies of Braudel's world-economies, albeit in digital form.

Braudel maintained that the analysis and theorization of world-economies must attend not only to their "vibrating surfaces," but also to their underlying conditions of existence. He believed that the "only" method capable of shedding light on these "historical monsters" was a variant of conjunctural history, tracing the "combination of movements" underpinning capitalism's restless topography. Characteristically "lumpy," conjunctural histories are however neither erratic, nor do they tend in a unidirectional fashion towards maturation, equilibrium, or some teleological destination. Instead, these lumpy histories must engage the concrete movements of structural forces, legible as medium-term configurations approximating to the "space of a Kondratieff cycle," or a quasi-régulationist periodicity spanning several decades (Day, 1980, p. 509; Vidal, 2019), each of which is associated with a particular patterning (and culture) of powerful interests and spatial forms (Helleiner, 1990). "Braudel's conjuncturalism," Kinser (1981a, p. 94) remarks, characteristically yields a "tangle of distinctions even as it aims to disentangle," but functions at its best when specifying "movement toward or away from a change in pattern," particularly in relation to the interacting evolution of world-economies.

Suggestive though this conception is, a comprehensive mapping of the world-economies of platform capitalism is beyond the scope of the present paper, which must instead suffice with some brief pointers in this Braudelian direction. In this context, folk accounts provide one place to start. According to insiders like Marc Andreessen (2011, p. C2), it is "not an accident that many of the biggest recent technology companies are American," a position of dominance that he puts down to "[o]ur combination of great research universities, a pro-risk business culture, deep pools of innovation-seeking equity capital and reliable business and contract law [that] is unparalleled in the world." The United States has certainly benefitted from first-mover advantages in digital innovation and software development, coupled with especially deep consumer markets. But Andreessen's reading skirts around an array of more structural factors behind the preeminent position of the United States in the platform world. Situating the U.S. in comparative perspective, Rahman and Thelen (2019) identify a series of enabling conditions associated with this weakly regulated and pro-corporate variety of capitalism: a fragmented policy landscape ill-matched to the extra-regulatory entrepreneurship of the platform companies; a deeply financialized political economy flush with excess supplies of venture capital; a legal regime conducive to the formation of consumer-investor coalitions, shaped by a tradition of neoliberal antitrust law that prioritizes consumer welfare (and low prices) over assessments of market dominance; and a constellation of political forces promoting and legitimizing the interests of platform corporations in the absence of countervailing pressures from organized labor or competing fractions of capital (Rahman & Thelen, 2019, pp. 181, 193, 197). This distinctively American configuration sustains what some observers portray as a quintessentially "neoliberal narrative of platform competition," which "lionizes currently dominant firms, looks with suspicion on virtually all regulation of them, and gives current consumer interests far more weight than those of other stakeholders" (Pasquale, 2016, p. 317).[4]

The shape, evolution, and global footprint of platform capitalism cannot be dissociated from these geographical origins, even as the phenomenon is not reducible to the global diffusion of a Silicon Valley-style model. Outside the United States, platform operators encounter, adapt to, and interact with quite different regulatory and political worlds, with constitutive consequences for the actually-existing form of these digitized world-economies. Operating in the context of a balkanized internet, for example, the Chinese model of platform (state) capitalism displays a measure of relative autonomy, following a distinctive path of development, while at the same time exhibiting parallel patterns of concentrated monopoly rule and vast spatial reach. Jia et al. (2018, p. 190) remark that "the Chinese market has spawned an entirely separate ecosystem of platforms and firms, a number of which have grown in size sufficiently to rival the US platform giants." The two largest platform operators in China, Alibaba and Tencent, rank alongside the Big Four tech companies from the United States among the ten

4. The cultural politics of the so-called techlash, coupled with an increasingly restive regulatory climate, may have disrupted the dynamics of this situation, although at this point the outcomes remain difficult to predict.

most valuable companies in the world, yet of course they operate in a quite different milieu of state-capital relations. While Chinese platform operators lack the global reach of their American counterparts, their near-exclusive access to a domestic market of nearly 900 million internet users has sustained analogous processes of scale-driven network effects, including an "infrastructural" presence in the markets for retail goods (Alibaba), services (Meituan-Dianping), credit (Huabei), media (Tencent), and information (Baidu). These and other operators have been expanding into a range neighboring Asian markets.[5]

Braudel cautions against reading the monopoly powers of capitalists as if they are independently and unilaterally secured, insisting instead that they are deeply imbricated with those of capitalist states, sometimes acting as the enablers or guarantors of extra-competitive positions, elsewhere policing the rules of competition by "contain[ing] the forces of the anti-market" (Wallerstein, 1991, p. 457). Ultimately, "[c]apitalism only triumphs," Braudel (1977, p. 64) avers, "when it becomes identified with the state," its privileged position "guaranteed by, incarnated in, the hegemonic power" (Wallerstein, 1991, p. 357). Platform operators in the United States have thrived in a context of a permissive and partly incapacitated antitrust regime, institutional fragmentation, and an entrenched culture of lax regulation. On the other hand, it has been with recourse to its own variety of strategic discretion that China's party-state has "given tech firms such as Alibaba and Tencent just enough space to grow into giants" (Economist, 2020, p. 9; cf. Zheng & Huang, 2018). The Chinese platform operators have benefited from what Zheng and Huang (2018) portray as a "state sponsorship" system, including preferential status in strategic policy projects like the "Internet Plus" strategy, introduced in 2015 with the goal of "creat[ing] a new engine for economic growth" via the expansion of home-grown tech companies. Under this arrangement, support is provided for the internationalization of leading tech firms; party-state actors side with platform operators in labor disputes with gig-economy workers; the internet market is aggressively protected from foreign entrants; and substantial sources of capital are advanced to platform startups.

Yet alongside these points of difference, there are also certain resonances across the Chinese and American cases, mainly in relation to the regulation of platform competition. Chinese competition law is weakly institutionalized and inconsistently enforced, such that there have been few, if any, impediments to the merger and acquisition strategies of leading tech firms, while the tendential monopolization of the massive market for electronic payments has attracted hardly any attention from antitrust regulators (see Jia & Kenney, 2016; Coe & Yang, 2020). The outcomes of this approach are not dramatically dissimilar to those described in the U.S., where since the 1970s antitrust doctrines have been revised in accordance with Chicago-style price theory, diluting the concept of entry barriers and equating consumer welfare with corporate efficiency (Khan, 2017; Wu, 2018; Cohen, 2019). There is a sharper distinction, however, with the competition laws of the European Union, where a succession of antitrust investigations have been launched against Google in the past decade, and cases are being built against Amazon and Apple (Michaels & Schechner, 2020; see also Kang et al., 2020). Beyond this, the European policy landscape is less exposed to the kinds of regulatory evasion and arbitrage on which American platforms have thrived (see Rahman & Thelen, 2019).[6] Table 1

5. The rapacious activities of Chinese platform firms in India, for example, have included the purchase of equity stakes in a number of local startups and significant penetration of Chinese apps — opening gambits in what has been styled as a "tech Cold War," waged across the subcontinent between the U.S. giants and their Chinese counterparts (Ruehl et al., 2020).

6. It may be no coincidence that Europe has been a less accommodating home for platform enterprises, fewer than 30 of the top 200 being headquartered in the region. Most of these are concentrated in the United

provides a schematic overview of some of the major points of regulatory difference between the United States, China, and the European Union, reflecting a discontinuous pattern of interactions between states, institutional and legal orders, and the unevenly developing modalities of the platform model. In light of the distinctive transnational footprints displayed by each of the major platform operators, coupled with the complex interdependencies between different markets and regulatory regimes, this table should not be read as some approximation of free-standing "varieties" of platform capitalism, more as an input to the task of mapping its variegated zones of expansion-*cum*-transformation.

Paralleling these evolving (regulatory) geographies of platform capitalism, there are also segmentations, organizational concentrations, and functional divisions that appear to be more its own making. As powerful shapers of their own world-economies, platforms occupy, transform and rematerialize their markets and operating environments in different ways. They host, facilitate, mediate, and govern a wide array of interactions; they work with a diverse repertoire of revenue models and functional architectures; and they variously remake technical and social divisions of labor according to their specific requirements. Although most of the major platform operators may be engaged, in some fashion or another, in "restructuring the space of capitalist accumulation" (Kenney & Zysman, 2020, p. 55), both the form and the consequences of these restructuring processes vary in complex conjunction with the regulatory and corporate geographies of this (emergent) conjunctural formation.

Would-be cartographers of the world(s) of platform capitalism, however, are hardly facing conditions of unprincipled and unpatterned complexity, since there has been valuable work on different ways to systematically engage and organize its attendant contours and variegations. For example, Brett Christophers' suggestive schema separates out four modes of intermediation: *labor platforms*, through which human labor power is bought and sold; *capital platforms*, which facilitate the sale or letting of capital assets, such as real estate; *commodity platforms*, through which commodities, goods, and services are traded; and *attention platforms*, which seek to monetize and revalue the attention of their users (Christophers, 2020, p. 188). This typology usefully positions platforms on something akin to a Braudelian plane, foregrounding their role as *capitalist* intermediaries variously insinuated into the transactions, networks, chains, and relations that connect laborers with employers, sellers with buyers, producers with consumers, and so on.[7]

Kingdom, where the regulatory order is more closely aligned with that of the United States, such that platforms have enjoyed "free reign to create new markets and disintermediate existing ones" (Christophers, 2020, p. 200).

7. Parallel approaches to classification emphasize revenue and profitability (see Srnicek, 2017a), different types of activities, such as transactions, innovation, investment, or some combination of these (see Evans & Gawer, 2016; Kenney & Zysman, 2016), or distinctions drawn between platforms operating within single firms, across supply-chains, or within industries (see Gawer, 2014).

https://doi.org/10.6092/issn.1971-8853/11613

	United States	China	European Union
Mode of Government	Neoliberal governmentality; non-interventionist approach to economic policy and regulation	State capitalism; interventionist approach to economic policy and regulation	Varied modes of government; tendency toward increased interventionism
Regulatory Capacity	Jurisdictionally fragmented federalist system encourages regulatory entrepreneurship; weak regulatory capacity; holes in labor, financial, and other regulation	Centralized system; strong regulatory capacity; loose and uneven regulatory enforcement	EU rules constrain regulatory entrepreneurship and jurisdictional switching; individual member states have limited degrees of regulatory fragmentation
Antitrust Regime	Consumer welfare-oriented antitrust regime; weak antitrust enforcement in cases of concentrated market control; some special consideration for "new economy" firms	No centralized antitrust regime prior to 2007; current antitrust regime defined by strict merger control to protect domestic companies; limited antitrust enforcement in practice	Market concentration-oriented antitrust regime; enforcement focuses on abuse of market power by dominant firms; no special consideration for "new economy" firms
Data and Privacy Protection Regulations	No federal consumer data or privacy protection laws; no recognized right to be forgotten	Data and privacy protection laws currently being drafted; right to be forgotten denied by Chinese courts	Strong orientation toward consumer data protection (e.g. GDPR); right to be forgotten recognized by the European Court of Justice
Industrial Relations	Weak unionization provides little opposition to platform power; Supreme Court signals lack of support for collective bargaining for platform employees	Party-controlled unionization limits opportunities for collective bargaining; party policies empower platform owners over employees	Nascent unionization signals gathering societal mobilization against platform power; courts divided over collective-bargaining rights for platform workers

Source: authors' formulation

Table 1: Spaces of Platform Capitalism I: Regulatory Geographies

Table 2 takes this schema as a point of departure: Uber is offered as an example of a labor platform; Airbnb and Amazon stand in as proxies for capital and commodity platforms, respectively; and Google exemplifies an attention platform; to which we add a fifth, the *innovation platform*, illustrated by the case of Salesforce.[8] Again, the point here is not to reify a taxonomic categorization, but to illustrate the diversity of the platform economy itself (see also Elder-Vass, 2016; Grabher & König, 2020; Kenney & Zysman, 2020; Vallas & Schor, 2020). These might be thought of as (some of) the coexisting world-economies of platform capitalism, each reaching out from its own "home" territories across an array of markets, infrastructural networks-cum-scales, and transactional spaces. Some, like Amazon for example, are architects of their

8. Evans and Gawer (2016, p. 9) define innovation platforms this way: "a technology, product or service that serves as a foundation on top of which other firms (loosely organized into an innovative ecosystem) develop complementary technologies, products or services."

https://doi.org/10.6092/issn.1971-8853/11613

own (unevenly contested) labor systems, combining a concentrated managerial core with an extensive network of workers and "independent" contractors, while others, such as Airbnb, operate with a tiny cadre of highly-skilled "venture laborers," mobilizing at a distance a vast network of platform participants (see Neff, 2012; Stone, 2013).

	Uber *Labor platform*	**Amazon** *Commodity platform*	**Airbnb** *Capital platform*	**Google** *Attention platform*	**Salesforce** *Innovation platform*
Headquarters Location	San Francisco Bay Area, CA	Seattle, WA	San Francisco Bay Area, CA	San Francisco Bay Area, CA	San Francisco Bay Area, CA
Division of Labor	Managerial core + dispersed network of independent contractors	Managerial core + dispersed logistics and distribution labor + independent contractors	Managerial core + non-employee labor (e.g. cleaning and maintenance staff)	Managerial core + independent contractors working alongside the managerial core	Managerial core + distributed network of developers who build on top of the platform
Site of Intervention	Local labor markets	Markets for goods at various scales	Local home rental and hospitality markets	Advertising markets at various scales	Industry technology ecosystem
Scale of Operations	Nearly global	Nearly global	Nearly global	Nearly global	Concentrated in North America and Europe
Intermediation	Local workers + service consumers	Spatially disparate sellers + buyers or producers + consumers	Capital owners + renters	Spatially disparate web users + advertisers	Spatially disparate companies
Forms of Value Creation and Capture	Network effects; transaction fees	Network effects; transaction fees; product sales	Network effects; transaction fees	Network effects; advertising fees	Revenue sharing
Control Mechanisms	Centralized algorithmic control of drivers; user agreements; systems of valuation (e.g. ratings)	Centralized control of supply chains and logistics; systems of valuation (e.g. ratings); user agreements with sellers; data manipulation	User agreements; systems of valuation (e.g. ratings)	Walled garden approach; control over consumer data	Centralized control of the core platform architecture upon which developers build; controlled access to marketplace platform
Other Activities	Uber Eats; Uber Freight	Amazon Web Services; Amazon Marketplace; Amazon Prime; Amazon Music; Whole Foods; Kindle; Fire TV; Echo; Alexa	Airbnb Experiences	G-Suite; Playstore; Android; Google Cloud; advertising products; Google Nest	Consulting and professional services; software products

Source: Authors' Formulation

Table 2: Spaces of Platform Capitalism II: Corporate Geographies

For all this diversity, however, there are cross-cutting characteristics too, some of which resonate with Braudel's depictions of world-economies, with their various cores, peripheries, intermediate zones, and "lines of force." According to Annabelle Gawer (2014, p. 1240), a feature common to all platforms is their reliance on "a modular technological architecture made up of a core and a periphery," which in turn is reflected in bespoke accounting regimes and novel architectures of control (see Kornberger et al., 2017). Organizationally, this materializes as a separation between a relatively stable core, under the direct control of platform owners, and an array of "variable peripheral components" that are differently shaped and developed in conjunction with platform users (Baldwin & Woodward, 2009, p. 24). This, in turn, is related to particular regimes of power and control.

Vallas and Schor (2020, p. 273) argue that platforms succeed — in facilitating trade, connecting users, or capturing value — when they are able to "externalize responsibility and control over economic transactions while still exercising concentrated power." Kornberger et al. (2017, p. 79) likewise explain that while the operational reach of platforms is "radically distributed," a largely invariant condition is that "power remains centralized." As Table 2 illustrates, platform operators centralize and concentrate power in diverse ways, but they all do it: labor platforms like Uber deploy algorithmic systems and regulatory evasion to manage a distributed fleet of nominally self-employed drivers; capital platforms like Airbnb reserve their right to exclude users and to ban some rental activities; innovation platforms like Salesforce retain control over the operating system upon which other applications are built. The monopolization of information on platform participants, their transactions, and even their desires, is the key resource in this context; in contrast to the always-imperfect information possessed by conventional market actors, platform operators are positioned so as to monitor all sides of the transactional relation, actual and potential, mobilizing modes of long-distance surveillance and control that for Braudel would have been unimaginable — albeit in a strange way predictable. As Tim Wu (2018, p. 11) has protested, the overlords of today's platform fiefdoms "seem to know too much about us," exercising "too much power over what we see, hear, do, and even feel."

5 Conclusion: Platform Power

In July 2020, Jeff Bezos of Amazon, Tim Cook of Apple, Mark Zuckerberg of Facebook, and Sundar Pichai of Alphabet were summoned to appear before a panel of the United States Congress investigating allegations of antitrust violations and other abuses of power, position, and privilege, a confrontation that some commentators likened to the long-delayed moment of judgment faced by Big Tobacco a generation before. The confrontation was anticlimactic, but could yet mark a milestone in a regulatory struggle that seems destined to last for years (see Kang et al., 2020; Subcommittee on Antitrust, Commercial and Administrative Law, 2020). The day after the hearings, as chance would have it, the Big Four reported their quarterly earnings. In the throes of an unprecedented collapse of the U.S. economy, ravaged by the COVID-19 pandemic, the platform firms were thriving. Facebook's profits almost doubled from the previous year, while Amazon reported a 40% increase in sales, the Big Four posting combined profits of $28.6 billion for a quarter in which their aggregate market capitalization ballooned to $5 trillion. Alongside Big Pharma, the platform giants have been the most significant beneficiaries of the global crisis triggered by the pandemic (see Financial Times, 2020). Even though, in the early stages of the crisis, the platform operators "felt some sting from the spending slowdown," Wakabayashi et al (2020, p. B1) report, this new generation of corporate giants would demonstrate once again, as occupants of the commanding heights of digital capitalism, that "they are operating on a different playing field from the rest of the economy."

In the space of two decades, the world's leading platform operators have consolidated positions at the weakly-regulated summit of contemporary capitalism. Taking our cues here from the creative formulations of Fernand Braudel, for whom capitalist power is always exercised from a "narrow platform" (Braudel, 1977, p. 113; Day, 1980, p. 108), we have argued in this paper that platforms represent a "new business model *within* capitalism" (Srnicek, 2017b, p. 254, emphasis added), but also that they also stand for something more specific than that — as new machines for the concentration of power and the monopolization of markets, working from that "restricted layer" that Braudel called the antimarket, newly constituted as a placeless place in the clouds with its very own breed of great predators. In a context such as this, which might be regarded as both familiar and strange, one of the benefits of traveling with Braudel is that inquiries pointedly *begin* with monopoly power and anticompetitive practices, rather with notions of technologically induced disruption, or the magical properties of network effects.

Platform capitalism, we have argued, represents more than a new way of delivering the goods (cf. Robinson, 1962), but functions as a machine for concentrating and exploiting political-economic power. The monopoly practices of platform corporations, as Christophers (2020) has demonstrated, are a defining feature of this system, not an anomaly or a bug. This defining feature, however, should not be confused with an eternal and mechanically produced characteristic, since the conjunctural condition of platform capitalism is neither stable nor free of contradiction. As Grabher & König (2020, p. 110) conclude, "the various institutional configurations and regulatory regimes of [the] platform economy" are still very much "in the making," leaving open a host of questions concerning how the platform model "might be combined with, or live alongside other governance models, in various degrees of contradiction or complementarity." And as Julie Cohen (2019) has argued, also striking a Polanyian tone, the distinctive dynamics of platformization will surely be met with countermeasures and countermovements, although the content and consequences of these counteractions are ultimately matters of politics, not functional predetermination. The institutional legacies of double movements played out in the previous century, however, seem to be ill-matched for this challenging task. New modalities of counterpolitics will surely be required, given the nature of this particular beast.

References

Andreessen, M. (2011). Why Software is Eating the World. *Wall Street Journal*, 20 August, C2.

Arrighi, G. (2001). Braudel, Capitalism, and the New Economic Sociology. *Review*, *24*(1), 107–123. https://krieger2.jhu.edu/arrighi/NewEconomicSoc_000.pdf

Ash, E., Chen, D.L., & Naidu, S. (2019). Ideas Have Consequences: The Impact of Law and Economics on American Justice. *Center for Law & Economics Working Paper Series*, *4*. Zurich: Center for Law & Economics. https://doi.org/10.3929/ethz-b-000376884

Atkinson, R.D., Brake, D., Castro, D., Cunliff, C., Kennedy, J., McLaughlin, M., McQuinn, A., & New, J. (2019). A Policymaker's Guide to the "Techlash." What It Is and Why It's a Threat to Growth and Progress. *Information Technology and Innovation Foundation*, October 28. https://itif.org/publications/2019/10/28/policymakers-guide-techlash

Bakker, I. (2007). Social Reproduction and the Constitution of a Gendered Political Economy. *New Political Economy*, *12*(4), 541–556. https://doi.org/10.1080/13563460701661561

Baldwin, C.Y., & Woodard, J.J. (2009). The Architecture of Platforms: A Unified View. In A. Gawer (Ed.), *Platforms, Markets and Innovation* (pp. 19–44). Cheltenham: Edward Elgar. https://doi.org/10.2139/ssrn.1265155

Banaji, J. (2020). *A Brief History of Commercial Capitalism*. Chicago: Haymarket.

Block, F., & Somers, M.R. (2014). *The Power of Market Fundamentalism: Karl Polanyi's Critique*. Cambridge, MA: Harvard University Press.

Bratton, B.H. (2016). *The Stack*. Cambridge, MA: MIT Press.

Braudel, F. (1977). *Afterthoughts on Material Civilization and Capitalism*. Baltimore: Johns Hopkins University Press.

Braudel, F. (1981). *The Structures of Everyday Life*. New York: Harper & Row.

Braudel, F. (1982). *The Wheels of Commerce*. New York: Harper & Row.

Braudel, F. (1984). *The Perspective of the World*. New York: Harper & Row.

Cassidy, J. (2003). *Dot.Con*. New York: HarperCollins.

Castelle, M. (2016). Marketplace Platforms or Exchanges? Financial Metaphors for Regulating the Collaborative Economy. *Economic Sociology*, *17*(3), 14–26. http://hdl.handle.net/10419/156076

Choudary, S.P. (2015). *Platform Scale*. Singapore: Platform Thinking Labs.

Christophers, B. (2020). *Rentier Capitalism*. London: Verso Books.

Clarke, C. (2019). Platform Lending and the Politics of Financial Infrastructures. *Review of International Political Economy*, *26*(5), 863–885. https://doi.org/10.1080/09692290.2019.1616598

Coe, N., & Yang, C. (2020). *Mobile Gaming Production Networks, Platform Business Groups and the Market Power of China's Tencent*. Mimeo. Department of Geography, National University of Singapore.

Cohen, J.E. (2019) *Between Truth and Power*. New York: Oxford University Press.

Cusumano, M.A., Gawer, A. & Yoffie, D.B. (2019). *The Business of Platforms*. New York: Harper Business.

Cusumano, M.A., Yoffie, D.B., & Gawer, A. (2020). The Future of Platforms. *MIT Sloan Management Review*, *61*(3), 46–54. https://sloanreview.mit.edu/article/the-future-of-platforms/

Dale, G. (2016). *Reconstructing Karl Polanyi*. London: Pluto Press.

Day, J. (1980). Fernand Braudel and the Rise of Capitalism. *Social Research*, *47*(3), 507–518.

Dobb, M. (1950). *Studies in the Development of Capitalism*, 4th edition. London: Routledge & Kegan Paul.

The Economist (2018). Into the Danger Zone. June 2, 61–63. https://www.economist.com/business/2018/06/02/american-tech-giants-are-making-life-tough-for-startups

The Economist (2020). Xi's New Economy. August 15, 9. https://www.economist.com/weeklyedition/2020-08-15

Elder-Vass, D. (2016). *Profit and Gift in the Digital Economy*. Cambridge: Cambridge University Press.

Evans, P.C., & Gawer, A. (2016). *The Rise of the Platform Enterprise*. New York: Center for Global Enterprise.

Feng, H., Froud, J., Johal, S., Haslam, C., & Williams, K. (2001). A New Business Model? The Capital Market and the New Economy. *Economy and Society*, *30*(4), 467–503. https://doi.org/10.1080/03085140120089063

Financial Times (2020). Prospering in the Pandemic: The Top 100 Companies. June 18. https://www.ft.com/content/844ed28c-8074-4856-bde0-20f3bf4cd8f0

Frank, T. (2000). *One Market under God*. New York: Doubleday.

Fraser, N. (2017). Why Two Karls are Better than One: Integrating Polanyi and Marx in a Critical Theory of the Current Crisis. *Working Paper der DFG-Kollegforscher_innengruppe Postwachstumsgesellschaften*, No. 1/2017, Jena.

Friedman, T.L. (2005). *The World is Flat*. New York: Farrar, Straus & Giroux.

Gawer, A. (2014). Bridging Differing Perspectives on Technological Platforms: Toward an Integrative Framework. *Research Policy*, *43*, 1239–1249. https://doi.org/10.1016/j.respol.2014.03.006

GAI [Global Antitrust Institute] (2019). *Annual Report, 2018–2019*. Fairfax, VA: Antonin Scalia Law School, George Mason University.

GAI (2020). *The Global Antitrust Institute Report on the Digital Economy*. Fairfax, VA: Antonin Scalia Law, School George Mason University.

Germain, R.D. (1996). The Worlds of Finance: A Braudelian Perspective on IPE. *European Journal of International Relations*, *2*(2), 201–230. https://doi.org/10.1177/1354066196002002003

Gillespie, T. (2010). The Politics of "Platforms." *New Media & Society*, *12*(3), 347–364. https://doi.org/10.1177/1461444809342738

Goodwin, T. (2015). The Battle is for the Customer Interface. *TechCrunch*, March 3. https://techcrunch.com/2015/03/03/in-the-age-of-disintermediation-the-battle-is-all-for-the-customer-interface/

Grabher, G., & König, J. (2020). Disruption, Embedded. A Polanyian Framing of the Platform Economy. *Sociologica*, *14*(1), 95–118. https://doi.org/10.6092/issn.1971-8853/10443

Harris, O. (2004). Braudel: Historical Time and the Horror of Discontinuity. *History Workshop Journal*, *57*, 161–174. https://doi.org/10.1093/hwj/57.1.161

Helleiner, E. (1990). Fernand Braudel and International Political Economy. *International Studies Notes*, *15*(3), 73–78.

Jia, K., & Kenney, M. (2016). Mobile Internet Business Models in China: Vertical Hierarchies, Horizontal Conglomerates, or Business Groups?. *BRIE Working Paper*, *6*. Berkeley: Berkeley Roundtable on the International Economy. https://brie.berkeley.edu/sites/default/files/working-paper-2016-6.jiakenney.pdf

Jia, K., Kenney, M. & Zysman, J. (2018). Global Competitors? Mapping the Internationalization Strategies of Chinese Digital Platform Firms. In R. van Tulder, A. Verbeke, & L. Piscetello (Eds.), *International Business in the Information and Digital Age* (pp. 187–216). Bingley, UK: Emerald Publishing.

Kamepalli, S.K., Rajan, R., & Zingales, L. (2020). Kill Zone. *NBER Working Paper*, 27146. Cambridge, MA: National Bureau of Economic Research. http://www.nber.org/papers/w27146

Kahn, L.M. (2017). Amazon's Antitrust Paradox. *Yale Law Journal*, *126*, 710–805.

Kang, C. Benner, K., Lohr, S., & Wakabayashi, D. (2020). U.S. Suit Against Google is Said to Focus on its Dominance in Search. *New York Times*, September 23, B1.

Kenney, M., Rouvinen, P., Seppälä, T., & Zysman, J. (2019). Platforms and Industrial Change. *Industry and Innovation*, *26*(8), 871–879. >https://doi.org/10.1080/13662716.2019.1602514>

Kenney, M., & Zysman, J. (2016). The Rise of the Platform Economy. *Issues in Science and Technology*, *32*(3), 61–69. https://issues.org/the-rise-of-the-platform-economy/

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. https://doi.org/10.1093/cjres/rsaa001

Kinser, S. (1981a). *Annaliste* Paradigm? The Geohistorical Structuralism of Fernand Braudel. *American Historical Review*, *86*(1), 63–105. https://doi.org/10.1086/ahr/86.1.63

Kinser, S. (1981b). Capitalism Enshrined: Braudel's Triptych of Modern Economic History. *Journal of Modern History*, *53*(4), 673–682. https://doi.org/10.1086/242372

Kornberger, M., Pflueger, D., & Mouritsen, J. (2017). Evaluative Infrastructures: Accounting for Platform Organization. *Accounting, Organizations and Society*, *60*, 79–95. https://doi.org/10.1016/j.aos.2017.05.002

Lan, S., Liu, K., & Dong, Y. (2019). Dancing with Wolves: How Value Creation and Value Capture Dynamics Affect Complementor Participation in Industry Platforms. *Industry and Innovation*, *26*(8), 943–963. https://doi.org/10.1080/13662716.2019.1598339

Langley, P., & Leyshon, A. (2017). Platform Capitalism: The Intermediation and Capitalisation of Digital Economic Circulation. *Finance and Society*, *3*(1), 11–31. https://doi.org/10.2218/finsoc.v3i1.1936

Larkin, B. (2013). The Politics and Poetics of Infrastructure. *Annual Review of Anthropology*, *42*(1), 327–343. https://doi.org/10.1146/annurev-anthro-092412-155522

Lynch, L.M. (2017). Amazon's Antitrust Paradox. *Yale Law Journal*, *126*, 710–805. https://digitalcommons.law.yale.edu/ylj/vol126/iss3/3

MacGuineas, M. (2020). Capitalism's Addiction Problem. *Atlantic Monthly*, April, 9–12. https://www.theatlantic.com/magazine/archive/2020/04/capitalisms-addiction-problem/606769/

McAfee, A., & Brynjolfsson, E. (2017). *Machine, Platform, Crowd*. New York: W.W. Norton.

Michaels, D., & Schechner, S. (2020). Apple Pay, App Store Face EU Probes. *Wall Street Journal*, June 17, B1.

MITIDE [MIT Initiative on the Digital Economy] (2018). *Platform Strategy Summit Report*. Cambridge: MITIDE.

Montalban, M., Frigant, V., & Jullien, B. (2019). Platform Economy as a New Form of Capitalism: A Régulationist Research Programme. *Cambridge Journal of Economics*, *43*(4), 805–824. https://doi.org/10.1093/cje/bez017

Morozov, E. (2019). Capitalism's New Clothes. *The Baffler*, February 4. https://thebaffler.com/latest/capitalisms-new-clothes-morozov

Neff, G. (2012). *Venture Labor*. Cambridge, MA: MIT Press.

NVCA [National Venture Capital Association] (2020). *2020 Yearbook*. Washington, DC: NVCA.

Ovide, S. (2020). Congress Doesn't Get Big Tech. By Design. *New York Times*, July 29. https://www.nytimes.com/2020/07/29/technology/congress-big-tech.html

Parker, G.G., Van Alstyne, M.W., & Choudary, S.P. (2016). *Platform Revolution*. New York: W.W. Norton.

Pasquale, F. (2016). Two Narratives of Platform Capitalism. *Yale Law and Policy Review*, *35*, 309–319.

Peck, J. (2013). For Polanyian Economic Geographies. *Environment and Planning A*, *45*(7), 1545–1568. https://doi.org/10.1068/a45236

Plantin, J-C., Lagoze, P., Edwards, P.N., & Sandvig, C. (2018). Infrastructure Studies Meet Platform Studies in the Age of Google and Facebook. *New Media & Society*, *20*(1), 293–310. https://doi.org/10.1177/1461444816661553

Rahman, K.S., & Thelen K. (2019). The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism. *Politics and Society*, *47*(2), 177–204. https://doi.org/10.1177/0032329219838932

Ritala, P., Golnam, A., & Wegmann, A. (2014). Coopetition-Based Business Models: The Case of Amazon.com. *Industrial Marketing Management*, *43*(2), 236–249. https://doi.org/10.1016/j.indmarman.2013.11.005

Robinson, J. (1962). *Economic Philosophy*. Harmondsworth: Penguin.

Ruehl, M., Findlay, S., & Kynge, J. (2020). Tech Cold War Comes to India. *Financial Times*, August 30, 19.

Satariano, A. (2020). Europe Tries New Strategy to Limit Tech. *New York Times*, July 31, A1.

Schechter, A. (2018). Google and Facebook's "Kill Zone." *Promarket*, May 25. https://promarket.org/2018/05/25/google-facebooks-kill-zone-weve-taken-focus-off-rewarding-genius-innovation-rewarding-capital-scale/

Srnicek, N. (2017a). *Platform Capitalism*. Cambridge: Polity.

Srnicek, N. (2017b). The Challenges of Platform Capitalism: Understanding the Logic of a New Business Model. *Juncture*, *23*(4), 254–257. https://doi.org/10.1111/newe.12023

Stone, B. (2013). *The Everything Store*. New York: Random House.

Subcommittee on Antitrust, Commercial and Administrative Law (2020). *Investigation of Competition in Digital Markets*. Washington, DC: United States House of Representatives, Subcomittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary.

Thrift, N. (2005). *Knowing Capitalism*. London: Sage.

UNCTAD [United Nations Conference on Trade and Development] (2018). *Trade and Development Report: Power, Platforms, and the Free Trade Delusion*. Geneva: United Nations Conference on Trade and Development.

Vallas, S., & Schor, J.B. (2020). What Do Platforms Do? Understanding the Gig Economy. *Annual Review of Sociology*, *46*, 273–294. https://doi.org/10.1146/annurev-soc-121919-054857

van Dijck, J., Poell, T., & de Waal, M. (2018). *The Platform Society*. New York: Oxford University Press.

Vidal, M. (2019). *The Next Stage of Capitalism? The Digital Revolution, Platform Business Models and Capitalist Growth Regimes*. Presentation at the Weizenbaum-Institut für die vernetzte Gesellschaft, Berlin, October 22.

Wakabayashi, D. (2020). Big Tech Funds a Think Tank Pushing for Fewer Rules. For Big Tech. *New York Times*, July 26, B1.

Wakabayashi, D., Weise, K., Nicas, J., & Isaac, M. (2020). Lean Times, But Fat City for the Big 4 of High Tech. *New York Times*, July 31, B1.

Wallerstein, I. (1991). Braudel on Capitalism, or Everything Upside Down. *Journal of Modern History*, *63*(2), 354–361. https://doi.org/10.1086/244319

Watkins, E.A., & Stark, D. (2018). The Möbius Organizational Form: Make, Buy, Cooperate or Co-opt? *Sociologica*, *12*(1), 65–80. https://doi.org/10.6092/issn.1971-8853/8364

Webb, J. (1992). Braudel's Civilizational Economics. *Comparative Civilizations Review*, *27*, 143–147. https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=1267&context=ccr

Williams, K. (2001). Business as Usual. *Economy and Society*, *30*(4), 399–411. https://doi.org/10.1080/03085140120089036

Wu, T. (2018). *The Curse of Bigness*. New York: Columbia Global Reports.

Zheng, Y., & Huang, Y. (2018). *Market in State*. New York: Cambridge University Press.

Zook, M. (2005). *The Geography of the Internet Industry*. Oxford: Blackwell.

Zuboff, S. (2019). *The Age of Surveillance Capital*. New York: PublicAffairs.

Zysman, J., & Kenney, M. (2018). The Next Phase of the Digital Revolution. *Communications of the ACM*, *81*(2), 54–63. https://doi.org/10.1145/3173550

Jamie Peck: Department of Geography, University of British Columbia (Canada)
https://orcid.org/0000-0002-1425-9705
jamie.peck@ubc.ca; http://blogs.ubc.ca/peck/
Jamie Peck is Canada Research Chair in Urban & Regional Political Economy and Professor of Geography at the University of British Columbia, Canada, and Global Professorial Fellow at the Institute for Culture and Society at Western Sydney University, Australia. His most recent book is *Market/Place: Exploring Spaces of Exchange*, coedited with Christian Berndt and Norma Rantisi.

Rachel Phillips: Department of Geography, University of British Columbia (Canada)
rachel.j.phillips@gmail.com
Rachel Phillips is a doctoral student in the Department of Geography at the University of British Columbia. Her research focuses on the intersections between law and (geographical) political economy.