Evgeny Morozov Critique of Techno-Feudal Reason

First the good news. The moratorium on imagining the end of capitalism, noted in the 1990s by Fredric Jameson, has finally expired. The decades-long recession of the progressive imagination is over. Apparently the task of envisioning systemic alternatives has become much easier, now that we are allowed to work with dystopian options—for apparently the long-awaited end of capitalism could merely be the beginning of something much worse. Late capitalism is certainly bad enough, with its explosive cocktail of climate change, inequality, police brutality and the deadly pandemic. But having made dystopia great again, some on the left have quietly moved to revise the Jamesonian adage: today, it's easier to imagine the end of the world than the *continuation* of capitalism as we know it.

The not-so-good news is that, in undertaking this speculative exercise in apocalyptic scenario-planning, the left has a hard time differentiating itself from the right. In fact, the two ideological poles have all but converged on a shared description of the new reality. For many in both camps, the end of actually existing capitalism no longer means the advent of a better day, whether democratic socialism, anarcho-syndicalism or 'pure' classical liberalism. Instead, the emerging consensus is that the new regime is nothing short of feudalism—an -ism with very few respectable friends. True, today's neo-feudalism arrives with catchy slogans, slick mobile apps, even the promise of eternal virtual happiness in the borderless demesne of Zuckerberg's metaverse. Its vassals have swapped their medieval garb for the elegant t-shirts from Brunello Cucinelli and sneakers from Golden Goose. Many adherents of the neo-feudal thesis contend that its rise is concomitant with that of Silicon Valley. Thus, terms like 'technofeudalism', 'digital feudalism' and 'information feudalism' are frequently bandied around. footnote¹ 'Smart feudalism' is yet to gain much traction, but it may not be far away.

On the right, the most vocal proponent of the 'return to feudalism' thesis has been the conservative urban theorist Joel Kotkin, who targeted the power of 'woke' technologiarchs in *The Coming of Neo-Feudalism* (2020). While Kotkin goes for 'neo', Glen Weyl and Eric Posner, younger thinkers of a more neoliberal persuasion, opted for the 'techno' prefix in their much-discussed *Radical Markets* (2018). 'Techno-feudalism', they write, 'stunts personal development, just as feudalism stunted the acquisition of education or investment in improving land.'footnote² For classical liberals, of course, capitalism, corroded by politics, is always on the verge of lapsing back into feudalism. Yet some on the radical right see neo-feudalism as a project to be embraced. Going under labels such as 'neo-reaction' or 'dark enlightenment', many are close to the billionaire investor Peter Thiel. Among them is the neo-reactionary technologist-cumintellectual Curtis Yarvin, who hypothesized a neo-feudal search engine, which he cutely named Feudl, as early as 2010.footnote³

On the left, the list of people who have flirted with 'feudalist' concepts is long and growing: Yanis Varoufakis, Mariana Mazzucato, Jodi Dean, Robert Kuttner, Wolfgang Streeck, Michael Hudson and, ironically, even Robert Brenner, of the eponymous Brenner Debate on the transition from feudalism to capitalism. footnote⁴ To their credit, none of them goes as far as to claim that capitalism is completely extinct or that we are

back in the Middle Ages. The more careful of them, like Brenner, suggest that features of the current capitalist system—prolonged stagnation, politically driven upward redistribution of wealth, ostentatious consumption by the elites combined with increasing immiseration of the masses—recall aspects of its feudal predecessor, even if capitalism still very much rules the day. Yet for all these disclaimers, many on the left have found that calling Silicon Valley or Wall Street 'feudal' is simply irresistible, just as many pundits cannot resist calling Trump or Orbán 'fascist'. The actual connection to historical fascism or feudalism might be tenuous, but the wager is that there is enough shock value in the proclamation to rouse the soporific public from its complacency. Plus, it makes a good meme. The hungry crowds on Reddit and Twitter love it: a YouTube video of a discussion on techno-feudalism by Varoufakis and Slavoj Žižek garnered over 300,000 views in just three weeks. footnote⁵

In the case of well-known figures like Varoufakis and Mazzucato, tantalizing their audiences with invocations of feudal glamour may provide a media-friendly way to recycle arguments they have made before. In Varoufakis's case, techno-feudalism seems to be mostly about the perverse macroeconomic effects of quantitative easing. For Mazzucato, 'digital feudalism' refers to the unearned income generated by tech platforms. Neo-feudalism is often proposed as a way to bring conceptual clarity to the most advanced sectors of the digital economy, where the left's brightest minds still find themselves very much in the dark. Are Google and Amazon capitalists? Are they rentiers, as Brett Christophers's Rentier Capitalism suggests? footnote What about Uber? Is it just an intermediary, a rent-taking platform that has inserted itself between drivers and passengers? Or is it producing and selling a transportation service?footnote⁷ These questions are not without consequences for how we think about contemporary capitalism itself, heavily dominated by technology companies. The idea that feudalism is making a comeback also coheres with left critiques condemning capitalism as extractivist. If today's capitalists are mere lazy rentiers who contribute nothing to the production process, don't they deserve to be downgraded to the status of feudal landlords? This embrace of feudal imagery by media- and memefriendly figures of the left intelligentsia shows no signs of ceasing. Ultimately, though, the popularity of feudal-speak is a testament to intellectual weakness, rather than media savviness. It is as if the left's theoretical framework can no longer make sense of capitalism without mobilizing the moral language of corruption and perversion. In what follows I delve into some landmark debates on the distinguishing features that differentiate capitalism from earlier economic forms—and those that define politicaleconomic operations in the new digital economy—in hope that a critique of technofeudal reason may throw fresh light on the world we're in.

1. feudalist logics

Neo-reactionaries apart, virtually everyone who uses the term finds neo-feudalism deplorable, a throwback to an oppressive past. But what exactly is wrong with it? Here, as with Tolstoy's unhappy families, those unhappy with neo-feudalism are all unhappy in their own way. The differences derive in part from the contested nature of the term 'feudalism' itself. Is it an economic system, to be evaluated in terms of its productivity and openness to innovation? Or is it a socio-political system, to be assessed in terms of who exercises power within it, how, and over whom? This is hardly a new debate—both medievalists and Marxists know it well—but these definitional ambiguities have crossed over into the nascent discussions about neo- and techno-feudalism.

For Marxists, the term 'feudalism' refers, above all, to a mode of production. The concept thus defines an economic logic through which surplus produced by the peasants—the linchpin of the feudal economy—is appropriated by the landlords. footnote⁸ Of course, viewing feudalism as a mode of production does not mean that political and cultural factors did not matter. Not all peasants, lands and landlords were alike; all sorts of multi-level hierarchies and intricate distinctions—rooted in provenance, tradition, status, force—shaped interactions not only between classes but also within them. Feudalism's own conditions of possibility were as complex as those of the capitalist regimes that succeeded it. For example, the peculiar nature of sovereignty under feudalism—as Perry Anderson emphasized, it was 'parcelized' among landholders, rather than concentrated at the top—left a major imprint. However, for all these nuances, important strands within the Marxist tradition have concentrated their efforts on deciphering the economic logic of feudalism, as a key to elucidating that of its successor regime, capitalism.

In its simplest version, feudal economic logic went something like this. The peasa nts possessed their own means of production—tools and livestock; access to common land—and so enjoyed some autonomy from the landlords in producing their subsistence. The feudal lords, facing few incentives to raise the peasants' productivity, didn't intervene much in the production process. The surplus produced by the peasants was openly appropriated from them by the landlords, most commonly by appeal to tradition or to law, enforced by the lord through the threat—and often the application—of violence. There was no confusion about the nature of such surplus extraction: the peasants were under no illusion about their freedom. Their autonomy in matters of production may have been considerable; their autonomy in general, however, was strictly circumscribed.

As a result, many Marxists—we can skip the internal disputes at this stage—held that, under feudalism, the means of surplus extraction are *extra*-economic, being largely political in nature; goods are expropriated under the threat of violence. Under capitalism, in contrast, the means of surplus extraction are entirely economic: nominally free agents are obliged to sell their labour power in order to survive in a cash economy, in which they no longer possess the means of subsistence—yet the highly exploitative nature of this 'voluntary' labour contract remains largely invisible. Thus, as we move from feudalism to capitalism, politically enabled expropriation gives way to economically enabled exploitation. The distinction between the extra-economic and the economic—one of many such dichotomies—suggests that, as a category in Marxist thought, 'feudalism' is intelligible only when examined through the prism of capitalism, commonly imagined as its more progressive, rational and innovation-friendly successor. And innovative it is: in relying solely on economic means of surplus extraction, it need not dirty its hands more than is strictly necessary; the 'invisible Leviathan' of the capitalist system does the rest. <u>footnote</u>9

For most non-Marxist historians, in contrast, feudalism was not a backward mode of production but a backward socio-political system, marked by bouts of arbitrary violence and the proliferation of personal dependencies and ties of allegiance, commonly justified on the most tenuous religious and cultural grounds. footnote 10 It was a system in which untamed private powers ruled supreme. As a result, it's customary within this rather diverse intellectual tradition to contrast feudalism not to capitalism but to the law-respecting and law-enforcing bourgeois state. To be a feudal

subject is to live a precarious life in fear of arbitrary private power; to tremble at rules that one had no role in creating and to have no possibility of appealing one's guilty verdict. For Marxists, the opposite of the feudal subject, the peasant, is the fully proletarianized worker of the capitalist enterprise; for the non-Marxists, it's the citizen of the modern bourgeois state, enjoying a plethora of guaranteed democratic rights. Regardless of the paradigm, it should in theory be possible to identify the key features of the feudal system and examine whether they might be reoccurring today. For example, if we treat feudalism as an economic system, one such feature could be the parasitic existence of the ruling class, which gets to enjoy a luxurious lifestyle at the expense and misery of the class (or classes) it dominates. If we treat it as a sociopolitical system, it might be the privatization of power formerly vested in the state and its dispersion through opaque and non-accountable institutions. footnote¹¹ In other words, if we manage to associate feudalism with a certain dynamic, and if we can observe the recurrence of that dynamic in our own post-feudal present, we should at least be able to speak of the 're-feudalization' of society, even if a full-blown 'neofeudalism' is nowhere on the horizon. It's a weaker claim, but it carries greater analytical clarity.

Precursors

Some sixty years ago, Habermas did pioneering work in this field in *The Transformation of the Public Sphere* (1962). On his—not undisputed—account, the early-bourgeois public sphere could be seen in London's coffee houses, important locales for the development of emancipatory discourse. Tamed by capitalists, its imperatives were then tied to those of the culture industry and its advertising complex. As a result, premodern, private power structures and hierarchies reemerged in what he termed the 'refeudalization of the public sphere', indicating the zigzag dynamics of modernity. While Habermas eventually distanced himself from the concept of 'refeudalization', preferring 'colonization of the lifeworld' instead, some in Germany have recently recovered it.

In the past decade, the Hamburg-based sociologist Sighard Neckel has produced an impressive body of work documenting how the roll-out of neoliberalism—that great lubricant of modernity—has led to the reemergence of pre-modern social forms such as the pauperization of work, the skewed distribution of wealth and the emergence of new oligarchs. footnote¹² Although Neckel frequently cites Thomas Piketty's warnings about the return of 'patrimonial capitalism'—a concept that sails close to the 'neofeudal' imaginary—it is the Habermasian notion of 'refeudalization' that allows Neckel to draw these diverse strands together. Creatively fusing Marxist and non-Marxist perspectives, Neckel argues that we may be witnessing the emergence of 'a modern capitalism without bourgeois structures', and that their very absence might be 'a cultural precondition for the triumphal march of capitalism in the 21st century.' Neoliberal modernization is thus to be read as neither progressive nor regressive, but rather as paradoxical. For Neckel, refeudalization does not lead back to the past, but refers instead to 'a social dynamic of the present, in which modernization takes the form of a rejection of the maxims of a bourgeois social order.' In this, Neckel joins ranks with other prominent German sociologists—Wolfgang Knöbl and Hans Joas come to mind—in questioning teleologically inspired accounts of modernization. footnote¹³ An intriguing use of 'refeudalization' can be seen in the work of the French legal theorist Alain Supiot. In his *Homo Juridicus* (2005) and *Governance by*

Numbers (2015), Supiot presents neoliberalization and digitization as two leading drivers of 'refeudalization'. footnote14 The ambition here is not to shock but to complicate our bland existing accounts of social change. Although the world is not returning to the Middle Ages, Supiot writes, 'the legal concepts of feudalism provide excellent tools for analysing the vast institutional upheavals occurring under the acritical notion of "globalization". 'footnote 15 Key to Supiot's legal philosophy is the distinction between government by men—typical of the feudal period, with its personal allegiances and ties of dependence—and government by law—the achievement of the bourgeois state, which establishes itself as the objective third-party guarantor of rights and enforcer of rules. Because the state declared certain areas off-limits for private contracting—leaving them impervious to calculations of utility—a modicum of dignity could be enjoyed by all citizens, in the workplace and beyond it, regardless of their power and wealth differentials. In subjecting the state to utility- and efficiencymaximizing imperatives, neoliberalism once again opens it up to private contracting. For Supiot, digitization also accelerates the process of 'refeudalization' by linking people into networks in which their power and autonomy depend on their positions visà-vis other nodes. The citizens of the bourgeois state are in principle entitled to all its rights, regardless of what communities they belong to. But is this still the case for citizens of the network society, whose online reputations and digital scores shape their interactions with institutions in ways they may not even be aware of? Amidst all the hype over neo-feudalism, Neckel and Supiot's carefully argued earlier critiques stand out—even if they remain mostly unknown to those jumping on the neo-feudalist bandwagon today. Current debates generally ignore the finer theoretical points they raise about the contradictory dynamics of neoliberal modernization. The young Habermas is occasionally cited—if Habermas says it is feudalism, who could disagree?—but without much serious engagement.

2. brenner or wallerstein?

But what background intellectual assumptions, in the rich body of today's left thought, make something like 'neo-feudalism' even thinkable? After all, making the strange argument that capitalism is somehow moving in reverse requires a very particular understanding not only of its dynamics, but also of activities and processes that are properly 'capitalist'—as well as of those that are definitely not. What are these assumptions?

Here we can return to the above-mentioned disputes on the nature of the transition from feudalism to capitalism within the Marxist tradition. There are two mutually exclusive ways to think about this. One sees the capitalist system as driven solely by its internal dynamics of competition and exploitation, with political expropriation lying firmly outside its boundaries. On this reading, capital accumulation is driven solely by 'clean', economic means of surplus extraction. The existence of extraneous, expropriation-enabling processes—violence, racism, dispossession, carbonization—is not denied, but they should be analytically bracketed out as non-capitalist extras; they may have abetted particular capitalists in their individual efforts to appropriate surplus value, but they stand outside the process of capitalist accumulation as such. There are no 'laws of motion' of capital that could be deduced about them. In this view, even if 'the coercive force of the "political" sphere is ultimately necessary to sustain private property and the power of appropriation, "economic" need supplies the immediate

compulsion that forces the worker to transfer surplus labour to the capitalist. $'footnote^{16}$

The other option, analytically messier but more intuitively convincing, is to acknowledge that capitalism—at least the historical capitalism that we know, not the purist capitalism of abstract models—is unthinkable without all those extraneous processes. One doesn't have to deny the centrality of exploitation to the capitalist system to see how racism or patriarchy has helped to create the conditions of its possibility. Would the capitalist system in the Global North have developed as it did if cheap resources had not been methodically expropriated from the Global South? Unlike the case of labour exploitation, these historical dynamics—and the tradeoffs present therein—cannot be reduced to a neat formula, which, in Marx's own writings, would describe a firm's decision to automate its labour force. But such messiness doesn't make these dynamics any less real or less constitutive of historical capitalism. The differences between these approaches surfaced in two landmark and paradigmdefining debates about the origins of capitalism and the nature of the transition from feudalism to capitalism. First the 1950s Dobb-Sweezy Debate and then the 1974-82 Brenner Debate pitted Marxist and non-Marxist historians against each other in varying combinations, debating the relative importance of the rapidly expanding world-system of trade versus the shifting class and property relations, initially in England, as the main factors responsible for the emergence of capitalism. <u>footnote¹⁷</u> Those discussions featured many fascinating tangents. One in particular is crucial for deciphering the theoretical foundations of the more serious formulations of the techno-feudalist thesis: the centrality of 'primitive accumulation' to the origins, as well as subsequent developments, of capitalism.

In some Marxian accounts, including that of Immanuel Wallerstein, 'primitive accumulation' refers to the use of extra-economic, political means to capture and transfer surplus, under the label of 'unequal exchange', from the poorer to the richer lands—or, as Wallerstein put it, from the periphery to the core. footnote 18 The origins of capitalism could not be understood without taking into account this ability of the core to appropriate the surplus of the whole global economy. This is what explains why capitalism emerged and flourished where it did. The exploitation of (never fully proletarianized) wage-labour certainly boosted the fortunes of capitalists in the core, but this was only part of the story. Thus, to focus exclusively on exploitation and ignore the fact that the core-periphery dynamics of 'unequal exchange' and 'primitive accumulation' are still present today is to misunderstand the nature of capitalism. Brenner charged Wallerstein's analysis with techno-determinism, downplaying class relations and the role of 'relative surplus labour', i.e. rising productivity, as a systemic feature of capitalism. Wallersteinian exchange-based accounts, Brenner argued, were a staple of neo-Smithian Marxism, ignoring what Marx really meant by the concept of 'primitive accumulation'. It was to be understood, in Marx's words, as the process of 'divorcing the producer from the means of production', which opened the door to wagelabour and exploitation and came to replace expropriation of ready-made goods by the semi-autonomous peasants. The divorce in question happened as a result of reconfigurations in class relations and shifting property rights; it had little to do with unequal exchange or world trade. footnote¹⁹ As Brenner put it in a later essay, the stage known as 'primitive accumulation' was nothing but the 'bringing into being of the social-property relations constitutive of capital.' This certainly included plenty of force

and violence. But the role of primitive accumulation was very limited; its dynamics were not to be confused with those of proper, non-primitive capitalist accumulation. What was that limited role? According to Brenner, 'primitive accumulation' served solely to break up the politically instituted 'merger' of land, labour and technology which characterized the feudal system and had prevented these three essential factors of production being put to more productive use—something that could be corrected once they were inserted into the capitalist logic of profit-making.footnote²⁰ Put bluntly, Brenner's analysis of feudalism proposed that it gave everyone incentives to slack off. In the absence of competitive market pressures there was no need to worry about the rationalization of the production process. Primitive accumulation put an end to that slacker utopia, ushering in the competition-driven 'will to improve' so characteristic of capitalism.

A cursory look at *Capital*, *Volume One*, however, reveals more ambiguity on the subject of primitive accumulation than Brenner initially let on. Chapter 26, where Marx criticized Adam Smith's rather naïve conception of 'previous accumulation', certainly backs up Brenner's claims (he used it, very eloquently, in attacking Wallerstein). But then, in Chapter 31, Marx says something much more congruent with Wallerstein's own line of analysis, famously writing that:

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins, signalized the rosy dawn of the era of capitalist production. These idyllic proceedings are the chief momenta of primitive accumulation. footnote²¹

The chapter leaves no doubt about the intricate connection between violence waged in the name of forced transfer and the origins of capitalism. Marx couldn't be more explicit here: 'the veiled slavery of the wage workers in Europe needed, for its pedestal, slavery pure and simple in the new world.' It is hard to see how to fit this account of 'primitive accumulation' into the Brennerian story of the 'divorce' between the producers and their means of production in the English countryside. There are similar ambiguities in Marx's discussion of whether these violent practices of 'conquest and looting' stopped at the stage of primitive accumulation, or whether they—and thus, also, primitive accumulation—continued alongside capitalist accumulation proper, based on exploitation; or indeed whether, even if 'primitive accumulation' itself is a thing of the past, there is nonetheless an ongoing process of expropriation or dispossession that exists alongside exploitation. Even on relatively straightforward issues—should 'slavery' and 'unfree labour' be seen as part of capitalism?—there are hazy areas in Marx which feed many of the current debates.

For Brenner—and for the school of Political Marxism that formed around him and Ellen Meiksins Wood in later years—there was no such ambiguity. Capitalism emerged and expanded at such a tremendous pace because a number of historical processes converged in such a way as to force capitalists to 'accumulate via innovation'. footnote²² The Brennerian project of understanding the logic of capitalism thus became about spelling out the dynamics—codified in such terms as the 'rules of reproduction' and 'laws of motion'—through which the systemic pressures exerted on capitalists led to accumulation via innovation. It was an elegant and consistent model, which posited that rising productivity was the consequence of innovation, which, in turn, was the consequence of capitalists competing in the market, employing free

wage-labour, and trying everything they could to reduce costs. There was no need in this model for any discussion of violence, expropriation or dispossession; while their existence was not denied, they had little to contribute to rising productivity and were not part of the capitalist-accumulation process.

3. 'accumulation by dispossession'?

Not everyone was convinced by Brenner's arguments. In the past decade, there have been many intriguing attempts to advance the argument that exploitation and expropriation have been—and still are—mutually constitutive. Two stand out in particular: the German sociologist Klaus Dörre's theorization of the capitalist 'land grab', drawing on Rosa Luxemburg's Landnahme and Nancy Fraser's related work on the deep-rooted structural connection between exploitation and expropriation, with the latter creating—and constantly recreating—conditions of possibility for the existence of the former. footnote²³ Many of the methodological discussions unfolding on the left today—about the best ways to narrate capitalism in relation to climate or race or colonialism—still reflect the unresolved isues of the Brenner-Wallerstein debate. A lot of this recent work builds on David Harvey's influential concept of 'accumulation by dispossession', introduced in his 2003 book The New Imperialism. Harvey coined this term as he was unsatisfied with the qualifier 'primitive'; he, as many others before him, saw accumulation as ongoing. Summarizing some of the recent scholarship on the issue in The New Imperialism, Harvey noted that 'primitive accumulation, in short, entails expropriation and co-optation of pre-existing cultural and social achievements as well as confrontation and supersession.' This was hardly the Brennerian account of 'primitive accumulation' as the process of breaking up the feudal 'merger' between the factors of production; Brenner's capitalists were not 'co-opting' anything—they were ridding themselves, with some systemic help, of unproductive social practices and relations.

Alas, Harvey's account of 'accumulation by dispossession', while promising so much, delivered very little: in the end, it became even more ambiguous than Marx's account of 'primitive accumulation'. If Harvey's initial formulation was to be believed, the poor capitalists of the early 2000s could barely make money at all without dispossessing someone of something: Ponzi schemes, the collapse of Enron, raiding pension funds, the rise of biopiracy, the commodification of nature, the privatization of state assets, the destruction of the welfare state, the exploitation of creativity by the music industry—these are just some of the examples used to illustrate the concept in *The New Imperialism*. Seeing it everywhere, Harvey unsurprisingly concluded that 'accumulation by dispossession' had become the 'dominant' form of accumulation in the new era. How could it be otherwise, when every activity that did not directly involve the exploitation of labour—and even some that did—seemed to be automatically included in this category?

In 2006, Brenner wrote a mixed review of *The New Imperialism*, chiding Harvey for his 'extraordinarily expansive (and counterproductive) definition of accumulation by dispossession', inflating the concept to an extent where it was no longer useful.footnote²⁴ He confessed that he found Harvey's conclusion about the dominance of dispossession over capitalist accumulation 'incomprehensible'. But was it? It would indeed be 'incomprehensible' if one assumed that we were still living in capitalism, which, at least to the Brenner of 2006, seemed unquestionable. But, if

capitalism really was over and some other feudalism-like system was upon us, that statement would make more sense.

In later works, Harvey muddied the waters some more, making 'accumulation by dispossession' the main driver of neoliberalism, which he defined as a political project, redistributive rather than generative in outlook, that aimed to transfer wealth and income from the rest of the population to the upper classes within nations or from the poor countries to richer ones internationally. Here, there was no space for the Brenner-friendly interpretation of 'accumulation by dispossession' as something aimed at creating conditions for innovation—hence production and generation—at all. Without stating so explicitly, Harvey quietly joined the other side of the debate, while adding a host of other mechanisms of surplus transfer—rent extraction around intellectual property, for example—to those initially described by Wallerstein. Anyone steeped in the orthodox, Brennerian take on 'primitive accumulation' would immediately take issue with Harvey's basic chronology of events; even for Wallerstein and his followers, trade-based primitive accumulation preceded and accompanied capitalist accumulation, it did not replace or overtake it. footnote²⁵

Since Harvey's initial formulation of the concept in the early 2000s, 'accumulation by dispossession' has been embraced by many scholars, not least those in the Global South, who use it to theorize new forms of rentier extractivism whereby corporations flex their political muscles to acquire land and mineral resources. footnote²⁶ There's a certain logic to all of this: first dispossession, via extra-economic means; then rentierization, by leveraging property rights—including those over intellectual products—which shifts the operation back into the economic realm. Being in that realm, however, is no guarantee that we are in normal capitalism. Save for mining and agriculture, where some productive or at least extractive activities do need to be organized, the capitalist class appears to be simply reaping rents and enjoying a life of luxury, much like the landlords of the feudal era. 'If everyone tries to live off rents and nobody invests in making anything,' wrote Harvey in 2014, 'then plainly capitalism is headed towards a crisis.'footnote²⁷ But what kind of crisis? Harvey himself doesn't flirt with neo-feudalist imagery—at least he hasn't yet—but his analysis of contemporary capitalism makes it easy to draw the obvious conclusion: this is capitalism in name only; its actual economic logic is much closer to the feudal one. What other lesson could one draw from Harvey's claim, as early as 2003, that redistributive dispossession had overtaken generative exploitation?

Cognitive multitudes

A similar message could be found in the work of those Italian and French theorists who prophesize the emergence of 'cognitive capitalism'—yet another capitalism in name only.footnote²⁸ Inspired by the work of Toni Negri and other Italian *operaistas*, these thinkers—Carlo Vercellone and Yann Moulier-Boutang are among the best known—insist that the multitude, the successor to the working class, armed with the latest information technologies, is finally capable of autonomous existence. On this account, capital can't—and doesn't want to—control production, much of which now happens in a highly intellectualized manner beyond the gates of the Taylorist factory, which itself is no more (at least in Italy and France).footnote²⁹ Today's capitalists simply establish control over intellectual property rights, while trying to limit what the unruly multitude can do with its newfound communicative freedoms. These are not the innovation-obsessed capitalists of the Fordist era; these are lazy rentiers, entirely parasitic on the

creativity of the masses. Working from these premises, it's easy to think that some kind of techno-feudalism is already upon us: if the members of the multitude are truly the ones doing all the work and are even using their own means of production, in the sense of computers and open-source software, then to speak of capitalism seems like a cruel joke.

One aspect of the 'cognitive capitalism' perspective has a particular bearing on contemporary debates about the logic—feudal or capitalist?—of today's digital economy. Drawing on the Italian workerist tradition, Vercellone and his co-thinkers have hypothesized the obsolescence of the managerial class, supposedly defeated by the creativity of the multitude. Bosses may have had a role under Fordism, but modern cognitive workers need them no more. This is taken as a sign that the move from formal to real subsumption—i.e. from the mere incorporation of labour into capitalist relations to its structural transformation according to capitalist imperatives—has now been reversed, with capitalism moving backwards. Feudalism becomes visible, even if these theorists hope that communism will arrive first.

As George Caffentzis has pointed out in a perceptive critique, the possible irrelevance of managers to the organization of the productive process is in itself no proof that the revenues booked by capitalist enterprises come in the form of rent, rather than profit.footnote³⁰ After all, there are plenty of capitalist firms that are almost fully automated, with neither managers nor workers. Should they therefore be seen as rentiers? The answer of the cognitive-capitalism theorists seems to be 'yes': such firms must be parasitic on something, perhaps squeezing a patent portfolio, a real-estate holding or the General Intellect of humanity as such. Take, for example, an automated car wash.footnote³¹ Is there a reason to believe that it is not capitalist simply because it does not employ anyone, and thus generates no surplus value? Or because, in order to automate the car wash, a few algorithms—undoubtedly using dead labour and congealed knowledge of previous generations, and maybe even a patent or two—were used?

Probably not. In line with Marx's own writings on the equalization of profits across differently automated firms and industries, the car wash is simply absorbing the surplus value generated elsewhere in the economy. To present these automated firms as 'rentiers' rather than as proper capitalists is to strip Marx's account of capitalist competition of its substance; it is precisely the constant drive to automate—to cut costs and boost profitability—which accounts for the constant flow of capital towards more productive firms. Workerism, the intellectual cornerstone of the cognitive-capitalism theory, remains trapped in the epistemology of the human worker: if no workers are present, the Italian theorists assume that no capitalist production takes place and that rentierism rules the day. In such accounts, 'capitalism' may live on as a label, but we are already somewhere in the No Man's Land between feudalism and the putting-out system (Vercellone himself has noted the similarity).

4. digital fortunes

Theorists of techno-feudalism share the cognitive-capitalism assumption that something in the nature of information and data networks pushes the digital economy in the direction of the feudal logic of rent and dispossession, rather than the capitalist logic of profit and exploitation. What is it? An obvious explanation points to the tremendous growth of intellectual-property rights and the peculiar power relations that they institute. As early as 1995, Peter Drahos, an Australian legal scholar, warned about

the looming 'information feudalism'. Imagining the world of 2015 in the first half of his article—he got virtually everything right—Drahos argued in the second half that extending patents to abstract objects, such as algorithms, would result in the proliferation of private and arbitrary power. footnote³² (Similarly Supiot's critique of feudalization claims that intellectual-property rights allowed for the formal separation of the ownership of objects from their control—a throwback to the past.) Another feature of the digital economy that seems to chime with feudal models especially the Marxian, mode-of-production variety—is the strange, almost surreptitious way in which users of digital services are made to part with their data. As we all know, the use of digital artefacts produces data traces, some of which are then aggregated—potentially yielding insights than can help to refine existing services, finetune machine-learning models and train artificial intelligence, or be used to analyse and predict our behaviour, fuelling the online market for behavioural advertising. Humans are key to activating the data-gathering processes that envelop these digital objects. Without us, many of the initial data traces would never be produced. These days, we are creating them constantly—not just when we open our browsers, use gaming apps or search online, but in myriad ways in our workplaces, cars, homes even our smart toilets.

What exactly is going on here, capitalism-wise? One could argue, with the cognitivecapitalism theorists, that users are actually workers, with technology platforms living off our 'free digital labour'; without our interaction with all these digital objects, there wouldn't be much digital advertising to sell and the making of artificial-intelligence products would become more expensive. footnote³³ Another view, of which Shoshana Zuboff is the leading exponent, compares users' lives to the pristine lands of a faraway, non-capitalist country, threatened by the extractivist operations of the digital giants. Condemned to 'digital dispossession', as she puts it in The Age of Surveillance Capitalism (2018), 'we are the native peoples whose tacit claims to self-determination have vanished from the maps of our own experience.' footnote³⁴ For clarity of exposition, this is not exactly Marx's c-m-c. But the sentiment is clear. Zuboff distances herself from theories of 'digital labour'—in fact, from consideration of labour tout court. Accordingly, she doesn't have much to say about exploitation; surveillance capitalists, it seems, don't do much of this. footnote³⁵ Instead, she draws on Harvey's 'accumulation by dispossession', presenting it as an ongoing process. Zuboff discusses at length Google's elaborate procedures for the extraction and expropriation of user data. The term 'dispossession' appears almost a hundred times in the book, often in original combinations with other terms—'dispossession cycle', 'behavioural dispossession', 'dispossession of human experience', the 'dispossession industry' and 'unilateral surplus dispossession'. For all its high-pitched language about users as 'native peoples', The Age of Surveillance Capitalism leaves little doubt that 'dispossession' is accomplished through modern technology and on an industrial scale—which supposedly makes it look capitalist. For Zuboff, however, 'capitalism' is something that companies 'commit', like a faux pas or a crime. If the formulation sounds strange, it is an accurate rendering of how she understands this particular -ism: by and large, 'capitalism' is what happens to humans when companies do stuff. Reading Zuboff's vivid descriptions of the symbolic and emotional violence, deception and expropriation that propel the Google-driven digital economy, one might wonder why she dubs it 'surveillance capitalism', rather than 'surveillance feudalism'. On the

very first page of the book she writes of 'a parasitic economic logic'—not that far from Lenin's famous analysis of the rentier profits underpinning 'imperialist parasitism'. footnote³⁶ The Age of Surveillance Capitalism flirts with the 'feudalist' formulation in a couple of places, without ever fully embracing it. On closer examination, however, the economic system she describes is neither capitalism nor feudalism. It is what one might call, for lack of a better term, user-ism—in direct analogy to Italian workerism. The Italians could not imagine how non-rentier, labourlight capitalist firms could make capitalist profits merely by attracting surplus value produced elsewhere; as a result, they ended up introducing strained concepts like 'free digital labour'. Zuboff, in turn, cannot imagine that human experience, congealed in data that is appropriated from the user at the point of contact with digital artefacts, is not the principal driver behind Google's exorbitant profits.

User-ism posits that, from Google to Facebook, the bulk of the profits of these firms derives from their expropriation of user data. But does it? Could there be other explanations? If they exist, Zuboff doesn't consider them, marshalling only evidence that will confirm her existing thesis: users give Google data; Google uses the data to personalize advertising and build data-intensive cloud services (an important part of Google's business, of which Zuboff says very little). Therefore, it must be the user-data-advertising connection that accounts for Google's windfall profits. What else could it be, given that she discusses no other aspects of Google's operations? Google as a firm

To get Google's business model into sharper focus, let us compare it to Spotify, the music-streaming service from Sweden. The two models are somewhat similar: while Spotify has paying users who make up the bulk of its revenue, it also has plenty of non-paying ones. The latter can stream music for free, but every few songs they have to listen to advertisements. Despite the stellar recent performance of its stock, Spotify is not profitable: in 2020, it lost \$810 million; by contrast, the 2020 earnings of Alphabet, Google's parent company, were \$41 billion, much of it coming from Google's advertising business. In fact, Spotify has been bleeding cash ever since its inception: between 2006 and 2018, the last year that such total figures are available, it spent \$10 billion dollars in licensing deals, paying music labels and, eventually, artists, for being able to stream their catalogues.

Now, what business is Spotify in? One could argue that it sells a very peculiar commodity: a unique, personalized user experience that provides real-time access to a nearly infinite collection of music. Here is the view of one perceptive analyst: Spotify is 'a producer of a new commodity, the branded musical experience', in which 'music (commodified as licences) is simply one of several inputs, albeit the most important'. footnote³⁷ Yes, Spotify gives away some of those commodities to its non-paying users, but it does so because it has found a clever way to sell another, advertising-based commodity to someone else; the latter would be impossible without the former. There's plenty of data extraction—Spotify produces personalized playlists for its users every week by observing their listening habits—and we should not overlook the importance of intellectual-property rights for its business model. But should Spotify's business model therefore be explained by focusing on data extraction alone, ignoring the fact that it is in the capitalist business of producing something? To do that would be to miss that all that data is just an add-on to the main business of Spotify: its

unique music-cum-branded-experience commodity. The despised rentiers in this model are the music labels; Spotify is as much a card-carrying capitalist as Henry Ford. Let's return to Google. It, too, produces a commodity—real-time access to vast amounts of human knowledge—but, unlike Spotify, Google's commodity is much cheaper to make. Why so? Because Google doesn't pay the publishers and content creators whose pages it indexes in order to produce that commodity, at least not in the same way that Spotify pays the music labels. Google, unlike Spotify, doesn't offer a different, advertising-free search experience to its paying users; but its sister site, YouTube, does so for a monthly fee. Just like Spotify with its non-paying users, Google gives away its search commodity for free, which, in turn, makes it possible to sell another, highly profitable commodity—access to its users' screens and attention—to advertisers. There are all sorts of ways in which vast troves of personal data, surreptitiously extracted, can make that advertising commodity more valuable. But none of it would matter if Google actually had to pay a fee for indexing every piece of content it shows on the first page of search results, next to the ads that make it so insanely profitable.

The Age of Surveillance Capitalism is 704 pages long, but Zuboff devotes just two sentences, in discrete passages discussing other subjects, to this original sin at the heart of Google's business model. She accepts it as a matter of course, simply writing of 'indexed information that Google's web crawler had already taken from others without payment.' It is easy to see why this does not meet Zuboff's own definition of dispossession: there are no users involved. Google's actual capitalist operations are thus of no interest to user-ism. However, to focus on users and their data here is like focusing on Spotify's personalized playlists at the expense of royalty payments: the former are not entirely irrelevant—they keep users coming back—but, in the grand scheme of things, their explanatory power pales in significance compared to the latter. Paradoxically, the tremendous success of Google's business model suggests that the environment in which it operates is not defined by 'information feudalism' but, rather, by 'information communism'. This is how its lofty, almost socialist goal of 'organizing all of the world's knowledge' could justify the infinite, no-fee indexing of information produced by others, as if property rights—including rights related to access and use did not exist. The problem with Zuboff's account of dispossession-obsessed 'surveillance capitalism' is that it is constitutionally incapable of grasping just how the non-capitalist digital economy might operate in the future. As a result, it has no radical political agenda except for some vaguely liberal demands for undefinable things like 'the right to the future'.

In pathologizing the ongoing extractivist side of contemporary digital capitalism, Zuboff's critique completely normalizes its non-extractivist dimension. Her utopian horizon doesn't stretch much beyond demanding a world in which Google, having abandoned advertising and the associated data-extraction, would simply start charging for its search services; an option that Facebook has been reportedly considering. That this would inadvertently normalize all the 'digital dispossession' that occurs at the indexing stage, cementing Google's power and its hold on society's institutional imagination, is of little concern to Zuboff. After all, for user-ism, the problem with 'surveillance capitalism' is the surveillance of user-consumers, not capitalism as such. 5. capitalism, still?

Until recently, most of the serious literature on neo- and techno-feudalism from the left approached it—like Neckel and Supiot—as a socio-political rather than an economic system. The publication of Techno-féodalisme by the French economist Cédric Durand represents the most sustained attempt so far at a serious consideration of the economic logics involved. footnote³⁸ Durand earned his name with Fictitious Capital (2014), an insightful analysis of modern finance. Contrary to assumptions by some on the left, Durand argued, financial activities do not have to be 'predatory': in a well-functioning system, they could help to advance capitalist production by facilitating advance financing, for example. However, from the 1970s onwards, this accumulationfriendly feature of modern finance—Durand dubs it simply, 'innovation'—was overtaken by two more sinister dynamics. The first, rooted in the logic of dispossession as theorized by Harvey, involved powerful financial institutions leveraging their connections to the state to redirect more public money towards themselves; here we are back to the 'extra-economic' means of extracting or, more accurately, redistributing value, backed by the close links between Wall Street and Washington. The second dynamic, rooted in the logic of parasitism theorized by Lenin in his analysis of imperialism, referred to the various payments—interest, dividends, management fees—that non-financial corporations have to render to financial firms, which stand completely outside the production process.

On Durand's telling, the bailout measures following the 2008 financial crisis turbocharged the dynamics of dispossession and parasitism, suppressing those of innovation. 'Is this still capitalism?', he wondered, in the closing pages of Fictitious Capital. 'This system's death-agony has been heralded a thousand times. But now it may well have begun—almost as if by accident.' This would not be the first 'almost accidental' transition to a new economic regime; Brenner once described the transition from feudalism to capitalism in England as 'the unintended consequence of feudal actors pursuing feudal goals in feudal ways.'footnote39 So the idea that financiers, by taking the easy way out—dedicating themselves solely to politically organized upward redistribution and rent-supported parasitism—could accelerate the transition to a post-capitalist regime was not only highly intriguing but also theoretically plausible. In his new book, Techno-féodalisme, Durand retains his focus on the looming end of capitalism but assigns the task of burying it to the tech firms. Fictitious Capital had already examined the so-called profit-investment puzzle: when capitalism is functioning well, higher profits should mean higher investments; the whole point of being a capitalist is to never stand still. And yet, from roughly the mid-1990s on, there was no such link: profits increased in the advanced-capitalist economies—with ups and downs—but investment stagnated or declined. Plenty of explanations have been adduced to explain this, including the maximization of shareholder value, growing monopolization or the toxic effects of ever-accelerating financialization. Durand did not come up with new causal factors. Instead, he chose to argue that 'the enigma of profits without accumulation is, at least in part, an artificial one'—a statistical illusion, created by our inability to grasp the effects of globalization.

On the one hand, some firms had found ways of making more money without additional investment. Globalization and digitization allowed top firms in the Global North—think Walmart—to leverage their positions at the apex of global commodity chains in order to extract lower prices for final or intermediate goods from the actors lower down the chain. On the other hand, when capitalists from the Global North were making

investments, these increasingly went to the Global South. Thus, looking at profit-investment dynamics through the lens of individual countries of the Global North—the us, for example—doesn't tell us much. One needed a global view to see how exactly profits map onto investments.

With *Techno-féodalisme*, Durand joins the growing chorus who explain the profit-investment puzzle by emphasizing the role of intellectual-property rights and intangibles—including data holdings—in allowing the giant us firms to squeeze tremendous profits from their supply chains by focusing on those aspects that have the highest margins. footnote⁴⁰ To an extent, it's an elaboration of Durand's argument from 2014, but with much greater attention paid to the actual operations of global supply chains and the role that intellectual-property rights play in the distribution of power within them. For some of the firms he examines, the enigma of profits without investment is no longer artificial, as it was in *Fictitious Capital*: they really don't invest much, at home or abroad, regardless of their profit levels. They either hand back their earnings to shareholders in dividends or buy back their own stock; some, like Apple, do both.

Techno-féodalisme argues that the rise of intangibles, usually concentrated at the most profitable points of the global value chain, led to the emergence of four new types of rent.footnote⁴¹ Two of them—legal intellectual-property rents and natural-monopoly rents—look familiar: the first refers to the rents derived from patents, copyrights and trademarks; the second to rents derived from the ability of Walmart-like firms to integrate the whole chain and to furnish infrastructures needed within it. The other two—dynamic-innovation rents and intangibles-differential rents—sound more complex. But they, too, capture relatively clear and distinct phenomena: the former refers to valuable data sets that are the exclusive property of these firms, while the latter refers to the ability of firms inside a single value chain to scale up their operations (firms that own predominantly intangible assets can do this faster and more cheaply). Durand's taxonomy is elegant. Armed with these categories, he begins to see rentiers everywhere—not unlike the theorists of cognitive capitalism whom he chided, mildly, in Fictitious Capital—and capitalists nowhere. 'The ascent of the digital', he concludes, 'feeds a giant economy of rent', because 'the control of information and knowledge, that is, intellectual monopolization, has become the most powerful means of capturing value.' With a nod to McKenzie Wark's recent speculations on the subject, footnote⁴² Durand returns to the question he asked in 2014: is this still capitalism? It was the imperative to invest in order to improve productivity, cut costs and raise profits that ensured the dynamism of the capitalist system. That imperative was due to capitalists operating under the pressures of market competition, with the fungibility of commodities, labour and technology—the result, as Brenner argued, of breaking up the 'merger' of these three factors under feudalism.

The rise of intangibles—but especially of data—reverses the capitalist break-up of that merger, Durand argues: if digital assets are indissociable from the users that produce them and from the platforms wherein they are made, then we can read the digital economy as once again 'merging' the main factors of production, so that their mobility is impeded. In simpler terms, we are stuck inside the walled gardens of the tech companies, our data—carefully extracted, catalogued and monetized—tying us to them forever. This weakens the productivity-inducing effects of market competition, giving those who control the intangibles an impressive ability to appropriate value

without ever having to engage in production. 'In this configuration,' writes Durand, 'investment is no longer oriented towards the development of the productive forces, but to the forces of predation.' footnote⁴³

Parasitism and dispossession may no longer be part of Durand's vocabulary in *Techno-féodalisme*—they are replaced by 'predation', as Harvey and Lenin are dismissed in favour of Thorstein Veblen, and finance gives way to the technology industry—but the logic is not so different from that of *Fictitious Capital*. What gives the digital economy its peculiar neo- and techno-feudal flavour is that, while workers are still being exploited in all the old capitalist ways, it is the new digital giants, armed with sophisticated means of predation, who benefit most. Analogously to the feudal lords, they manage to appropriate huge chunks of the global mass of surplus value without ever being directly involved in labour exploitation or the productive process. Durand draws on Zuboff's work to show the hidden domination exercised by the 'Big Other' of Big Data, arguing as she does that the secret of Google's success lies in its ability to extract, assemble and profit from a variety of data sets. It enjoys an effective monopoly due to network effects and impressive economies of scale: it will benefit more from any new data sets than a start-up could, making competition much harder.

There is much wisdom, as well as basic common sense, in such conclusions. But the overall tenor of the argument veers too much towards *user*-ism, as Durand, like Zuboff, ignores the crucial role played by indexing in Google's overall operation. It is harder to invoke concepts like 'intellectual monopolization' here, for the third-party pages to which Google links to produce its search-result commodity remain the property of their publishers; Google doesn't own the results that it indexes. In theory, any other well-capitalized firm could build the web-crawling technology for indexing them. It might be extremely expensive, but one shouldn't confuse such barriers for a rent-like situation: what is expensive for a Berlin start-up might be relatively affordable for Japan's SoftBank, with its \$100 billion Vision Fund. Google's extensive data holdings are a different matter; they do merit a discussion of rent. But one cannot pretend that its business is all about these data holdings, as if Google were a mere rentier—and not also a standard capitalist firm.

6. forces of predation?

Durand's reasoning also draws upon important work on information rents in the global economy by the economist Duncan Foley. In line with Marx's perspective, Foley argues that surplus value is not appropriated only at the sites where it is generated (these are the missing pages of Marxist theory that have still to reach Italian workerists). Treating the vast intangible resources reaped through intellectual-property rights the way Marx and some of the classical political economists treated land rentiers, we can see that the giant information-technology platforms are not capitalists, but rentiers in disguise. 'It is not even necessary to be a capitalist in order to compete for a share of this pool of surplus value', Foley writes:

Enforceable property rights that permit the owner of productive resources (often called 'land' in the terminology of classical political economy) to exclude capitalists from access to those resources create 'rents.' These rents are a part of the pool of surplus value generated in capitalist production, though they have no direct relation to the exploitation of productive labour in themselves. The owner of land resources, such as fertile fields, waterfalls, mineral and hydrocarbon reserves and the like, need not lift a

finger or hire anyone else to lift a finger productively in order to share in the surplus value generated by productive wage labour. footnote⁴⁴

Here, the analogies are quite clear: land = data; technology firms = non-capitalists; their revenues = rent. Foley makes much of the waterfall example, arguing that 'once a particular person or entity has established property right control over a waterfall, for example, a rent constituting a share of the global pool of surplus value springs into existence.' But, he continues, there are even better things than owning a waterfall. Water is scarce, after all. Intangibles, on the other hand, could be infinite: if one owns the copyright to a popular song, one can draw almost infinite rents from it. Now, the great outstanding question is whether Google and its peers are like that noncapitalist owner of the waterfall who 'need not lift a finger' in order to share in the surplus value generated somewhere else. Foley says they are. But, if so—if the tech giants really are lazy rentiers who are ripping everyone off by exploiting intellectualproperty rights and network effects—why do they invest so much money in what can only be described as production of some kind? What kind of rentiers do that? Alphabet's r&d spending in 2017, 2018, 2019 and 2020 was \$16.6 billion, \$21.4 billion, \$26 billion and \$27.5 billion respectively. Does that not count as 'lifting a finger'? If not, what would?

Amazon, too, spent \$42.7 billion in 2020 alone on research and development, while employing over a million people across the globe. In the us, the company employs more people than the entire residential construction industry: one out of every 153 employed Americans.footnote⁴⁵ If these are lazy waterfall-owning rentiers, they are peculiarly masochistic ones: why not just rest on their laurels, fire everyone and stop spending? And who, looking at these numbers, could really believe—together with the postworkerists—that capitalists are now external to production? What then are they spending all this r&d money on? More telling still, a close analysis of the balance sheets of Google, Amazon and Facebook shows that they have *fewer* intangible assets than other big corporations—in fact, today they own relatively fewer intangibles than they did ten to fifteen years ago.footnote⁴⁶ It is easy to see why: all this data requires extensive physical networks and vast data centres—but such trends create a big hole in arguments that overemphasize the intangible assets.

Durand must surely be aware of some of these numbers. His potential escape from this analytical predicament is the concept of 'predation'—borrowed from Veblen's analysis of America's belle-époque bourgeoisie in *The Theory of the Leisure Class* (1899)—and to argue that these massive investments fund the forces of predation, rather than the forces of production. There are, indeed, many interesting ways to deploy Veblen's analytical framework—his distinction between efficiency-oriented industry and pecuniary-oriented business, for example—to argue that what really drives capitalists is not profit-seeking, but, rather, the ability to engage in sabotage, to ensure that today's robber barons receive not only the profits they expect, but higher profits than their competitors.

In the past twenty years, a new approach to political economy known as Capital as Power (CasP), has emerged to do just that, introducing the concept of 'differential accumulation' to describe such dynamics. <u>footnote</u>⁴⁷ Its adherents, concentrated mostly at York University in Canada, have criticized both Marxist and neoclassical economics—using some solid and convincing arguments—for overlooking these 'sabotage' dynamics and ignoring the constitutive role of power in capitalism as a

whole. This approach has informed some interesting recent research on the technology industry, including empirically rich work on techno-scientific rent and assetization, with insights from Science & Technology studies. footnote⁴⁸

The difficulty of fitting Marx and Veblen into a single analytical framework here—something Durand also attempts in a recent essayfootnote⁴⁹—is that Marx saw predation and sabotage as part and parcel of feudalism, not capitalism. For Veblen, these are instincts present in all capitalists, even if those with control over intangible assets may be better positioned to act upon them. Marx, however, ultimately saw capitalists as productive; if one could speak of sabotage, this would only be possible at the systemic level of capitalism as a whole and not at the level of individual capitalists. Durand clearly wants to stay with Marx rather than Veblen. However, that would require spelling out just what exactly these 'forces of predation' are and how they relate to accumulation and all the thorny debates on 'primitive accumulation'—a theoretical challenge that Durand, having engaged with 'accumulation by dispossession' in *Fictitious Capital*, knows all too well. Otherwise, it's not clear why Marxist theory would need this highly ambiguous theoretical carapace of 'predation', when its own categories—of profit and capitalist production, as well as rent and rentierism—suffice to explain Google's success.

Marx himself was unequivocal about the fact that fully automated capitalist firms not only appropriate surplus value derived elsewhere—on this, both Foley and Durand agree—but that they do so as *profits*, not *rent*. These automated firms are as capitalist as the firms that exploit wage labour directly. As Marx writes in Volume 3:

A capitalist who employed no variable capital at all in his sphere of production, hence not a single worker (in fact an exaggerated assumption), would have just as much an interest in the exploitation of the working class by capital and would just as much derive his profit from unpaid surplus labour as would a capitalist who employed only variable capital (again an exaggerated assumption) and therefore laid out his entire capital on wages. footnote⁵⁰

The techno-feudal thesis stems not from the advance of contemporary Marxist theory, but from its apparent inability to make sense of the digital economy—of what, exactly, is produced in it and how. If one accepts that Google is in the business of producing search-result commodities—a process that does require massive capital investment there is no great difficulty in treating it as a regular capitalist firm, engaged in normal capitalist production. This is not to say that the digital giants do not engage in all sorts of other tactics to consolidate their power, leverage their patent portfolios, lock in their users and obstruct any possible competition, often by buying challenger start-ups, in addition to the fortunes spent on winning the support of lawmakers on Capitol Hill. Capitalist competition is a nasty business and it may be even nastier when digital products are involved. But this is no reason to fall into the analytical swamps of cognitive capitalism, user-ism or techno-feudalism. Both Veblen and Marx may be needed if we want to understand the tactics of individual firms and the systemic consequences of their actions; in that sense, there's much that Marxists can learn from the 'Capital as Power' school. But for either approach to make great strides forward, one needs to be at least clear about the business models of the firms in question. Fixating on aspects of them—simply because one detects an excess of intellectualproperty rights, or signs of financialization, or some other disturbing process—is not going to provide a comprehensive view of those models.

7. enter the state

As well as lack of analytical clarity, another major problem with the techno-feudalist framework is that it risks taking the state out of the picture. Durand's Technoféodalisme has very little discussion of the driving role of the American state in the rise of Alphabet, Facebook or Amazon; the same goes for many other shorter texts on techno-feudalism.footnote⁵¹ Durand's critique of what he dubs the Californian Ideology makes much of the cyber-libertarian orientation of the 'Magna Carta of Cyberspace', its foundational text. But he neglects to mention that one of that document's four authors, the prominent investor Esther Dyson, also spent years on the board of the National Endowment for Democracy, America's finest regime-change outlet. Save for a few contrarian accounts—among them, Linda Weiss's excellent America Inc.? Innovation and Enterprise in the National Security State (2014)—the role of the American state in the rise of Silicon Valley as a global techno-economic hegemon has been greatly understated. Reading these developments through the lens of techno-feudalism which assumes that states are weak, with sovereignty 'parcelized' among many techno-lords—can only obfuscate this further. All the recent techlash hysteria about the power of technology companies—as 'giants' or 'robber barons', or just one monolithic 'Big Tech' bloc—has entrenched the notion that the rise of digital platforms has come at the cost of the state's disempowerment.

This may be the case for weaker European or Latin American countries, all but colonized by American firms in recent years. But can the same be said for the United States itself? What of the longstanding links between Silicon Valley and Washington, with Google's former ceo, Eric Schmidt, leading the Defense Innovation Board, an advisory body to the Pentagon itself? What about Palantir, the company co-founded by Thiel which provides essential links between the us surveillance state and American tech? Or Zuckerberg's argument—apparently effective so far—that breaking up Facebook would embolden the Chinese technology giants and weaken America's standing in the world? Geopolitics is barely visible within the techno-feudalist perspective: Durand's few mentions of China are mostly to scold its Social Credit system, an instrument of algorithmic governmentality.

Could this lack of attention to the constitutive role played by the state in the consolidation of the American tech industry be the result of the analytical, Brennerian framings of capitalism that seek to deduce its 'laws of motion' by observing it in action? It is impossible to grasp the ascendancy of the American tech industry if one brackets out the Cold War and the War on Terror—with their military spending and surveillance technologies, as well as the global network of American military bases—as extraneous, non-capitalist factors, of little importance to understanding what 'capital' wants and what it does. Could one make the same mistake today, when the 'rise of China' and climate catastrophe are coming to occupy the system-orienting role once played by the Cold War? If so, we can also forget about comprehending the rise of what some have dubbed 'asset-manager capitalism', which seeks to delegate the state's task of fighting climate change to the likes of Blackrock, Vanguard and State Street.

From the Brennerian vantage point, any systemic intervention by the state into the ongoing operations of capital might appear as an example of 'political capitalism' footnote 52—rather than properly functioning 'economic' capitalism, driven by its own laws of motion. For Brenner himself, the long-term stagnation of the us economy in conditions of global manufacturing over-capacity has led powerful

elements of the American ruling class to abandon their interest in productive investment and turn instead to the upward redistribution of wealth by political means.footnote53 In this, strangely, left and right appear to converge. After all, detecting the corrosive effects of 'political capitalism' everywhere is much more typical of liberal and neoliberal economics, concerned as they are with rent-seeking by public officials and the resurgence of personalistic networks intervening in the operations of capital. It was this kind of concern about 'political' rather than 'economic' capitalism that gave rise to Public Choice and the fetishization of anti-corruption by Chicago economists such as Luigi Zingales. Durand himself repeatedly engages with Mehrdad Vahabi, a Public Choice scholar, citing him favourably on predation. footnote⁵⁴ Perhaps it is now time to ask whether the Brenner-Wallerstein debate is in for some definitive resolution. Arguably, the unresolved ambiguities of that debate have created the analytical and intellectual openings through which the techno-feudalist thesis now appears plausible to creative young Marxian economists like Durand. After all, it is only because ongoing expropriation, and the political power that it presupposes, cannot be easily reconciled with the exploitation-driven account of capitalist development that one needs extraneous concepts like Harvey's 'accumulation by dispossesion', Veblen's 'predation', Vercellone's 'cognitive rent', or even Zuboff's 'extraction of behavioural surplus'.

8. broader oceans

Currently, the only way to fit exploitation and expropriation into a single model is to argue that we need a more expansive conception of capitalism itself—as Nancy Fraser has done, with some success. Whether Fraser's account, which is still being elaborated, will succeed in accounting for broader geopolitical and military considerations remains to be seen. But the overall thrust of the argument seems correct. While in the 1970s it may have been possible to analyse unfree labour, racial and gender domination and the unpriced use of energy—as well as the unequal terms of trade that resulted from the core siphoning off cheap commodities from the periphery—as external to the exploitation-driven capitalist system, this is no easy task today. Such arguments have increasingly been put into question by some of the stellar empirical work done by historians of gender, climate, colonialism, consumption and slavery. Expropriation was given its due, significantly complicating the analytical purity with which capital's laws of motion could be formulated. Jason Moore—a student of Wallerstein and Giovanni Arrighi—may have formulated the new consensus when he wrote that 'capitalism thrives when islands of commodity production and exchange can appropriate oceans of potentially Cheap Natures—outside the circuit of capital but essential to its operation.' footnote 55 This holds, of course, not only for Cheap Natures there are many other activities and processes to appropriate—so these 'oceans' are broader than Moore suggests.

One major concession that Political Marxism would probably have to make is to abandon its conception of capitalism as a system marked by the functional separation between the economic and the political—that 'economic need supplies the immediate compulsion compelling the worker to transfer surplus labour to the capitalist'—in contrast to their fusion under feudalism. There were certainly good reasons to point out that the advance of democracy stopped at the factory gates; that rights granted in the political arena did not necessarily eliminate despotism in the economic sphere. Of course, much in this presumed separation was fictitious: as Ellen Meiksins Wood

argued in her seminal article on the issue, it was bourgeois economic theory that had abstracted 'the economy' from its social and political content, and capitalism itself that had driven the wedge separating essentially political issues, such as the power 'to control production and appropriation, or the allocation of social labour', from the political arena, displacing them to the sphere of the economic. True socialist emancipation would require a full awareness that the separation between the two was artificial.footnote⁵⁶

Yet Wood's overall account painted a picture of coercion under capitalism that was too simplistic. 'The integration of production and appropriation [under capitalism],' she wrote, 'represents the ultimate "privatization" of politics, to the extent that functions formerly associated with a coercive political power—centralized or "parcelized"—are now firmly lodged in the private [economic] sphere, as functions of a private appropriating class relieved of obligations to fulfil larger social purposes.' On this view, the scope of the 'purely political' with regards to the purely economic was quite limited: it consisted, primarily, of safeguarding property rights. That the political was also instrumental in securing cheap supplies of energy and food, of unfree labour and minerals, of knowledge and, perhaps, eventually, of data—the very conditions of possibility that make the (expanded) conception of the 'economic' possible—was left unsaid, for obvious reason: none of those things had a direct bearing on exploitation. However, if the 'political' was so instrumental to the constitution of the 'economic', one might as well ask just what is gained by presenting capitalism as a system that keeps the 'political' and the 'economic' apart? That capitalists and their ideologues talk that way is one thing; the extent to which this is an accurate description of what actually occurs under capitalism—the thesis of Woods's article—is another. Here one is reminded of Bruno Latour's quip that modernity speaks with a forked tongue: it says that science and society are poles apart—but this strategic confusion is precisely what allows it to hybridize them so productively. It may be that the story of the political and the economic under capitalism is very similar.

In retrospect, it is easy to see why Brenner was never impressed by Harvey's coinage of 'accumulation by dispossession'. In as much as the concept referred to redistribution—accomplished by markets and violence alike—rather than production, it could not graduate from 'primitive' to regular capitalist accumulation, at least in Brenner's understanding of the term. However, given all the historical evidence that piled up in the past forty years—especially during the 2008 crisis and the Covid pandemic—it has become harder, even for Brenner, to bracket out redistribution as something extraneous to actually existing capitalism. The amounts involved—many trillions of dollars—are just too staggering. Thus he came to write in 'Escalating Plunder', his 2020 text on the Covid bailouts: 'What we have had for a long epoch is worsening economic decline met by intensifying political predation.' footnote⁵⁷ The word 'political'—a hint that, for Brenner, the 'normal' process of capitalist accumulation is failing—makes a frequent appearance in that essay. Lacking the framework for bridging redistribution and exploitation within some broader account of capitalist accumulation, Brenner has just one move left: to posit that capitalists' dependence on state-driven upward redistribution of wealth is moving capitalism away from itself, towards an economic form that apparently shares a central feature with feudalism. This would retain the purity of the original model—the honorary title of 'capitalism' could be reserved for that one impressive regime in which

accumulation does happen through innovation, rather than predation or dispossession—but only at the expense of unleashing all sorts of secondary analytical and political problems. The weaknesses in Durand's argument are, to some extent, the product of unresolved tensions in the Brenner–Wallerstein debate.

The ultimate irony here is that the best evidence that 'accumulation via innovation' is—like capitalism itself—still very much alive, can be found in the same technology sector that Durand writes off as feudalist and rentierist. We can see as much when we abandon the overdetermined macro-narratives of these analytical frameworks—be it Harvey's 'neoliberalism' as a political project or Vercellone's 'cognitive capitalism'. Thinking of technology firms the way Marx would have likely thought about them—that is, as capitalist producers—surely yields better results.

In the meantime, Marxists would do well to acknowledge that dispossession and expropriation have been constitutive of accumulation throughout history. Perhaps the luxury of employing *only* the economic means of value extraction in the 'properly' capitalist core was always due to the extensive use of extra-economic means of value extraction on the non-capitalist periphery. Once we make that analytical leap, we no longer need to bother with invocations of feudalism. Capitalism is moving in the same direction it always has been, leveraging whatever resources it can mobilize—the cheaper, the better. In this sense, Braudel's one-time description of capitalism as 'infinitely adaptable' is not the worst perspective to adopt. But it does not adapt continuously and, when it does, it's not a given that the upward-redistributive tendencies win out over the productive ones. It may well be that this is exactly how much of today's digital economy operates. This, of course, is no reason to believe that techno-capitalism is somehow a nicer, cozier and more progressive regime than techno-feudalism; by vainly invoking the latter, we risk whitewashing the former's reputation.

- ¹ In the interests of disclosure, I must report that around 2016 I, too, flirted with these concepts, using them in an occasional newspaper column and a talk. Around then, the term 'digital feudalism' even crept into the announcement of the subtitle of my yet-to-be-published book (the final edition certainly won't feature it); it also appeared in the subtitle of a collection of my essays that came out in Spain in 2018. Having realized their analytical weaknesses, I quickly abandoned these concepts.
- ² Eric Posner and Glen Weyl, *Radical Markets: Uprooting Capitalism and Democracy for a Just Society*, Princeton 2018, p. 232. Weyl fashions himself as a rebel son of neoliberal economics. A childhood fan of Ayn Rand, he won praise from major stars of the profession, including—as a 13-year-old—Milton Friedman. Recently, Weyl has declared he no longer identifies as an economist, due to the flawed premises of the profession. His links to the tech sphere derive from a perch at Microsoft Research and collaboration with Vitalik Buterin, co-founder of the Ethereum blockchain, Bitcoin's main competitor.
- ³ The ideas behind Feudl are described on Yarvin's blog, *Unqualified Reservations*. Essentially, Google was not too feudal but too 'woke'—too democratic. Indexing and ranking every web page it found based on how many other pages linked to it, the search engine ignored the emergence of natural hierarchies which, according to Yarvin, are a benign feature of all communities. Yarvin put some of his ideas about neo-feudal digital infrastructures into practice in his Urbit project, funded in part by Thiel. For a summary of its politics, see Harrison Smith and Roger Burrows, 'Software, Sovereignty and the

Post-Neoliberal Politics of Exit', *Theory, Culture & Society*, vol. 38, no. 6, November 2021. For a profile of Yarvin, see Joshua Tait, 'Mencius Moldbug and Neoreaction', *Key Thinkers of the Radical Right*, Oxford 2019, pp. 187–203.

- ⁴ Varoufakis: see his short piece 'Techno-Feudalism Is Taking Over', *Project Syndicate*, 28 June 2021 and my interview with him, 'Yanis Varoufakis on Crypto, the Left and Techno-Feudalism', *The Crypto Syllabus*, 26 January 2022; Mariana Mazzucato, 'Preventing Digital Feudalism', *Project Syndicate*, 2October 2019; Jodi Dean, 'Communism or Neo-Feudalism?', *New Political Science*, vol. 42, no. 1, February 2020; Robert Kuttner: see his co-authored piece with Katherine Stone, 'The Rise of Neo-Feudalism', *American Prospect*, 8 April 2020. For Wolfgang Streeck's discussion of 'oligarchic inequality'—'one could also speak of neo-feudalism'—see *How Will Capitalism End? Essays on a Failing System*, London and New York 2016, pp. 28–30, 35, 187. Michael Hudson has been writing about neo-feudalism for almost a decade; see for example, 'The Road to Debt Deflation, Debt Peonage and Neofeudalism', Levy Economics Institute of Bard College Working Paper no. 708, February 2012. For Robert Brenner's use of the term, see his lecture, 'From Capitalism to Feudalism? Predation, Decline and the Transformation of us Politics', University of Massachusetts Amherst Political Economy Workshop, 27 April 2021, available on YouTube.
- ⁵ Digital culture from the early 1990s onwards was already drowning in medieval imagery of 'enclosures', 'commons', 'robber barons', 'tech overlords', 'digital sharecropping', even 'digital witch hunts'—not to mention Umberto Eco's comparison of dos and Mac users to Protestants and Catholics. The techno-feudalist diagnosis thus lands on fertile soil.
- ⁶ See Brett Christophers, *Rentier Capitalism: Who Owns the Economy, and Who Pays for It?*, London 2020.
- ² Julia Tomassetti, 'Does Uber Redefine the Firm? The Postindustrial Corporation and Advanced Information Technology', Indiana Legal Studies Research Paper No. 345, April 2016.
- ⁸ The most accessible recent recapitulation of the Marxist reading of feudalism as an economic logic is by Chris Wickham, 'How Did the Feudal Economy Work? The Economic Logic of Medieval Societies', *Past & Present*, vol. 251, no. 1, May 2021.
- ⁹ I owe this striking phrase to the title of Murray Smith's *Invisible Leviathan: Marx's Law of Value in the Twilight of Capitalism*, Leiden 2020.
- ¹⁰ Marc Bloch's work, *Feudal Society*, London [1939] 2014, is the perennial reference point in these circles.
- ¹¹ An intriguing example in this regard—coming from the political right—is offered by the work of the Dutch theorist Frank Ankersmit, who has argued since 1997 onwards that the prominent role played by ngos and other quangos in liberal democracies has produced a 'quasi-feudal archipelago of selfish managerial islands', ushering in—to borrow the title of his 2005 book—'The New Middle Ages.'
- ¹² See Sighard Neckel, "Refeudalisierung": Systematik und Aktualität eines Begriffs der Habermas'schen Gesellschaftsanalyse', *Leviathan*, vol. 41, no. 1, 2013; 'Refeudalisierung der Ökonomie', in *Soziologie der Finanzmärkte*, Bielefeld 2014, pp. 113–28; 'The refeudalization of modern capitalism', *Journal of Sociology*, vol. 56, no. 3, June 2020. Despite frequent references to capitalism, the account of feudalism that informs Neckel's usage is unmistakably non-Marxist, contrasting the equality, justice

- and neutralization of private power fostered by the bourgeois state with their absence under feudal arrangements.
- ¹³ This is most visible in their co-written works: Joas and Knöbl, *Social Theory: Twenty Introductory Lectures*, Cambridge 2009; *War in Social Thought*, Princeton 2012.
- ¹⁴ An accessible summary of Supiot's argument in article form is found in 'The Public-Private Relation in the Context of Today's Refeudalization', *International Journal of Constitutional Law*, vol. 11, issue 1, January 2013, pp. 129–45.
- ¹⁵ Supiot, *Governance by Numbers*, London 2015, p. 225. There's an affinity here with the proliferation of concepts related to 'neo-medievalism' in International Relations theory from the 1960s. In that field, 'neomedievalism' was also applied early on to the global digital economy: see Stephen Kobrin, 'Back to the Future: Neomedievalism and the Postmodern Digital World Economy', *Journal of International Affairs*, vol. 51, no. 2, Spring 1998.
- ¹⁶ Ellen Meiksins Wood, 'The Separation of the Economic and the Political in Capitalism', nlr i/127, May–June 1981, p. 80.
- The literature on this is huge, but an indispensable starting point for the Brenner Debate on the transition to capitalism is Trevor Aston and Charles Philpin, eds, *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*, Cambridge 1987.
- ¹⁸ Immanuel Wallerstein, *The Origins of the Modern World-System*, New York 1974, pp. 16–20.
- ¹⁹ Robert Brenner, 'The Origins of Capitalist Development: A Critique of Neo-Smithian Marxism', nlr i/104, July–August 1977.
- ²⁰ Robert Brenner, 'What Is, and What Is Not, Imperialism?', *Historical Materialism*, vol. 14, no. 4, January 2006, pp. 79–105.
- ²¹ Karl Marx, *Capital*, *Volume One*, Ben Fowkes, trans., London 1990, p. 915.
- ²² For an assessment of the current state of political Marxism see *Historical Materialism*, vol. 29, no. 3, November 2021, which is devoted to the topic. Remarkably, Brenner's seminal critique of Wallerstein, 'The Origins of Capitalist Development', mentions the term 'innovation' 43 times—probably a first for an essay in *New Left Review*.
- ²³ See Klaus Dörre, 'Capitalism, *Landnahme* and Social Time Regimes: An Outline', *Time & Society* vol. 20, no. 1, April 2011; 'Finance Capitalism, *Landnahme* and Discriminating Precariousness: Relevance for a New Social Critique', *Social Change Review*, vol. 10, no. 2, October 2012. For Fraser's contributions see Nancy Fraser and Rahel Jaeggi, *Capitalism: A Conversation in Critical Theory*, Cambridge 2018; and Fraser, 'Expropriation and Exploitation in Racialized Capitalism: A Reply to Michael Dawson', *Critical Historical Studies*, vol. 3, no. 1, Spring 2016.
- ²⁴ Brenner, 'What Is, and What Is Not, Imperialism?'
- ²⁵ In the past decade, the Brazilian sociologist Daniel Bin produced a more careful account of specific conditions under which dispossession would lead to capitalist accumulation—a combination of proletarianization, commodification and what Bin calls 'capitalization'—in order to distinguish it from cases where dispossession would have solely redistributive effects. See Daniel Bin, 'So-Called Accumulation by Dispossession', *Critical Sociology*, vol. 44, no. 1, January 2018; and his 'Dispossessions in Historical Capitalism: Expansion or Exhaustion of the System?', *International Critical Thought*, vol. 9, no. 2, May 2019.

- ²⁶ For a quick overview, see Verónica Gago and Sandro Mezzadra, 'A Critique of the Extractive Operations of Capital: Toward an Expanded Concept of Extractivism', *Rethinking Marxism*, vol. 29, no. 4, 2017, pp. 574–91.
- ²⁷ David Harvey, Seventeen Contradictions and the End of Capitalism, New York 2014.
- ²⁸ See Yann Moulier-Boutang, *Cognitive Capitalism*, Cambridge 2011; Carlo Vercellone, 'From Formal Subsumption to General Intellect: Elements for a Marxist Reading of the Thesis of Cognitive Capitalism', *Historical Materialism*, vol. 15, no. 1, January 2007. The fact that Harvey himself has mixed feelings about 'cognitive capitalism' should not deter us here; for his discussion of the term, see Chapter 5 of *Marx*, *Capital*, *and the Madness of Economic Reason*, London 2017.
- ²⁹ The gaze of these theorists does not often extend beyond Western Europe, with the partial exception of Moulier-Boutang, who is an expert in African colonial and postcolonial economic history.
- ³⁰ See Chapter 5 of George Caffentzis, *In Letters of Blood and Fire: Work, Machines, and the Crisis of Capitalism*, Oakland 2012.
- ³¹ This example is drawn from Bryan Parkhurst, 'Digital Information and Value: A Response to Jakob Rigi', *tripleC: Communication, Capitalism & Critique*, vol. 17, no. 1, February 2019, pp. 72–85.
- ³² See Peter Drahos, 'Information Feudalism in the Information Society', *The Information Society*, vol. 11, no. 3, April 1995; Drahos and John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?*, Abingdon 2002.
- ³³ The 'users are workers' position has also been promoted by Glen Weyl, who coauthored a much-discussed paper on 'data labour' with technology pundit Jaron Lanier and others; see Imanol Arrieta-Ibarra et al., 'Should We Treat Data as Labour? Moving Beyond "Free"', *American Economic Association Papers & Proceedings*, vol. 108, May 2018. See also Carlo Vercellone, 'Les plateformes de la gratuité marchande et la controverse autour du Free Digital Labor: une nouvelle forme d'exploitation?', *Open Journal in Information Systems Engineering*, vol. 1, no. 2, 2020.
- ³⁴ Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York 2019.
- ³⁵ While Zuboff writes of Google 'exploiting information' or 'exploiting its discovery of behavioural surplus', she does not mean capitalist exploitation here.
- ³⁶ 'The income of the rentiers is five times greater than the income obtained from the foreign trade of the biggest "trading" country in the world! This is the essence of imperialism and *imperialist parasitism*': V. I. Lenin, *Imperialism, the Highest Stage of Capitalism* [1916], Peking 1970, p. 121. Ironically, in 2004 Zuboff did pen a column that embraced the neo-feudalist framework: 'From Subject to Citizen', *Fast Company*, 1 May 2004.
- ³⁷ Rasmus Fleischer, 'If the Song Has No Price, Is It Still a Commodity? Rethinking the Commodification of Digital Music', *Culture Unbound*, vol. 9, no. 2, October 2017. Since the platform has to pay so much for licensing, Fleischer notes, 'the devaluation of recorded music would be in the interest of Spotify.'
- ³⁸ Cédric Durand, *Techno-féodalisme: Critique de l'économie numérique*, Paris 2020. An English edition has not appeared yet; all translations from French are mine.
- ³⁹ See Chris Harman and Robert Brenner, 'The Origins of Capitalism', *International Socialism*, no. 111, summer 2006.

- ⁴⁰ See, for example, Özgür Orhangazi, 'The Role of Intangible Assets in Explaining the Investment–Profit Puzzle', *Cambridge Journal of Economics*, vol. 43, no. 5, March 2019, pp. 1251–86; Herman Mark Schwartz, 'Global Secular Stagnation and the Rise of Intellectual Property Monopoly', *Review of International Political Economy*, 2021, pp. 1–26.
- ⁴¹ Durand also discusses this typology in an article co-authored with William Milberg, 'Intellectual Monopoly in Global Value Chains', *Review of International Political Economy*, vol. 27, no. 2, September 2020. For illuminating case studies, see Céline Baud and Cédric Durand, 'Making Profits by Leading Retailers in the Digital Transition: A Comparative Analysis of Carrefour, Amazon and WalMart (1996-2019)', Working Papers of the Department of History, Economics and Society, University of Geneva, April 2021.
 ⁴² McKenzie Wark, *Capital Is Dead: Is This Something Worse?*, London and New York 2021.
- ⁴³ A one-time co-author of Durand, the Argentinian economist Cecilia Rikap makes similar arguments about predation, also drawing on Veblen, in her recent book on what she calls 'intellectual monopoly capitalism' (see Cecilia Rikap, *Capitalism, Power and Innovation: Intellectual Monopoly Capitalism Uncovered*, London 2021). She does not follow Durand in detecting any feudalist tendencies in the global economy, opting for the Wallerstein-friendly account that sees leading tech firms as capitalists that leverage both exploitation and expropriation, absorbing surplus value wherever they could find it.
- ⁴⁴ Duncan Foley, 'Rethinking Financial Capitalism and the "Information" Economy', *Review of Radical Political Economics*, vol. 45, no. 3, September 2013.
- ⁴⁵ Dominick Reuter, '1 out of Every 153 American Workers Is an Amazon Employee', *Business Insider*, 30 July 2021.
- ⁴⁶ See Kean Birch, D. T. Cochrane, and Callum Ward, 'Data as Asset? The Measurement, Governance, and Valuation of Digital Personal Data by Big Tech', *Big Data & Society*, vol. 8, no. 1, May 2021.
- ⁴⁷ The paradigmatic text is Jonathan Nitzan and Shimshon Bichler, *Capital as Power: A Study of Order and Creorder*, London 2009. For a Marxist critique of this approach see Bue Rübner Hansen, 'Review of Nitzan and Bichler's *Capital as Power: A Study of Order and Creorder'*, *Historical Materialism*, vol. 19, no. 2, April 2011.
- ⁴⁸ See Kean Birch and Fabian Muniesa, eds, *Assetization: Turning Things into Assets in Technoscientific Capitalism*, Boston 2020; Birch, 'Technoscience Rent: Toward a Theory of Rentiership for Technoscientific Capitalism', *Science, Technology, & Human Values*, vol. 45, no. 1, February 2020; Birch and D. T. Cochrane, 'Big Tech: Four Emerging Forms of Digital Rentiership', *Science as Culture*, May 2021.
- ⁴⁹ See Durand, 'Predation in the Age of Algorithms: The Role of Intangible Assets', in Marlène Benquet and Théo Bourgeron, eds, *Accumulating Capital Today:*Contemporary Strategies of Profit and Dispossessive Policies, London 2021, pp. 149–62
- ⁵⁰ Marx, Capital, Volume Three, David Fernbach, trans., London 1991, p. 300.
- ⁵¹ On the absence of the us state in Zuboff's *magnum opus*, see Rob Lucas's review, '<u>The Surveillance Business</u>', nlr 121, Jan–Feb 2020.
- ⁵² The term 'political capitalism', coined by Weber in *Economy and Society* to describe—however inappropriately—the political-economy of Ancient Rome, was repurposed by Gabriel Kolko to characterize the self-styled Progressive Era in *The*

Triumph of American Conservatism: A Reinterpretation of American History, 1900-1916, New York 1963.

- ⁵³ Robert Brenner, 'Escalating Plunder', nlr 123, May–June 2020, p. 22.
- ⁵⁴ See, Mehrdad Vahabi, *The Political Economy of Predation: Manhunting and the Economics of Escape*, Cambridge 2016.
- ⁵⁵ Jason Moore, 'The Capitalocene Part ii: Accumulation by Appropriation and the Centrality of Unpaid Work/Energy', *The Journal of Peasant Studies*, vol. 45, no. 2, May 2018, pp. 237–79.
- ⁵⁶ Wood, 'The Separation of the Economic and Political in Capitalism', pp. 66–7.
- ⁵⁷ Brenner, 'Escalating Plunder', p. 22.