

Uber and the Unmaking and Remaking of Taxi Capitalisms: Technology, Law, and Resistance in Historical Perspective

Eric Tucker¹

I. Introduction

From a neoliberal economic perspective, the emergence of new digital technologies portends the possibility of an economic revolution, in which there will be greater human freedom and a democratization of economic opportunity. Digitally enabled workers will transform themselves into micro-entrepreneurs, able to work for themselves “whenever they want from any location and at whatever level of intensity needed to achieve their desired standard of living.”² Of course, there is also recognition that this bright future will not be decided by technology alone. Even for the most technological utopian, human liberation is not merely an app away, and there is recognition that other institutional and policy changes are required for the emancipatory potential of the platform economy to be unlocked.³ But it is seen as possible within what Arun Sundararajan, a leading sharing economy optimist, calls “crowd-based capitalism.”⁴

For others, the impact of the platform economy is much darker. The title of Steven Hill’s book succinctly encapsulates this perspective: *Raw Deal: How the “Uber Economy” and Runaway Capitalism are Screwing American Workers*.⁵ Here the emphasis is on the ways in which these platforms are shifting uncertainty and risks onto workers who lack employment security and face a shredded safety net in hyper-competitive, globalized labour markets.



Woodcut by Philippe Maurais, c. 1995. Reproduced with permission of the artist.

On the surface there seems to be a common agreement that capitalism is central to understanding the operation of the platform economy and its implications for the workforce, yet neither Sundararajan nor Hill actually make capitalism and the social relations of production central to their analytic framework. Thus, one goal of this chapter is to put capitalism at the centre of the analysis, drawing on Nick Srnicek's recent book, *Platform Capitalism*.⁶ In doing

so, there is a need to recognize that capitalism is not a static system operating uniformly over time and space, but rather takes very different forms. The debate about the varieties of capitalism draws on this insight, but focuses on the political framework within which capitalism functions and the extent to which it is embedded in particular institutional arrangements.⁷ The concern here is more focused on the inner workings of capitalist regimes of accumulation. In particular, this chapter inquires into and seeks to account for the distinct ways that workers are subsumed into platform capitalism.

A second goal is to use this refined political economy framework to place Uber and the taxi industry in historical perspective. As we shall see, taxi capitalisms have been made, unmade, and remade several times over the past hundred years in response to changing technology law, and resistance to these changes by workers and segments of capital which shape both law and technology. Using Toronto as a case study, this chapter examines the rise of Uber and its platform technology in the context of the broader history of taxi capitalisms.

II. Theoretical Starting Points

Although Sundararajan titled his book *The Sharing Economy*, he recognizes this is a misnomer, since there is actually very little sharing that takes place in the world of the platform economy.⁸ Rather, the so-called sharing economy is dominated by technologically facilitated commercial exchanges, and in recognition of this reality Sundararajan's preferred term is "crowd-based capitalism." As I draw on Nick Srnicek's work, I prefer the term "platform capitalism," but regardless of the adjective used to describe the kind of capitalism that exists, it is important in the first instance not to lose sight of the analytical significance of its *capitalist* character. In particular, venture capitalists fuel the platform economy, seeking to increase their private fortunes by finding new ways of extracting value from socially produced wealth. Platforms are digital infrastructures that enable individuals and groups to interact and are thus intermediaries. What makes them capitalist is that these infrastructures are privately owned and operated to extract profits by becoming the ground on which transactions take place. Users must pay quasi-monopoly rents to access the platform while the platform itself is uniquely positioned

to collect data provided by its users, which is then commodified and sold to other profit-seeking businesses.⁹

The identification of the platform as a vehicle for capitalist accumulation, however, only begins the analysis, and here is where the adjectives come in. What kind of capitalism does the platform produce? A good place to begin this discussion is with Sundararajan's subtitle, *The End of Employment and the Rise of Crowd-Based Capitalism*. This juxtaposition might seem paradoxical at first glance, since capitalism has long been associated with the primacy of waged work as the mechanism through which capitalists extract surplus value from labour. But Sundararajan is not a Marxist, and neither sees his claim as paradoxical nor as requiring an explanation of what makes crowd-based capitalism capitalist. However, he does describe the elements of crowd-based capitalism as being market-based, providing greater opportunities to more fully deploy assets, and to source labour and capital from decentralized crowds. He also describes it as blurring the lines between the personal and professional by commercializing activities that used to be considered personal, and as blurring the lines between fully employed and casual labour, between independent and dependent employment, and between work and leisure.¹⁰

This combination of characteristics seems to describe a decentralized market economy in which the lifeworld is pervasively commodified and in which labour is seemingly provided on a spot market finely tuned to meet ever-shifting demand. What is missing, however, are several structural features of capitalism that differentiate it from a simple trading economy. First, there is no recognition that underlying capitalism is a particular structure of property and class relations in which the means of production are substantially owned by a small minority of the population while the majority are dependent on their labour in order to survive.¹¹ Second, there is no recognition that capitalism is driven by the relentless pursuit of profits and expansion. Economic value in capitalism is not generated by simple exchange but in the ability of capital to extract profits from socially produced wealth through relations of domination and exploitation. If crowd-based capitalism was a world in which the predominant social relation of production was between relatively equal, truly independent, property-owning commodity and service producers, it would not be capitalist because it would not have a capitalist property and class structure.¹²

We will return to a discussion of Uber later, but the evidence seems pretty clear that the predominant structure of the platform economy does not resemble a world of truly independent commodity/service producers selling directly to consumers through platform-mediated transactions, but rather one in which workers are subordinated to platform enterprises bent on maximizing profits and expanding to become dominant players, if not monopolists, in their markets. For example, leaving open the question of whether Uber drivers are legally employees or not, what is clear is that they are not economically independent in any meaningful way, but rather exist in a subordinate relation with Uber, a privately held company with a valuation estimated to be over \$60 billion. This is the underlying reality that motivates Uber drivers to act collectively to redress what they perceive to be their domination and exploitation in that relation.¹³

So even if Sundararajan does not satisfactorily explain how capitalism works in the platform economy, the question is centrally important, not just theoretically, but also practically. Platform capitalism fits within a larger political economic transformation that has seen the decline of the standard employment relationship central to the post-World War II era of welfare-state capitalism and the growth of precarious work, including own-account self-employment and temporary work, associated with the rise of neoliberal capitalist formations.¹⁴

This is not to deny that technological change plays a significant role in the evolution of capitalism. Marx was acutely attentive to the “constant revolutionizing of the instruments of production” that was endemic to capitalism, but he did not consider technology in isolation. Rather, he was concerned with the way that technology revolutionized “relations of production and with them the whole relations of society.”¹⁵ It was the first industrial revolution that was Marx’s primary focus, and in *Capital* he famously described the process by which capitalist relations of production supplanted simple commodity production by freeing workers from ownership of the means of production, making them “free” to sell their labour as rights-bearing individuals to the equally rights-bearing owners of capital. He then followed these personae into the factory—the hidden abode of production—where the capitalist, having purchased the workers’ capacity to work, extracted surplus value by his control over the labour process. Thus the wage relation came to be seen as the paradigmatic mode of labour exploitation in Marxist theory.

However, as Wallace Clement reminds us, pockets of commodity production continued in areas such as fishing and farming, so the process of proletarianization was never complete.¹⁶ But even where simple commodity production continued, it was not hived off from the capitalist economy, but rather became linked to it in various ways that also produced economic domination and exploitation. For example, commodity producers retained possession and formal ownership of the means of production, but once market exchange ceased to be predominantly within integrated local economies, they increasingly became tied to and dependent upon capitalist firms to acquire necessary inputs (including financing) and to transport, store, and sell the outputs of commodity production. As a result, capital gained real economic control over commodity producers and with that the ability to extract surplus from their efforts. Indeed, as Jairus Banaji has demonstrated, historically, capitalism is compatible with a wide variety of modes of labour exploitation that may co-exist at any particular conjuncture.¹⁷ Moreover, as we shall see in the case of Uber, the lines between proletarianization and other modes of labour exploitation, such as petty commodity production, are not always clear in social reality, which opens up space to argue about their legal characterization as well.

Clement also examined the question of the determinants of the mode of labour exploitation. When does capital proletarianize workers from whom it extracts surplus value directly or leave them as dependent commodity producers from whom it extracts surplus value indirectly through commercial transactions? Focusing on farming and fishing, he pointed to the ways capital benefited by retaining dependent commodity production, including a reduction in its exposure to risks of nature, elimination of the cost of investment in the first stages of production, and lower labour supervision costs.¹⁸

Clement's Marxist analysis can be connected with and supplemented by Coase's theory of the firm, which asks when firms will make (that is, manufacture with its own employees) rather than buy.¹⁹ In a world of zero transaction costs there would be no firms and no employment, because there would be no benefit from managing (which always has a cost) compared to costless contracting. However, in the real world, where transaction costs are endemic at some level, firms will form and employees will be hired where the costs of making and managing are less than the cost of negotiating contracts. These decisions will be significantly affected by technology. For

example, where technological developments allowed productivity to be enhanced through capital-intensive investments in machinery and a refined division of labour, individualized dependent commodity production was replaced by proletarianized social labour coordinated by capital in factory settings. For Marx, writing in the third quarter of the nineteenth century, the factory was the paradigmatic site of the hidden abode of production where the capitalist extracted surplus labour from the proletarianized worker. Dependent commodity production seemed to be destined for the dustbin of history. As a result, theorizing about the social relations of production in dependent commodity production was relatively uncommon.

However, the shift from buying to making was never complete and, as Rubery and Wilkinson demonstrate, there is no economic law dictating that the movement from dependent commodity production to factorization will always be in one direction. Looking specifically at outwork, they identified a number of factors that interact to shape the decision whether to produce in-house or outsource. These include the type of technology available, the potential for fragmenting the production process, the role of capital-intensive investment, the cost of labour supervision, and the avoidance of collective action and legal regulation, among others.²⁰

David Weil has also approached this issue through his exploration of the phenomenon of fissuring, which involves once integrated lead businesses choosing not to make things themselves but to shift the production of goods and services outside the firm to smaller businesses through outsourcing, franchising, and supply chains. As a result, employment is also shifted outside lead firms and into smaller business, which in turn may seek to shift work out to so-called independent contractors or “micro-entrepreneurs.” Technological change is a significant factor that makes fissuring both feasible and attractive. “Over the past three decades, it has become far less expensive to contract with other organizations—or create new organizational forms—to undertake activities that [...] alte[r] the calculus of what should be done inside or outside enterprise boundaries.”²¹ Again it is important to remember that it is not just technology that drives fissuring, but rather it is the drive for profit maximization that leads firms to adopt and adapt technology for that purpose.

To the extent that Marxist theory is centred on the paradigm of extracting surplus value through employment in the hidden abode of the factory, it now faces the challenge of analyzing the new relations

of production and modes of labour exploitation that are becoming prominent features of twenty-first-century capitalist economies. Various theorists are beginning to take up this task. A collection of essays edited by van der Linden and Roth challenges the theoretical centrality of proletarianized wage work and calls for an examination of the "extraordinary multiplicity and multifacetedness of the constellations of exploitation" that coexist, including self-employment.²² Steffen Böhm and Chris Land argue that there is a need to prize open, new, hidden abodes of production outside of employment to incorporate new sites of value production.²³ Finally, Ursula Huws, a pioneer in theorizing the implications of cybernetics for capitalist development, has explored the question of how enterprises generate profit in the digital age. She makes the useful distinction between labour that is performed directly for a capitalist employer by a worker who is dependent on her or his labour for subsistence (workers whom she dubs "inside the knot"—the classic proletariat) and groups that she characterizes as being less directly involved in capitalist social relations, including people engaged in petty commodity production, trade or small-scale rent, groups that she says have been given a new lease on life by the Internet. Being less directly involved, however, does not translate into being outside capitalist relations of production, and so Huws points to the need to specify and analyze these relations, including the process of generating profits by rent or trade rather than commodity production. For example, she suggests that online employment agencies and car-sharing services may be thought of as profiting from rent rather than commodity production, but such a claim requires close scrutiny of the actual relations between these platforms and the workers who use them. Her larger point, however, remains valid; we need to think about the ways capitalism operates "outside the knot."²⁴

The identification of different modes of labour exploitation is the first step, but does not end the discussion, because one mode is not necessarily preferable to another. We must also take the next step and explore and assess the extent of domination and exploitation that exists within these relations. A number of factors are likely to be influential, including the extent to which laws effectively limit workers' market vulnerabilities or facilitate (or obstruct) their ability to act collectively to protect their interests. Then, within the spaces available for collective action, there is the question of the forms collective action takes (for example, unions or cooperatives) and their

success. More generally, the broader political economic context sets the conditions within which laws are enacted and enforced, collective action occurs, and capital exercises power.

With this in mind, we turn to a historical exploration of taxicab capitalisms and the social relations of production that characterized them through a case study of Toronto. However, one final theoretical clarification is necessary. It may seem odd, perhaps, to speak of taxi capitalisms as if they were distinct forms of capitalism on the same order as, say, liberal market capitalism or welfare-state capitalism. That is not the intention. Rather, the discussion of taxi capitalisms recognizes that the taxi industry operates within a larger capitalist social formation, but also understands that different sectors of capitalist industry are organized according to the distinctive technologies, market structures, regulatory arrangements, and worker resistance they experience. The historical account that follows aims to elaborate on these distinctive features without losing sight of the larger capitalist environment in which they operate.

III. Taxi Capitalisms Before Uber

i. Taxi Capitalism 1.0: Standard Capitalism and the Standard Employment Relation

The history of the taxicab industry and the impact of technological change logically should begin with the horse-drawn trade of the nineteenth century and the impact of the automobile, but there is too little Canadian research for this to be feasible, so the chapter begins with the motorized taxi trade dating from the second decade of the twentieth century.²⁵ Initially, the cost of entry was high. Motor cars were a luxury item affordable by few, and municipal regulations required cabs to have special features which made them more expensive than standard cars. Since cruising the streets looking for fares was not an efficient way of doing business, taxis depended on cabstands and telephone dispatch systems. Cabstands in prime locations often operated as private concessions, for which hefty fees were charged, and telephone dispatch required the installation of call boxes around the city, where drivers could wait for assignments, also requiring a significant investment. Another cost was taximeters, favoured by some segments of the public and by some owners as a means to protect themselves against petty fraud by drivers.

As a result of the high cost of entry, the trade was initially dominated by larger fleet owners who hired drivers as employees in the classic, or what I will call "standard capitalist," mode of production.²⁶ Yet despite the hopes of early investors that high entry costs would produce an oligopolistic industry structure in which quasi-monopoly profits could be extracted, independent operators soon found ways into the industry, increasing competition and reducing profits. For example, even by 1910, thirty-six automobile dealerships and other companies in Winnipeg leased taxis to drivers who competed for business with the taxi fleets.²⁷ The involvement of these companies also marked an early attempt by rentiers to profit from the taxi industry by selling services to those directly involved in producing taxi services.

The nature of the work also did not favour direct management of a large labour force, as there was little scope for extracting more surplus value by a refined division of mass labour. As well, because cab drivers worked alone and were geographically dispersed across the city, employers had difficulty exercising a high level of managerial control and intensifying the labour process. Beyond phone systems, significant economies of scale were simply not available.

Finally, the existing regulatory regime also did not create barriers to entry. Older municipal regulations, dating back to the horse-drawn trade, required licences, but there was no limit on their number, and fees were not particularly high. Rules governed other matters such as fare structures and driver behaviour, but none of this strongly favoured large taxi fleets over small ones or independent operators.²⁸

For all these reasons, taxi capitalism 1.0 failed to thrive, even without significant collective resistance by employee drivers.²⁹

ii. Taxi Capitalism 2.0: Unregulated Petty Commodity/Service Production

Conditions for fleet owners worsened in the 1920s and 1930s as the cost of entering the business dropped. The growth of the mass-production auto industry and the increase in real wages during the 1920s made car ownership more affordable, and municipalities failed to enforce vehicle regulations, allowing less specialized cars to operate as taxis. Public taxi stands in some cities replaced or provided an alternative to private concessions, and taxi driver and cab owner licences remained readily available at low cost. In Toronto,

for example, the number of taxi driver licences issued annually increased from 1,043 in 1921 to 2,009 in 1929, while the number of owner licences issued grew from 541 to 1,313 over the same period. By 1931, there was only one fleet with more than fifty licensed cabs, and fleets with ten or more cars accounted for only about a third of the trade. Small fleets with fewer than ten cars comprised about a quarter of the trade, while individual owner-operators made up the other 40 per cent.³⁰ Finally, in some cities taxi brokers entered the field, providing a bundle of services to taxi owners, including advertising, a garage, and telephone dispatching, further reducing the economies of scale that favoured larger fleets.³¹ As a result, petty commodity/service production came to dominate the industry.³²

iii. Taxi Capitalism 3.0: Regulated Petty Commodity Production

The triumph of petty production, however, did not bring prosperity to its participants. As one observer of the highly competitive cab business in London, England, commented at the turn of the century, "It is a poor man's industry."³³ This was the case in Canada too, particularly after the onset of the Great Depression in 1929, which not only reduced demand for taxi services but also triggered an increase in the number of operators as unemployed workers tried their hand at earning an income by driving a cab.³⁴ Cab fares dropped and operators and drivers struggled to make a living. In Toronto, an Advisory Committee on Taxicabs was struck in 1931 and in its 1932 report found that "the business is badly overcrowded" and the earnings of most drivers "meagre." Although there was some variation between different industry sectors, the report found that drivers typically worked about twelve hours a day, six days a week and earned about \$17 a week, less than the wage of a general labourer. In Montreal in 1934, it was estimated that both drivers and owner-operators of a single cab took home about \$13.50 a week.³⁵

The advisory committee was also highly critical of the emerging role of rentier capital in the industry. As noted earlier, taxi brokerages were formed to sell taxi owners a bundle of services, including dispatch. They have not been the subject of much research, so there are still unanswered questions, but it seems that, initially, some brokerages were created as cooperatives by small fleet owners to take advantage of economies of scale. By the early 1930s, however, most brokerages were businesses in their own right, selling services to industry participants who did not have an ownership stake in the

brokerage. The advisory committee was particularly critical of the role of these rentier brokerages, finding "that in a great many cases cab brokers have conducted their businesses in an irresponsible manner and largely at the expense of the cab owners whom they have induced to subscribe to their service." The committee recommended that brokers should be licensed and that licences should only be issued to persons who were licensed cab owners.³⁶

Another avenue for rentier capitalists to profit from the taxi industry was through cab leasing, a phenomenon that first appeared a decade earlier but that expanded in the 1920s. The advisory committee explained how it operated. A private company would buy a number of inexpensive cars and would then lease a car to a driver for one year, with payments made daily. The driver purchased fuel from the leasing company and paid for repairs, which were done at the company's garage. The company might also provide telephone dispatch services. If the driver lived up to the terms of the contract, the driver would obtain title to the car at the end of the year. Taxi leasing became more attractive as the Depression deepened because it provided unemployed workers without capital an opportunity to get into the business, but the advisory committee found that they fared poorly. "As far as financial results are concerned, however, the real and only beneficiaries have been the companies disposing of automobiles." It proposed to eliminate the practice by requiring that owners or their employers operate all cabs. Rentier capitalism was not welcome in the industry or, at the very least, the limited opportunities to profit from selling services to operators were to be hoarded for industry insiders.³⁷

Driver resistance to poor working conditions took a variety of forms. In a few instances, employed drivers tried to unionize, but Canadian labour law during this period did not compel employers to recognize and bargain with unions, so it was a tough slog.³⁸ As well, in a depressed industry where profits were hard to generate, there were severe limits on what drivers could gain through collective bargaining, although there were some successes. In 1936, 500 Montreal taxi drivers, joined by 873 licensed cab owners, struck to secure reduced brokerage fees. The city intervened and a committee was created to address the drivers' and owners' concerns.³⁹ In 1938, 720 members of the Toronto taxi drivers' local of the Teamsters struck against sixty-three taxi companies, demanding union recognition, a minimum weekly wage, overtime after ten hours, and

other improvements. The strike was substantially successful, and its terms were extended to the entire industry under the *Industrial Standards Act*. The following year, the union struck again and made further gains.⁴⁰

Drivers also worked with local labour councils to protect workers' interests when municipal taxi regulations were being considered.⁴¹ However, it was not just taxi drivers who acted collectively; the chief players in municipal taxi regulation were associations of taxi owners, whose demands included restrictions on entry, rate regulation, mandatory meters, tougher vehicle standards, and a requirement that brokers be cab owners. The politics of regulation were complicated as different segments of the industry formed into different associations to represent their distinct interests.⁴² There is no detailed account of how these politics unfolded in Toronto after the 1932 report but, like in most North American cities, taxi regulation restricted entry, regulated fares, and limited rentier capital's access to the industry.⁴³

iv. Taxi Capitalism 4.0: Medallion Capitalism

The intent of the new taxi licensing bylaws was to create a regulated regime of owner-operator petty commodity/service production. The adoption of a quota on licences (commonly known as the medallion system) restricted entry, enabling licence holders to gain an economic rent that otherwise would have been dissipated by competition, and the restrictions on dispatchers aimed to keep these rents in the hands of those directly providing taxi services. Moreover, because taxi licences were widely dispersed among small firms and individual owner-operators, municipal regulators anticipated that the rents would be widely shared. Finally, price regulation protected customers against licence holders taking undue advantage of limits on competition. However, the regulations also permitted medallion owners to treat their licences as alienable private property that its owner could sell, lease, or devise,⁴⁴ and this paved the way for the creation of a different mode of taxicab capitalism, which I have dubbed "medallion capitalism."

We can begin the story of the development of medallion capitalism by examining the industry's evolving social relations of production. Under the medallion system, employment in the taxi industry initially increased as workers seeking to become taxi drivers could not easily obtain a licence and go into business for themselves. For

many, the only option was to become an employee of a licence holder, who needed additional drivers to keep the car on the road as many hours as possible to maximize the revenue the licence produced. Since many drivers faced the prospect of remaining employees for several years until a medallion became available for purchase, they had a greater interest in engaging in collective action to improve their terms and conditions. More generally, there was a high level of labour militancy at the end of the war, as returning veterans and workers generally sought to share in the post-war prosperity and have a collective voice in workplace decision-making. The adoption of the Wagner Act model of collective bargaining in Canada at the end of the war facilitated this desire through an administrative regime of compulsory union recognition, coupled with a duty to bargain in good faith.

Although the labour legislation embraced a highly fragmented model of enterprise bargaining, taxi unions in Toronto not only managed to organize drivers but also to bargain on a broader basis. For example, in the late 1940s, Teamsters Local 488 bargained with the Federal Association of Taxi Cab Operators on behalf of 800 drivers employed by the association's forty members and with the Diamond Taxi Cab Association on behalf of 300 drivers employed by its members. As a result, taxi unions were successful in securing improved terms and conditions for drivers.

As the union pressed for contract improvements in the early 1950s, medallion owners took steps to end employment in the taxi industry. Instead of hiring drivers as employees, medallion owners adopted a leasing system in which drivers leased the car on either a long- or short-term basis, typically including dispatching services. Drivers who rented taxis either paid a percentage of the fares to the owner or, more commonly, paid a fixed fee and kept the fares, but were responsible for fuel. In part by push and perhaps in part by pull (the lure of being independent), the leasing system became so widespread that employment virtually disappeared and Local 488 collapsed.⁴⁵

A second development that produced and shaped medallion capitalism was the departure of owner-operators, the intended beneficiaries of regulated petty commodity/service production, from the industry. Driving a cab is hard work, involving long hours, and so owner-operators often looked for exit strategies. As the value of licences went up, some owner-operators cashed out, sometimes

selling their medallions to drivers who replaced them as owner-operators, but often selling medallions to small fleet owners looking to expand their operations. Each medallion that went to a fleet owner reduced the number of owner-operators, and the movement was largely in one direction. Another exit strategy for owner-operators was to retain ownership of the medallion as an income-generating asset. In this scenario, medallion operators stopped driving and became full-time rentiers by leasing it to other drivers or fleet owners. Often the owner hired an agent to manage the medallion on the owner's behalf. In fact, as we shall see, the use of agents became quite widespread. The overall result of this process was that not only did the great majority of medallion owners become rentiers but also a second layer of rentiers became interposed between the medallion owner and the driver.

A third change in the relations of production involved the growing role of taxi associations providing dispatch services. The development of radio displaced telephone dispatching and new economies of scale became available. Diamond Taxi was typical. It was formed after the war by ten small fleet owners who collectively operated 200 cars. By 1957, the number of medallions associated with the dispatch increased to 410. Diamond Taxi operated as a branded fleet with all of its associated taxis painted in the same colours and carrying rooftop signs, so that to the customer it would appear that Diamond Taxi was a single branded business. Diamond also developed corporate accounts, which provided a valuable and important source of fares at a time when credit card usage was not as widespread as it is today.⁴⁶

If these associations (or brokerages, as they came to be known) remained cooperatives providing services to their members, they would have been a barrier against, rather than an entry for, rentier capitalism. However, they became incorporated for-profit businesses that provided dispatching and other services to medallion owners and lessees who did not have ownership shares in the brokerage. This created another layer of rentier capitalism, characterized by unequal power relations between the brokerages and the remaining owner-operators of single vehicles who contracted for their services.

The structure and operation of the industry in the early 1990s was described in detail in two Ontario Labour Relations Board (OLRB) decisions from that period.⁴⁷ There were about 3,500 cab licences in Toronto, half of which were held by an owner having

one medallion. The other half were held by about 600 individuals or corporations that owned multiple licences. As well, there were 7,000 licensed drivers who were not medallion owners. However, as we noted, some medallion owners, including single owners, were not drivers but rather leased out their medallions to another individual who operated the vehicle or appointed an agent, typically a principal of a brokerage, to manage the medallion on their behalf.

The largest brokerage at the time was Diamond, which had 299 associates who collectively owned or leased 605 medallions. Of these, 248 associates owned or leased a single medallion, while the remaining fifty-one associates owned or leased 357 medallions. Only a small number of associates ran ten or more medallions with Diamond, the largest associate having thirty-nine.⁴⁸ Diamond was governed by a nine-member board of directors, almost all of whom were associates of the brokerage, and was managed by a president and vice-president. Although Diamond itself did not own any cabs, the president and vice-president acted as designated agents for owners of 173 medallions, giving them control of more than a quarter of the licensed vehicles operating under the Diamond banner. Other brokerages had different structures, but the OLRB noted there were often personal, commercial, or family connections between the larger associates who effectively controlled the brokerages. As a result, medallion capitalism created opportunities for both rentier capitalists and an increasing concentration of ownership and control of medallions.

Under these conditions, there were two principal groups from whom profits could be extracted: drivers who rented cars by the shift, and owner-operators who either owned or leased a single medallion—and both groups organized to resist what they perceived to be their exploitation. Initially, owner-operators and drivers were concerned with the disciplinary actions of the licensing authority, but by the 1960s they increasingly focused on their relationship with the brokerages and/or the multiple medallion owners. Access to protective employment law and collective bargaining, however, was impeded by their designation as self-employed, with little prospect of successfully challenging that status.⁴⁹

Operating from an industrial pluralist perspective, in 1965 Professor Harry Arthurs recognized the unfairness of depriving economically vulnerable individuals access to industrial citizenship to redress unequal power relations, regardless of whether that vulnerability was created by the employment relationship or through

commercial contracts. He proposed that the law should recognize a category of “dependent contractors” who would be given access to the collective bargaining regime and specifically identified “taxicab operators” as a group that fit this category.⁵⁰ Arthurs’ article opened a conceptual crack in the door to employee status, but it took years of struggle by taxi drivers and owner-operators to get through it.⁵¹

Drivers unsuccessfully attempted to unionize on several occasions in the 1960s. In the early 1970s, the Canada Labour Congress chartered the Toronto Union of Taxi Employees as a direct local, and by 1972 it had 500 members. Efforts to claim coverage under the recently enacted *Employment Standards Act*⁵² (ESA) failed when a court ruled that drivers were not employees, and talk of expanding the Act’s coverage in the Ministry of Labour came to naught. However, in 1975 the Ontario government amended the *Labour Relations Act* (LRA) to include a dependent contractor provision, which gave employment status to a person who

whether or not employed under a contract of employment, and whether or not furnishing his own tools, vehicles [...] performs work or services for another person for compensation [...] on such terms and conditions that he is in a position of economic dependence upon, and under an obligation to perform duties for, that person more closely resembling the relationship of an employee than that of an independent contractor.⁵³

No similar provision was added to the ESA at the time or has been to this day.

The dependent contractor provision clearly did not make all people in unequal economic relations employees. For example, if taxi drivers entered into fuel supply contracts with companies in an oligopolistic supply industry, the law would not transform them into fuel supply company employees simply because of unequal power relations and economic dependency. Exploitive relations of production in purely rentier capitalism were outside the scope of the law. So if all brokerages did was sell taxi drivers dispatch and related services, they could successfully argue that this did not create a dependent contractor relationship for the purposes of the law, even if the taxi brokerages were able to extract value from the labour of the rental drivers and owner-operators.

However, the relationship between brokers and drivers went beyond merely selling dispatch and related services. Taxi brokerages were branded businesses selling a product to the public, and to build and maintain their goodwill they were driven to impose contractual obligations on members and drivers in order to provide a more-or-less standardized product and to ensure reasonably prompt service. As well, the brokerages needed to prevent drivers from gaming or cheating the dispatch. The first goal was achieved primarily by requiring that associates' vehicles have common colours and signs, and be kept clean. As well, drivers were subject to dress and behaviour codes, with disciplinary measures available if the rules were violated. The provision of prompt service and the prevention of gaming required the exercise of managerial controls related to the use of the dispatch service, such as prohibitions on booking into an area when not in it or while engaged in transporting a passenger or parcel, and prohibitions on rejecting or failing to respond promptly to a fare offered by the dispatch. These rules were enforced by a system of sanctions.⁵⁴

These elements of control made it possible to argue that as a matter of law taxi drivers were dependent contractors of the dispatches, not merely the purchasers of dispatch services. This is not the place to delve into a detailed analysis of the complex legal test of who is an employee or dependent contractor,⁵⁵ but it will be helpful to look at the organizational and legal complexity that Toronto taxi unions faced when they attempted to organize the industry in the 1990s.

Although in the first case, the OLRB rejected a claim by owner-operators that they were dependent contractors employed by brokerages, organizing drives continued, reflecting workers' widespread dissatisfaction with how they were being incorporated into medalion capitalism. Eventually, one case was successful.⁵⁶ The fight to unionize in Toronto was an extended one. The Retail, Wholesale and Department Store Union (RWDSU) conducted an extensive organizing drive among drivers and individual owner-operators associated with nine different brokerages in the early 1990s, eventually filing simultaneous applications for certification, identifying the brokers as the employers. Votes were held and the ballot boxes were sealed pending a determination of whether the workers were dependent contractors under the LRA. After a careful examination

of the operation of the brokerages, the OLRB found that drivers and owner-operators

regularly and consistently derive a substantial portion of their income from a single entity which exercises detailed control over the performance of their work by means of an elaborate system of written or unwritten rules and disciplinary responses which effectively penalize anyone failing to meet its standards [...].

The board noted that although drivers could opt to work outside the dispatch system, “economic pressures substantially limit the exercise of those freedoms.” It also recognized that while owner-operators were at liberty to change brokers, their freedom was no greater than the freedom of employees to change employers, a freedom that merely shifted their dependency from one broker to another, but did not alter the basic condition of dependency.⁵⁷

Having been found to be dependent contractors and therefore employees under the LRA, the ballot boxes were opened, and in 1993 the union was certified as the bargaining agent for the drivers and owner-operators of three of Toronto’s largest brokerages: Diamond, Co-op, and Metro. Negotiations took place in 1994 but were unsuccessful, and the workers went on strike in August. After three weeks of demonstrations and protest, leading to unfair labour practice claims and criminal charges, the parties agreed to have outstanding issues resolved by arbitration. Part of the problem in negotiations was that some of the issues that needed to be resolved related directly to the rental and shift fees that associates charged drivers, a matter not governed by the brokerages’ rules. To address this problem, the union applied to have the members of the brokerage who owned or leased more than one medallion declared related employers to force them to the bargaining table.

The arbitration was held before the related employer application was heard, but to defend their interests, the association representing the small fleet owners associated with the brokerages sought to intervene. Although the arbitrator denied the fleet owners intervenor status, his award, issued in December 1994, identified them as parties to the agreement along with the union and the brokerages. However, the arbitrator refused to include a provision in the two-year agreement regarding the rental and licensing fees charged by the associates.

Hearings on the union's related employer application began in 1995. Ironically, although the associates previously sought to be represented in the arbitration proceedings, they now opposed the related employer application, presumably to avoid having their fees become subject to future collective negotiations. To determine whether the associates and the brokers were related employers, the OLRB had to consider whether they were carrying on associated activities under common control and direction. The board recognized that the fundamental goal of the related employer provision was to make collective bargaining viable in the face of organizational arrangements that fragmented the employer function, a situation that David Weil has since popularized as "fissuring."⁵⁸

Based on an extensive analysis of the relationship between the brokerages and their associates, the board found a high degree of functional integration, such that the drivers were dependent contractors of both and that there was common control and direction. The brokerages exercised control over the associates through the associates' dependency on their services, as well as through the brokerages' control over the associates' drivers, while the associates were found to exercise a degree of influence over the brokers, particularly the larger fleet owners who were often involved in running the brokerage. In the result, board found the brokerages and their associates to be related employers, and arrangements were made for them to be represented in future bargaining.⁵⁹

That future was short-lived. The parties managed to negotiate a second collective agreement but could not resolve the issue of rental and lease fees, a matter that was vital to the determination of compensation for drivers and owner-operators who leased but did not own a plate. As a result, by the end of the decade, the union collapsed, and collective bargaining and representation disappeared, a victim of the fragmented structure of the Toronto taxi industry and the unequal power relations it produced.

The failure of taxi drivers and owner-operators to achieve industrial citizenship meant these workers were unable to gain a reasonable share of the rents produced by medallion capitalism. Instead, these were being captured by the various rentiers.⁶⁰ A 1998 task force report found numerous problems in the taxi industry, including the fact that transferability allowed absentee ownership of medallions, which produced a layer of middlemen. Concerns were raised that the structure contributed to "deplorable working

conditions,” exacerbated by the redistribution of fare-box revenues to non-driving agents, lessees, and owners.⁶¹

In an effort to lessen the role of rentier capital in the Toronto taxi industry, two key changes were made to the bylaw in 1999 that aimed to get medallions back into the hand of drivers and recreate a regime of regulated petty commodity production. The first froze the number of medallions and placed limits on their transferability, while the second created a new “Ambassador” licence that could only be held by a full-time licensed driver who was prohibited from hiring another driver and/or transferring the licence in any way.⁶²

A preliminary report prepared for an industry review in 2012 found that these changes were partially successful in achieving their goal. Ambassador licences did create a new group of owner-operators who had higher incomes than shift drivers, although many resented the restrictions on their ability to hire drivers or lease the vehicle.⁶³ Standard licences, however, were not getting back into the hands of drivers because owners found various ways to evade the transferability restrictions imposed in the bylaw. They had a strong incentive to do so as the market value of standard licences was skyrocketing from about \$80,000 in 1998 to \$210,000 in 2011. The final report, issued in 2014, found that two-thirds of the nearly 3,500 standard taxi licences were managed by agents and that the top twenty-seven agents managed 1,113 medallions.⁶⁴ Despite the reforms, rentier capital retained a large place in the industry.

To complete the transformation from medallion capitalism to regulated petty commodity production, Toronto would have to move more aggressively to decommodify standard taxi licences and get them into the hands of drivers,⁶⁵ and to retain restrictions on supply. Here is where Uber comes into the story.

v. Taxi Capitalism 5.0: Platform Capitalism Uber Style

Uber is commonly referred to as a ride-sharing company and as such part of the sharing economy, but Uber drivers no more share their cars with passengers than traditional taxi drivers do; they both sell a transportation service. Of course human interactions inevitably occur in these jointly occupied spaces and pleasant ones enhance the quality of the experience for the customer and add exchange value for the seller. In fact, many workers, including taxi and Uber drivers, may be required to perform affective labour as part of their jobs,

whether for their own protection or to satisfy employer demands, obtain high ratings from customers or earn tips, where tipping is permitted.⁶⁶ The transactional context of these "sharing" interactions makes it impossible to know whether one is experiencing authentic sociality or merely witnessing a good performance, and perhaps as consumers we don't really care.

A somewhat more accurate way to describe Uber is that it is a transportation network company that provides intellectual property (a computer platform) to connect passengers with drivers who are paid by the passenger to transport them from one location to another. However, from a consumer perspective, Uber is functionally no different than a taxi dispatch service. If I want a taxi, I telephone a dispatch (say, Diamond Taxi), which uses its technology to locate a driver in its network who is sent to pick me up and drive me to where I want to go, for which I pay a fare to the driver. If I want an Uber, I use my Uber app, which is a technology that locates a driver in Uber's network who is sent to pick me up and drive me to where I want to go, for which I pay a fare through my app. I may prefer Uber to taxi dispatch services because the app is cool and easier to use than making a phone call and paying the driver myself, or because Ubers arrive more promptly or are less expensive, but the service is nonetheless functionally equivalent to a taxi dispatch. They even use the same technology to transport the passenger—a car.

We will return briefly to the question of the legal characterization of Uber, but first we want to look underneath the hood, so to speak, at its social relations of production. At one level Uber might be characterized as a rentier capitalist selling a dispatch service to individual commodity producers, arguably much as like traditional taxi dispatch services claim. On that reading, drivers with cars are just micro-entrepreneurs using their own labour and means of production to sell transportation services to the public. The Uber app is merely a software platform that enables Uber drivers to reach that public, just as telephone and radio dispatch services enabled traditional taxi drivers to connect with customers. Like radio dispatchers, Uber owns no cars and has no drivers on its payroll. The technology is different, but the functional relation between Uber and its drivers and radio dispatchers and their drivers is nearly identical.

To stop there, however, would be to miss what happens beneath the surface. Uber does more than simply sell dispatch services to drivers. Just like taxi dispatches, it is also a brand and, therefore,

is driven to impose additional obligations on its drivers to protect the brand by ensuring that certain service standards are met and that its network operates efficiently. Of course there are differences between brands. Taxi dispatches enhance their brands' visibility by requiring cars to be painted in its colours and to have rooftop signs, while Uber prefers to operate with a look more akin to a black car service, without identifying signs, but there is nothing fundamentally important about this difference.

To achieve its goals of maintaining standards and efficiency, Uber exercises considerable control over its drivers. Although Uber drivers are not required to book onto the service, once they do, they are governed by Uber's rules. For example, when a fare is offered to a driver, the driver has a very limited time to accept. If the driver does not respond in time, the fare is offered to another driver. Drivers who decline too many trips may be forcibly logged off the app for a period of time. The driver and the vehicle must meet quality standards set by Uber and are subject to customer reviews after each trip, with poor reviews potentially resulting in deactivation.⁶⁷ These controls sound remarkably similar to those imposed by traditional dispatches, which complicates Uber's claim that functionally it is merely a rentier capitalist selling digitalized dispatch services to drivers. Moreover, it is precisely these kinds of functional controls that make both traditional dispatches and Uber vulnerable to being legally classified the employer of the drivers in its network. Indeed, there is a rash of claims being brought by Uber drivers seeking employee status, whether for the purposes of collective representation or to gain the protection of minimum employment standards, as well as growing legal academic commentary on whether Uber employees are or should be considered employees.⁶⁸

The argument that from a consumer and a driver point of view Uber is functionally a dispatch that operates much along the same lines as traditional taxi dispatches, however, does not lead to the conclusion that it is a medallion capitalist. To the contrary, Uber has disrupted medallion capitalism in a very important way: it operates without medallion capital and therefore threatens to destroy medallion capitalism.⁶⁹ Uber recruits drivers who may not be licensed as taxi drivers and, more importantly, who do not own or lease a taxi licence. As a result, it bypasses municipal taxi regulation and, if it is successful, taxi licences will cease to have either a use or an exchange value or, at the very least, that value will be substantially

diminished.⁷⁰ In short, Uber's major innovation is less a technological than a legal one.

The avoidance of taxi regulation has important consequences for relations of production in the Uber model. In medallion capitalism, relations of production are complex and multilayered. Dispatches sell services to medallion owners who in turn rent licensed vehicles to drivers directly or through agents. Uber provides dispatch services directly to owner-operators, thus cutting out medallion owners and their agents. There are no intermediary rentiers between Uber and the driver.

Whether Uber's bold evasion of existing taxi regulations succeeds will depend on the regulators' response. In North America, this will be a municipal decision. Toronto's new bylaw, which came into effect on July 15, 2016, legalized and lightly regulated Uber's business model, while modifying standard taxi regulation by formally terminating its attempt to (re)create an owner-operator model. Limits on the number of taxi licences remain, but Ambassador licences were rolled over into standard licences and limits on the accumulation of licences by a single owner were ended.⁷¹ It remains to be seen how these changes will impact the future of medallion capitalism, but even if Uber's success comes at its expense, it will not be the end of taxi capitalism. Rather, we will have a new model of capitalism: platform-facilitated petty commodity production by subordinated workers. On one level, there will be thousands of so-called micro-entrepreneurs selling taxi services through the Uber platform, but on another Uber drivers will be engaged in a dependent relationship characterized by unequal power relations that enable Uber to extract profit from their labour and petty capital.

This dependency and inequality is not only a general characteristic of capitalist relations of production, but takes a specific form in *platform* capitalism. Platforms are likely to be oligopolistic in their structure. This is because, to be successful, Uber or other platforms must develop both sides of the market in the sense that they need to assemble large pools of sellers (drivers) and buyers (riders). Network effects play an important role here. The more numerous the users, the more valuable the platform becomes for both the users and the platform owner. According to Srnicek, "this generates a cycle whereby more users beget more users, which leads to platforms having a natural tendency towards monopolisation."⁷² As a result, being there first has a significant advantage, especially when the dominant player

is also heavily capitalized and can lock in its initial advantage by subsidizing rides when necessary to keep competitors at bay. Indeed, many observers argue that Uber's ambition, and the condition for its long-term success, is to establish itself as an unregulated monopoly provider.⁷³ A related feature of platform-facilitated petty commodity production is that unlike earlier versions, which pitted drivers against local petty capitalists, here drivers face a heavily capitalized global corporation that has the wherewithal to withstand short-term losses as well as unmatched resources to lobby government.

Uber's market power gives it the upper hand with its drivers, the petty service providers. As a price maker, Uber sets the fare structure and then takes a commission. It therefore exercises considerable control over what drivers can realistically earn. Since its launch, Uber has cut fares, increased its commission from 20 per cent to 25 per cent and tacked on a \$1 safety fee. Uber drivers are using their own cars and bear the cost of gas, maintenance, insurance, and car depreciation. Although comparisons are not straightforward, one analyst estimates that Uber drivers make no more than taxi drivers. Not surprisingly, researchers find that Uber drivers consistently complain about low income.⁷⁴ Indeed, Uber drivers in numerous jurisdictions have alleged they are making less than the minimum wage. As well, Uber's claim that its drivers enjoy freedom and flexibility has been contradicted by the experience of its drivers.

[T]he combination of blind passenger acceptance with low minimum fares and the algorithmic determination of surge pricing [...] reveal, respectively, how little control Uber drivers have over critical aspects of their work and how much control Uber has over the labor of its users (drivers).⁷⁵

Finally, Uber's platform technology gives it a level of surveillance and managerial control that was impossibly costly for traditional taxi brokerages.

It is not surprising that Uber drivers have resisted what they perceive to be their exploitation in the same ways that other workers have historically. Indeed, because the relation between drivers and Uber is more direct and unmediated by other layers of rentier capital than is the case in medallion capitalism, the obstacles to securing labour and employment rights may be somewhat reduced. Uber drivers have sought to be declared employees entitled to the protection

of employment standards and eligible for unemployment insurance, workers' compensation, and other benefits for which employers must make contributions. Many of these claims are still being litigated, but there have been some successes, including a decision in England, in 2016, by an employment tribunal that was scathing in its rejection of Uber's arguments.

Any organization [...] resorting in its documentation to fictions, twisted language and even brand new terminology, merits, we think, a degree of scepticism.

[I]t seems to us that the Respondents' general case and the written terms on which they rely do not correspond with the practical reality. The notion that Uber in London is a mosaic of 30,000 small businesses linked by a common 'platform' is to our minds faintly ridiculous.⁷⁶

In New York, Uber drivers have been ruled eligible for unemployment payments and workers' compensation coverage.⁷⁷ There is also a major class-action lawsuit claiming that Uber has misclassified thousands of drivers in California and Massachusetts, depriving them of minimum wages and hours of work protections.⁷⁸

Workers are also seeking to form unions in some locations. In New York, the Amalgamated Transit Union collected close to 14,000 signed union cards from Uber and Lyft drivers, but in order to avoid the issue of employee status under the *National Labor Relations Act*, union officials applied to the Taxi and Limousine Commission to hold an election.⁷⁹ The organizing drive occurred after Uber attempted to head off unionization by entering into an agreement with the Independent Drivers Guild, an organization affiliated with the International Association of Machinists, to represent its drivers in appeals of de-activations and in meetings with Uber, but without any authority to negotiate terms and conditions of employment or to strike.⁸⁰

It is too early to tell whether Uber drivers in platform-enabled petty commodity production will gain the protection of labour and employment law and whether, if they do, Uber will find ways to re-transform taxi capitalism to enable it to operate without having the obligations of an employer. The important point for our purposes is that to talk sensibly about the future of platform capitalism in the taxi industry we must not only recognize that it is capitalist, but

also understand the relations of production behind the app and the conflicts they generate.

IV. Conclusion

Platform capitalism Uber-style is not the end of taxi capitalism history. Changes in technology are part of the story, but so too is law and resistance. Indeed it is fair to say that the development of taxi capitalism is driven by their interactions. Medallion capitalism was made possible by law, but the law was a response to the actions of drivers and owner-operators unable to make a living in a regime of unregulated petty commodity production. The development and spread of a new technology, radio dispatching, provided an opportunity for rentier capitalism to gain a foothold in the industry, but medallion capitalism was also shaped by the conflict between drivers and dispatches and small fleet owners over how the value produced under medallion capitalism would be divided. In order to avoid collective bargaining and keep more of the value for themselves, dispatches and fleet owners ended employment and turned drivers into contractors. When labour law eventually changed to address this reality, drivers renewed their efforts to unionize as dependent contractors, but were ultimately defeated by the fissured relations in the industry.

Uber has introduced a new technology and created an unmediated relation between itself and its drivers, whom it too treats as self-employed micro-entrepreneurs. Yet here too law and resistance play an important role in shaping taxi capitalism Uber-style. Uber's boldest innovation is its legal claim that it is not subject to existing taxi regulation. Taxi regulation is being remade city by city, largely with the aim of creating a level playing field for both branches of the industry. At the same time, Uber is facing resistance from its drivers who seek to retain more of the value they produce through collective bargaining and employment law. It remains to be seen whether they will succeed and, if they do, how Uber will respond. It is already investing heavily in the development of driverless cars, which would lead to a new model of capitalism or, perhaps, post-capitalism.⁸¹

My argument is not that medallion capitalism is preferable to platform capitalism Uber-style. Under either form of taxi capitalism, the drivers who perform the work experience domination and exploitation. So, while technological change may open up possibilities

for transformation, as long as the technology is deployed for the purposes of maximizing profits for the benefit of its owners, its emancipatory potential is unlikely to be realized. Capitalism is not a platform on which a sharing economy can be built.

Notes

1. Professor, Osgoode Hall Law School, York University, and Distinguished Visiting Researcher, Cleveland-Marshall College of Law, Cleveland State University. Thanks to Alec Stromdahl and Tyler Fram for their research assistance and to Harry Ghadban and James Hayes for sharing their knowledge of the taxi industry and the challenges encountered in organizing. The chapter has benefited from the comments and questions of participants at presentations at Cleveland-Marshall College of Law, Cleveland, RMIT, Melbourne, the Australian Labour Law Association, Sydney, the Canadian Association of Work and Labour Studies, Toronto, and especially from Harry Glasbeek, Shelley Marshall, and Ron McCallum.
2. Arun Sundararajan, *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism* (Cambridge, MA: MIT Press, 2016) at 176. For a schematic overview of the conventional, neoliberal perspective, see Frank Pasquale, "Two Narratives of Platform Capitalism" (2016) 35:1 Yale L & Pol'y Rev 309.
3. Juliet Schor, "Debating the Sharing Economy" (October 2014) online: Great Transition Initiative <http://www.greattransition.org/images/GTI_publications/Schor_Debating_the_Sharing_Economy.pdf> ("[b]ut technologies are only as good as the political and social context in which they are employed. Software, crowdsourcing, and the information commons give us powerful tools for building social solidarity, democracy, and sustainability. Now our task is to build a movement to harness that power" at 12).
4. Sundararajan, *supra* note 2.
5. Steven Hill, *Raw Deal: How the "Uber Economy" and Runaway Capitalism Are Screwing American Workers* (New York: St. Martin's Press, 2015). See also Tom Slee, *What's Yours Is Mine: Against the Sharing Economy* (New York: OR Books, 2015), especially ch 4, 5; Trebor Scholz, *Uberworked and Underpaid: How American Workers Are Disrupting the Digital Economy* (Cambridge, UK: Polity, 2017).
6. Nick Srnicek, *Platform Capitalism* (Cambridge, UK: Polity, 2017).
7. Peter A Hall & David Soskice, *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford: Oxford University Press, 2001). For a critique, see Wolfgang Streeck, *Re-forming Capitalism*:

- Institutional Change in the German Political Economy* (Oxford: Oxford University Press, 2009), especially ch 12.
8. Sundararajan, *supra* note 2 at 27. Indeed, the growth of the platform economy may be tilting the balance away from de-commodified altruistic or communal interactions. See Orly Lobel, "The Law of the Platform" (2016) 101:1 Minn L Rev 87 at 109.
 9. For a more detailed and nuanced account, see Srnicek, *supra* note 6 ch 2.
 10. Sundararajan, *supra* note 2 at 27.
 11. Erik Olin Wright, *Understanding Class* (London, UK: Verso, 2015).
 12. Nick Dyer-Witheford, *Cyber-Proletariat: Global Labour in the Digital Vortex* (London, UK: Pluto, 2015) ("[s]ince the discovery of the microchip, promoters of the information revolution have argued that it dissolves class" at 9).
 13. See e.g. Hill, *supra* note 5 ch 3; Slee, *supra* note 5 ch 4.
 14. For a useful overview of and explanation for the rise and decline of the standard employment relation, see Judy Fudge, "The Future of the Standard Employment Relationship: Labour Law, New Institutional Economics and Old Power Resource Theory" (2017) 59:3 J Indus Rel 374. On precarious employment, see Gerry Rodgers & Janine Rodgers, eds, *Precarious Jobs in Labour Market Regulation: The Growth of Atypical Employment in Western Europe* (Geneva: International Institute for Labour Studies, 1989), online: <http://staging.ilo.org/public/libdoc/ilo/1989/89Bo9_333_engl.pdf>; Leah Vosko, ed, *Precarious Employment: Understanding Labour Market Insecurity in Canada* (Montreal: McGill-Queen's University Press, 2006); Katherine Stone & Harry Arthurs, *Rethinking Workplace Regulation: Beyond the Standard Contract of Employment* (New York: Russell Sage Foundation, 2013). On neoliberal capitalism, see David Harvey, *A Brief History of Neo-Liberalism* (New York: Oxford University Press, 2005).
 15. Karl Marx & Friedrich Engels, *The Communist Manifesto* (Oxford: Oxford University Press, 2008).
 16. Wallace Clement, *Class, Power and Property* (Toronto: Methuen, 1983), especially ch 9, 10. See also Wallace Clement, *The Struggle to Organize: Resistance in Canada's Fishery* (Toronto: McClelland and Stewart, 1986), especially ch 5.
 17. Jairus Banaji, *Theory as History: Essays on Modes of Production and Exploitation* (Chicago: Haymarket Books, 2011). Also, see Genevieve LeBaron, "Unfree Labour Beyond Binaries: Insecurity, Social Hierarchy and Labour Market Restructuring" (2015) 17:1 Intl Fem J Pol 1.
 18. Clement, *Class, Power and Property*, *supra* note 16 at 233.
 19. Ronald Coase, "The Nature of the Firm" (1937) 4:16 *Economica* 386. See also: Alfred D Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA: Harvard University Press, 1977);

- Bruce E Kaufman, "The Impossibility of a Perfectly Competitive Labour Market" (2007) 31:5 Cambridge J Econ 775.
20. Jill Rubery & Frank Wilkinson, "Outwork and Segmented Labour Markets" in Frank Wilkinson, ed, *The Dynamics of Labour Market Segmentation* (London, UK: Academic Press, 1981) 115 at 120–24. In a recent article, Matt Finkin usefully deployed this framework to explore the broad contours of the use of the "putting-out system" and its social relations of production. See Matthew W Finkin, "Beclouded Work, Beclouded Workers in Historical Perspective" (2016) 37:3 Comp Lab L & Pol'y J 603.
 21. David Weil, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Cambridge, MA: Harvard University Press, 2014) at 44.
 22. Marcel van der Linden & Karl Heinz Roth, "Results and Prospects" in Marcel van der Linden & Karl Heinz Roth, eds, *Beyond Marx: Theorising the Global Labour Relations of the Twenty-First Century* (Chicago: Haymarket Books, 2014) 445 at 479. In that volume, see Sergio Bologna, "Workerism: An Inside View. From the Mass-Worker to Self-Employed Labour" 121 at 121.
 23. Steffen Böhm & Chris Land, "The New 'Hidden Abode': Reflections on Value and Labour in the New Economy" (2012) 60:2 Sociol Rev 217.
 24. Ursula Huws, *Labor in the Digital Economy: The Cybertariat Comes of Age* (New York: Monthly Review Press, 2014) at 162–63.
 25. The only detailed Canadian study is Norman Beattie, "The Cab Trade in Winnipeg, 1871–1910" (1998) 27:1 Urban Hist Rev 36. For a brief discussion of the early cab trade in Toronto, see Kimberly M Berry, "The Independent Servant: A Socio-Cultural Examination of the Post-War Toronto Taxi Driver" (PhD Thesis, University of Ottawa Department of History, 2006) [unpublished] at 33–43. Drivers' unions seem to have been fairly common in major cities. See Eugene Forsey, *Trade Unions in Canada 1812–1902* (Toronto: University of Toronto Press, 1982).
 26. Beattie, *supra* note 25 at 48; Donald F Davis, "The Canadian Taxi Wars, 1925–1950" (1998) 27:1 Urban Hist Rev 7 [Davis, "Taxi Wars"] at 7–8.
 27. Beattie, *supra* note 25 at 48.
 28. Beattie, *supra* note 25 at 39–42; Berry, *supra* note 25 at 37–41.
 29. Canada Department of Labour, *The Labour Gazette* (Ottawa: Queen's Printer, 1900–1978) [LG] contains sporadic references to taxi driver unionization during this period, mostly from Montreal. For example, see LG (December 1922) at 1261 (application of Montreal taxi drivers for conciliation under the *Industrial Disputes Investigation Act* (IDIA)); (August 1923) at 870 (strike by seventy-seven taxi drivers over dismissal of an employee); and (June 1924) at 470 (another IDIA application from Montreal drivers).

30. *Report of the Advisory Committee on Taxi Cabs to the Board of Commissioners of Police of the City of Toronto* (12 April 1931), Toronto, City of Toronto Archives (Box No 225064, Item 2348) [*Advisory Committee on Taxi Cabs*] at 84–6.
31. In fact, many of the taxi brokerages, including the most powerful, the Diamond Taxicab Association, were initially created in Montreal by a decision of seven independents to share a switchboard. See Davis, “Taxi Wars,” *supra* note 26 at 10.
32. *Ibid* at 8–11.
33. Vance Thompson, “The London Cabby” (1904) *Outing* 156, cited in Beattie, *supra* note 25 at 37.
34. Davis, “Taxi Wars,” *supra* note 26, observes: “[d]riving a cab always has been a haven for the unemployed” at 11.
35. *Advisory Committee on Taxi Cabs, supra* note 30 at 55; Davis, “Taxi Wars,” *supra* note 26 at 12–3; Berry, *supra* note 25 at 46–51.
36. *Advisory Committee on Taxi Cabs, supra* note 30 at 28–9; Berry, *supra* note 25 at 56–8; Donald F Davis, “Continuity and Discontinuity in Canadian Cab History” (1998) 27:1 *Urban Hist Rev* 3 at 4.
37. *Advisory Committee on Taxi Cabs, supra* note 30 at 31–2.
38. Judy Fudge & Eric Tucker, *Labour Before the Law: The Regulation of Workers’ Collective Action in Canada, 1900–1948* (Toronto: Oxford University Press, 2001).
39. *LG* (September 1936) at 777–78.
40. *LG* (May 1938) at 486–88; (September 1938) at 1047; (August 1939) at 859–60. Berry, *supra* note 25 at 71–6.
41. There were also some efforts directed at obtaining protective provincial legislation. For example, in 1931 the Ontario Executive Committee of the Trades and Labour Congress lobbied for an eight-hour day for drivers of trucks, buses, and taxicabs. See *LG* (February 1931) at 188.
42. *Advisory Committee on Taxi Cabs, supra* note 30, contains all these demands and reproduces the submissions it received from seven different industry associations.
43. For a detailed discussion of the development of taxi regulation in Winnipeg during this period, see Davis, “Taxi Wars,” *supra* note 26 at 14–7.
44. The scope of license transferability changed over time. A 2014 review of Toronto taxi regulation found that as of 1956, transfers were only permitted on the death of the license holder and then only to a family member. These restrictions were removed in 1963. See City of Toronto, *Toronto’s Taxicab Industry Review, Final Report* (Toronto: January, 2014) [*City of Toronto, Final Report*] at 14–5. For an earlier discussion of the need to regulate transfers, see *Advisory Committee on Taxi Cabs, supra* note 30 at 30–2.

45. Berry, *supra* note 25 at 129–135.
46. *Ibid* at 84–7.
47. *RWDSU v Diamond Taxicab Assn. (Toronto) Ltd.*, [1992] OLRB Rep 1143 [*RWDSU v Diamond*]; *USWA, Local 1688 v Diamond Taxicab Assn. (Toronto) Ltd.*, [1995] OLRB Rep 753 [*USWA v Diamond*].
48. Some medallion owners were associates of more than one brokerage; they associated some of their medallions with one brokerage and some with another brokerage.
49. Berry, *supra* note 25 at 135–37. On the development of employment standards, see Mark Thomas, *Regulating Flexibility: The Political Economy of Employment Standards* (Montreal: McGill-Queen's University Press, 2009).
50. Harry Arthurs, "The Dependent Contractor: A Study of the Legal Problems of Countervailing Power" (1965) 16 UTLJ 89 at 89.
51. See Harry Arthurs, "The False Promise of the Sharing Economy," this volume, for Professor Arthurs' discussion of the "category problem" in the context of the sharing economy.
52. SO 1968, c 35.
53. SO 1975, c 76, s 1(1).
54. For a full description, see the two Diamond Taxi OLRB judgments at *supra* note 47.
55. See e.g. Judy Fudge, Eric Tucker & Leah Vosko, "Employee or Independent Contractor? Charting the Legal Significance of the Distinction in Canada" (2003) 10:2 CLELJ 193. More recent reviews of the issue in both domestic and international law include, Miriam A Cherry & Antonio Aloisi, "Dependent Contractors' in the Gig Economy: A Comparative Approach" (2017) 66:3 Am U L Rev 635; Breen Creighton & Shae McCrystal, "Who is a 'Worker' in International Law?" (2016) 37:3 Comp Lab L & Pol'y J 691.
56. *Ontario Taxi Association v Seven-Eleven Taxi Ltd.*, [1976] OLRB Rep 134; Berry, *supra* note 25 at 138–56.
57. *RWDSU v Diamond*, *supra* note 47 at paras 56–7.
58. *Ibid* at paras 62–3; Weil, *supra* note 21.
59. *USWA v Diamond*, *supra* note 47 at paras 75–127.
60. There is a conventional economic analysis of the medallion system that focuses on its distorting effects and cost to consumers. See e.g. Benoit-Mario Papillon, "The Taxi Industry and Its Regulation in Canada" (1982) Economic Council of Canada Working Paper No 30; D Wayne Taylor, "The Economic Effects of the Direct Regulation of the Taxicab Industry in Metropolitan Toronto" (1989) 25:2 Logist Transp Rev 169.
61. City of Toronto, Toronto Task Force to Review the Taxi Industry, Report to Review the Toronto Taxi Industry (Toronto: October 1998), 15.

62. For a discussion and critique of the program, see Mariana Valverde, *Everyday Law on the Street: City Governance in an Age of Diversity* (Chicago: University of Chicago Press, 2012) at 168–174.
63. Indeed, because the newer drivers who held ambassador licences were predominantly from racialized groups, an unsuccessful human rights complaint was launched alleging that the program unlawfully discriminated: *Addai v Toronto (City)*, 2012 HRT0 2252.
64. City of Toronto, *Taxicab Industry Review, Preliminary Report* (Toronto: September 2012), at 37–42; City of Toronto, *Final Report*, *supra* note 44 at 12–5, 22–7, 38–9.
65. For unsuccessful efforts in this regard, see David Bush, “UberXploited: Behind the Toronto Taxi Wars,” *RankandFile.ca* (11 December 2015), online: <<http://rankandfile.ca/2015/12/11/uberxploited-behind-the-toronto-taxi-wars/>>.
66. See Arlie Russell Hochschild, *The Managed Heart: Commercialization of Human Feeling* (Berkeley, CA: University of California Press, 1983); Marcia Facey, “‘Maintaining Talk’ Among Taxi Drivers: Accomplishing Health-Protective Behaviour in Precarious Workplaces” (2010) 16:6 *Health and Place* 1259.
67. For a detailed description of an Uber contract, see Joellen Riley, “Regulating Work in the ‘Gig Economy’” (April 2017) Sydney Law School Working Paper No 17/30, online: <<http://ssrn.com/abstract=2949631>>.
68. The litigation is ongoing. In England, Uber drivers were recently found by an employment tribunal to be workers (not employees) employed by Uber for the purposes of the *Employment Rights Act* and the *Minimum Wage Act*. See *Aslam v Uber BV* (2016), [2017] IRLR 4 [*Aslam*]. The limits of this decision are discussed in Rabih Jamil, “Drivers Vs Uber—The Limits of Judicialization: Critical Review of London’s Employment Tribunal Verdict in the Case of Aaslam Y. & Farrar J., Against Uber” (2017) 58 *Papers in Political Economy*, online: <<https://interventionseconomiques.revues.org/3449>>. For a recent review of claims, see Brishen Rogers, “Employment Rights in the Platform Economy: Getting Back to Basics” (2016) 10:2 *Harv L & Pol’y Rev* 479. See also Jeremias Prassl & Martin Risak, “Uber, Taskrabbit, & Co: Platforms as employers? Rethinking the Legal Analysis of Crowdwork” (2016) 37:3 *Comp Lab & Pol’y J* 619; Guy Davidov, “The Status of Uber Drivers: A Purposive Approach” (2017) 6:1–2 *Spanish Lab L & Employment R J* 6.
69. Conventional economic analysts celebrate this because of their critique of restrictions on entry. See David Seymour, *The End of Taxi Regulation: Why GPS-Enabled Smart Phones Will Send Traditional Regulation the Way of the Dodo* (May 2011), online: Frontier Centre for Public Policy <https://fcpp.org/files/1/PS105_TaxiReg_MY02F3.pdf>.

70. The value of Toronto taxi licences has dropped from a high of \$360,000 in 2012 to less than \$100,000. See Patrick Cain, "Toronto Taxi Licenses are Plummeting. Is Uber to Blame?," *Global News* (22 January 2015), online: <<http://globalnews.ca/news/1780260/toronto-taxi-licence-prices-are-plummeting-is-uber-to-blame/>>.
71. City of Toronto, "Vehicle-for-Hire," online: Toronto.ca <<http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=b7d78b38956c5510VgnVCM10000071d60f89RCRD>>.
72. Srnicek, *supra* note 6 at 45.
73. Simon Harding, Milind Kandlikar & Sumeet Gulati, "Taxi Apps, Regulation, and the Market for Taxi Journeys" (2016) 88:C *Transp Res Part A* 15; Justin Fox, "Uber is Still Trying to Figure Out if It's a Real Business," *Bloomberg View* (29 August 2016), online: <<https://www.bloomberg.com/view/articles/2016-08-29/uber-is-still-trying-to-figure-out-if-it-s-a-real-business>>; Yves Smith, "Can Uber Ever Deliver? Part Four: Understanding that Unregulated Monopoly Was Always Uber's Central Objective" (5 December 2016), *naked capitalism* (blog), online: <http://www.nakedcapitalism.com/2016/12/can-uber-ever-deliver-part-four-understanding-that-unregulated-monopoly-was-always-ubers-central-objective.html#_ednref10>.
74. Slee, *supra* note 5 at 63–7; Hill, *supra* note 5 at 84–90.
75. Alex Rosenblat & Luke Stark, "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers" (2016) 10 *Intl J Comm* 3758 at 3762.
76. Aslam, *supra* note 68 at paras 87, 90. On the potential implications of the decision, see Gregor Gall, "Is Uber Ruling the Beginning of the End for Bogus Self-Employment?," *The Conversation* (4 November 2016), online: <<https://theconversation.com/is-uber-ruling-the-beginning-of-the-end-for-bogus-self-employment-68010>>.
77. Noam Scheiber, "Uber Drivers Ruled Eligible for Jobless Payments in New York State," *The New York Times* (12 October 2016), online: <<https://www.nytimes.com/2016/10/13/business/state-rules-2-former-uber-drivers-eligible-for-jobless-payments.html>>; Deborah Berkowitz & Rebecca Smith, *On-Demand Workers Should be Covered by Workers' Compensation* (21 June 2016), online: National Employment Law Project <<http://nelp.org/content/uploads/Policy-Brief-On-Demand-Covered-Workers-Compensation.pdf>>.
78. US Circuit Court of Appeals for the Ninth Circuit, *O'Connor v Uber Technologies Inc.*, online: <https://www.ca9.uscourts.gov/content/view.php?pk_id=0000000823>.
79. Matthew Flamm, "Union Seeks to Organize Rideshare Drivers in NYC," *Crain's [New York Business]* (26 September 2016), online: <<http://www.crainsnewyork.com/article/20160926/TRANSPORTATION/160929902/>>

amalgamated-transit-union-local-1181-seeks-to-organize-uber-drivers-in-nyc>.

80. Noam Scheiber & Mike Isaac, "Uber Recognizes New York Drivers' Group, Short of a Union," *The New York Times* (10 May 2016), online: <<https://www.nytimes.com/2016/05/11/technology/uber-agrees-to-union-deal-in-new-york.html>>; Josh Eidelson, "Uber Found an Unlikely Friend in Organized Labor," *Bloomberg Businessweek* (27 October 2016), online: <<https://www.bloomberg.com/news/articles/2016-10-27/uber-found-an-unlikely-friend-in-organized-labor>>. For a discussion of the Guild that locates it in an analysis of non-traditional forms of worker representation that enhance labour-management cooperation, see Jeffrey Hirsch & Joseph A. Seiner, "A Modern Union for the Modern Economy," *Fordham L Rev* [forthcoming in 2018], at 25–9.
81. Paul Mason, *Postcapitalism: A Guide to Our Future* (London: Allen Lane, 2015).