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Law, Code and Exploitation: How Corporations Regulate the Working Conditions of the Digital Proletariat

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Abstract

Contrary to what orthodox Marxism claims, the article defends that the legal field has been a fundamental aspect of the capitalist social ordering, and an unavoidable feature to understand how dominated subjectivities are produced and exploited. Expanding Lessig's concept of 'code as law' with Marxist scholarly insight, the article argues that digital capitalists are reorganising work and the labour force through a form of algorithmic regulation. The article states that algorithms – that is, digital machines – have become not only part of the means of production of the *era of automation*, but also the code by which capitalists are writing the conditions of existence and exploitation of the digital proletariat. The article bridges recent contributions on labour law, AI and algorithmic regulation with the latest Marxist sociological contributions analysing the relation of work and digital exploitation, opening with it new ways to understand how sociotechnical systems owned by corporations regulate the behaviour not only of the working class but of the wider citizenry.

Keywords

digital capitalism, law, code, technology, digital proletariat

Introduction

This article hypothesises that digital capitalists are reorganising work and triggering a process of subjectification through a new form of sociotechnical ordering named algorithmic regulation. Algorithms, once simple mathematical expressions, have today become means of production of global businesses such as Facebook, Google, Airbnb and Uber. Rosenblat (2018), Cant (2019) and Delfanti (2021) among others, have described the labour conditions of Uber and Amazon workers and how they interact with technology. Their contributions show a working reality where digital capitalists supervise, control, surveil, evaluate, measure, direct and exploit workers thought an intricate assemblage of digital and physical machines. Algorithms are machines, the means of production of the digital era. But even more than this, they have become the labour code wherein the

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working conditions of the digital proletariat are inscribed. Critical sociologists, often attentive towards how law relates with racial and gender structures of dominations, have surprisingly avoided the thorny and deep relation of law and exploitation in the digital era (Benanav, 2020; Mueller, 2021).

The main contribution of this article is to demonstrate how the law/code binomial has become a crucial tool for shaping and defining digital economy's relations of exploitation. The first section of this article illustrates the relation of law, code and capitalism and explains how out of the interaction of these elements, a new wave of exploitative legal and sociotechnical system is emerging. Then the article examines how digital capitalists are weaponising this system of algorithmic exploitation to produce an oppressed subjectivity: the digital proletariat. Third, the article investigates two key features of the exploitative law/code Silicon Valley is imposing on the working class. Finally, the article dissects what I've labelled as the *liberal dilemma* – that is, *the cul de sac* wherein liberal thinkers are trapped with regard to digital capitalism's relations of production's regulatory framework.

Code, Law and Machines

The discussions around the resemblance between law and code are as old as code. After all, law is a normative language intended to shape conducts, frame behaviours and structure reality. In short, it is a system of rules regulating actions. And code is the same, a system to program instructions. A language that executes. Both are a system of symbols that, when activated, put in motion, stop, create or destroy something (Lessig, 2006). However, as Lessig's works show, the relationship between law and code has fundamentally changed. Before the digital revolution, law was undisputedly ruling the 'real world', while code was structuring the so-called cyberspace. But then the digital revolution occurred and digital technologies became ubiquitous and increasingly embroiled with law. The rise of the internet – with its libertarian dreams of free will with no laws – gave rise to the rule of digital monopolies, who ruled and legislated like tyrants in 'cyberspace' (Hassan and Filippi, 2017). However, cyberspace is not a place of fantasy. It is imbricated with reality. The digital economy is neither based on the material nor the cyberworld, but on a 'cyber-physical infrastructure' (Jacob, 2017), composed by programmes, software and the network, of course – but also data centres, investors, workers, minerals, cables and every possibly thing that can be perceived through senses.

In a vulgarised version of Marxism popularised under the Stalinist regime, law was considered as a simple product of the economic forces in motion (Vyshinsky, 1948). They drew on Marx's hierarchical distinction of the economic base and the legal and political superstructure arising on it (1979). With the becoming of code as a fundamental mean of production of the digital era, the positioning of law as an element solely circumscribed to the superstructure has been seriously, if not definitely, demolished. As Lessig announced, code and law not only share common grounds, indeed they have become undistinguishable. Hence, paraphrasing Pistor (2019), the 'code of capital' is present in today's digital factories, not as an outside regulatory force, but blended with its more complex machinery.

Think of an Uber driver driving someone somewhere. In this apparently simple business, there are multiple laws in motion: contractual/private relations, state laws, highway codes, constitutional rights regarding for example no discrimination, perhaps an insurance. All of those legal relations regulate the actions between the worker, the client and the environment. The different laws and rules in motion during that specific provision of services are, even in their complexity, clear, open to everyone willing (or able) to look at them. Those regulations are perhaps prescriptive and normative, but ostensibly free will still exists. Perhaps what is most important, the enabling

legislation, directly or indirectly, may be discussed and passed by some authority with democratic legitimacy. However, in the case of the digital economy, this is just half of the story. The interactions between the worker and the customer are meticulously controlled by the algorithm. Uber uses multiple algorithms and pieces of software to control the way workers and customers match, to set the prices and the route. It measures the speed, the way a driver uses car brakes. It measures the time. It finally captures the rating given by the customer to the worker to establish a rank. The working conditions of a business present in 63 countries, with nearly 3 million drivers (Sainato, 2019), are regulated by algorithms, a new kind of private law coded by the owners of capital, with no State or supreme authority above the corporation whatsoever.

Tech and law academics such as Hildebrandt (2018), Yeung (2011, 2017, 2018), Pasquale (2020), among others, have analysed how corporations are using digital technologies to enhance new forms of algorithmic control and surveillance over citizens. These technologies, labelled as automated decision-making (being algorithmic regulation a form of automated decision-making), have been designed to regulate and control behaviour through a process of automated data collection, analysis and delivering of positive/negative incentives to 'individuals for specific actions' (Cristianini and Scantamburlo, 2019: 647), aimed to reach a previously defined objective (Yeung, 2018: 507). Or put it in other words, a form of social control based on a cybernetic feedback loop. This sociotechnical framework would be composed of code, a system of automated data collection and the wider sociopolitical environment (Spielkamp, 2019).

Yeung argues that, in appearance, algorithmic regulation looks like any other architectural or design-based techniques of control and hence it is structured around three core components: setting standards, gathering information and finding the ways to enforce standards and modify behaviour. However, Yeung (2018), considers that algorithmic regulation differs from architectural regulation in two critical aspects: its adaptive feature, and the extraordinarily technological power driving the algorithms. These technologies are currently being used by public and private institutions around the world, in sectors such as education, policing, welfare and health, to name a few, with catastrophic consequences for the citizenry. A societal automating process (Spielkamp, 2019) orchestrated by public–private initiatives, ideologically driven by exacerbated waves of neoliberalism. This form of algorithmic power is leading to a new form of social ordering intimately connected with digital and surveillance capitalism (Morozov, 2019; Zuboff, 2019).

Tech and law scholars' critique of automated decisions highlights the lack of accountability, transparency and public review of automated decision system, making these technologies inscrutable and eventually incontestable. Liberals argue that algorithmic regulation is threatening key aspects of (allegedly) Western Values (Kantayya, 2020) such as equality, non-discrimination, free speech and representative democracy. For them, the solution would be to stablish a legal protection *by the design* that would 'safeguard our ability – as individuals – to challenge automated decision systems, by providing time and space to test and contest the workings of such systems' (Hildebrandt, 2018: 16). Despite the relevance and pertinency of their arguments, the liberal critique to the algorithmic domination exerted by corporations is limited in reach, depth and scope by the liberal and individualistic values underpinning their arguments. They do not see algorithmic regulation as a form of class oppression but a threat to the individual liberties reified by liberalism, and hence they are unable to see how the rise of these sociotechnical system is leading to the production of new forms of exploitation and subjectivation.

The Legal Construction of the Digital Proletariat

As has been argued in multiple places (Baldi, 1972; Berardi, 2001), the 1970s represent a turning point for the mass worker in the Global North. The post-Fordist regime of accumulation superseded

Fordism as the hegemonic mode of production, altering the equilibrium between capital and labour. It is not the place here to discuss why that happened. Perhaps because, as Tronti (2019) claims, working-class struggles forced capital to move and to evolve, or because, as here is argued, capitalist development transformed class composition. What matters is that the way work was organised changed, and the legal field was a central aspect of this swift transformation. Contrary to what some believed, Neoliberalism was not a deregulatory force, but a hyper normative regime granting labour regulatory powers to corporations to the detriment of the state. Law was, hence, a key aspect of the neoliberal offensive against everything challenging the market as the driving force of the social factory, and more specifically against workers' organisations and labour rights. Even more, law was one of the fundamental technologies capitalists used to produce a new form of life fully subdued to the fluxes of capital, now known as precarity.

Precarity was a legally induced existential and a social condition of vulnerability defined by the end of the Fordist certainties: work, house, structure and defined paths (Foti, 2017). Precarity was everything that was outside the predictability and social protective regime safeguarded by Fordism, unionism and the welfare state. What was once the hegemonic form of organising work, the full-time, rights-bearing mass worker became one among the many legal categories, and the only one truly protected from the capitalist tempest of uncertainty. A heterogeneous army of part-time, eventual and undocumented workers became dominant in the metropolis' productive spaces. The outside, the abnormal, rebranded by many as the precarious, became under neoliberal's hegemony the new normal (Berry and McDaniel, 2020; Butler, 2016; Lorey, 2015). The precarious was, hence, a product of the subjectivation processes (Foucault, 1978) triggered by the neoliberal rule of law. Today, many of us live precarious lives, precarity is the millennial default condition. However, precarity – that is an existence and social condition – is all what the precarious have in common. So, there was a substance, the soul of what was to come, but not its flesh.

What Makes You a Digital Proletarian?

The mass worker is not defined by the will to be a worker or by its social condition. It is not one of those nomadic identities that Lorey (2015) or Butler (2006) talk about. Mass workers are so because they suffer from the legalised exploitative conditions of the industrial capitalist mode of production. One does not have to be in the factory to be working class, but one must be immersed and affected by the relations of production that it generates. That is why the popular culture speaks of working-class neighbourhoods, of working-class attitude, or of working-class instinct. You belonged to that class whether you wanted to or not. Whether you were producing cars or washing machines, operating a combine, making photocopies or photocopiers. It was not about what the subjects were producing, what they were doing or how they were doing it.

The question then arises: what may a Deliveroo rider, an Uber driver, a professor at an online University, an operator at an Amazon logistics centre have in common? It is not who hires them or what they produce. It is not their legal status as employees, subcontractors, workers or self-employed. It is neither the temporality and the 'geographic stickiness' of their work (Woodcock and Graham, 2019), nor it is the nature of the entity exploiting them (Pesole et al., 2018). The imaginative way they are labelled by digital capitalists is also irrelevant. What they share – what they have in common no matter their country, their religion, their gender, or their personal political preference – is that they are being algorithmically exploited under the same regime of accumulation, is that they do not own the means of production of the digital era. That is why, today, we can talk of the digital proletariat. We can do so because digital capitalists have finally dismantled the blurry boundaries between base and superstructure as they control both through a single apparatus: an algorithmic system of exploitation. The social existence of the digital proletariat is being

produced in the assemblage of law, code and machines owned by digital capitalists. However, we should bear in mind, that this ongoing process, far from being the disruptive result of a new set of technologies, is part of the broader neoliberal managerial project of efficiency and innovation that dismantled the Fordist legal subjectivity to replace it with the precarious, now reframed in the cybernetic machinery as the digital proletariat.

Why Digital Proletariat?

Widely used concepts such as gig or platform worker (Ainsworth, 2018; Collier et al., 2017; Woodcock and Graham, 2019) cannot capture the complexity, extensity and intensity of the algorithmic exploitative working relations. As a recent EU report probes (Moore, 2020), algorithmic exploitation exceeds what some theorists described as digital labour (Fuchs, 2014, 2019; Huws, 2014) as it extends to every imaginable field, ranging from content moderators, dentists and schoolteachers, to name a few (Moore, 2020).

This conceptualisation of digital proletariat does not aim to challenge but to complement and extend the valuable contributions of authors such as Fuchs (2014, 2019) and Huws (2014), who previously acknowledged that the digital economy and digital labour are not isolated spheres existing autonomously in the cyberspace. As the latter author noted, '"virtual" activity is dependent on a highly material basis of physical infrastructure and manufactured commodities' (Huws, 2014: 89). For his part, Fuchs (2019) highlighted the encroachments of digital capitalism with previous exploitative class relations such as slavery or patriarchy. In the same vein, both authors, as well as other coming from different lineages of thought such as Caffentzis (1999), coincide in pointing at labour as the substance of value creation, a position that I also share here. With this, I am not discarding the rich discussions on how value might be created, augmented or appropriated in digital capitalism. In this regard, it is worth reading the evocative works of Pasquinelli (2014, 2015), who discussed the concept of machinic surplus value to explain the way *abstract machines* (such as algorithms) capture and assemble the information produced by the collective worker in a social process of valorisation. Other authors such as Birch (2020) and Sadowski (2020) emphasise the rentier character of digital capitalism. Cohen (2019) speaks about the exploitation of the biopolitical public domain, or, in other words, the extraction of digital raw resources by digital corporations. While insightful, these discussions are difficult to operationalise in terms of labour policy or labour law (partly, of course, because they are not specifically directed at this goal), and hence as rich as they are, they are not particularly useful to defend the interest of the digital proletariat in ongoing labour struggles. Now, I will outline two examples of how digital capitalists are weaponising an algorithmic regulatory exploitative framework against workers to remove former cornerstones of labour rights.

Digital Capitalism Intensifies Exploitation, Lengthens the Working Day and Lower Wages

Digital exploitation systems monetise every second of the workday by imposing a dystopian vigilance. Name the job, driver, delivery person, a warehouse operator, online teacher. In all those cases, from the moment the worker logs in until the worker logs out, each of their movements is recorded – each click, each page viewed, each object placed, each meter travelled, each message to a student (Delfanti, 2019; Kumar et al., 2021). The time spent marking, the time used to go to the toilet, the sudden braking, the times the worker rejected an order, the times accepted. Not so long ago, such surveillance conditions would not only have been intolerable, but they were also impossible. Today, those conditions have become the *new normality*. This intensification came alongside

the decommodification of previously remunerated tasks. For instance, as workers are now considered self-employed, they are responsible for the finances of their entrepreneurial endeavour. Workers with earnings below the living wage are not only forced to work under surveillance conditions, but they also have to perform financial, highly specialised tasks formerly responsibility of corporations (Collier et al., 2017).

One of the defining features of the algorithmic regulation feedback loop is the way digital capitalists match workers with clients. This matching process is critical for workers, as they often receive wages by the piece, so if they do not have clients they do not work, if they don't work, they don't make money. The way platforms match workers with clients is automatised, managed by an algorithm measuring a number of variables, which depending on the nature of the task could be distance, availability and so on. Along with these technically neutral variables, the algorithms also measure and consider workers' rating. The rating could be a numeric or symbolic value (e.g. 9.2 out of 10, or 4.7 stars). The higher the value, the more likely a worker will be assigned a task (Chan, 2019). The way algorithms assign values to workers is not public; it is a trade secret only known by the company. In theory, the algorithm considers customer's rating. Hence, workers have to dedicate a considerable amount of unpaid affective labour into the task, desperately trying to meet the expectations created by digital capitalist marketing (Ronsenblat and Stark, 2016). Picture the way Uber promises an outstanding luxury service, provided by young trendy handsome, super friendly drivers. But digital capitalists also consider a number of other elements linked to the tight control they exert through algorithmic regulation. For instance, the algorithms take into account the route taken by the driver as well as the way the driver actually drives (Rosenblat, 2018: 134).

But what has perhaps been the most disputed element of the rating system is the way the capitalist measures and leverages the worker's availability. We have to bear in mind that the majority of digital industries have taken a piece-wages approach to pay their workers. Workers' availability and rate of acceptance is rated and valued, fully taken into account when assigning further tasks to workers. The more the worker drives or delivers, the more chances he will have of getting assigned the best slots, hours and jobs. The problem arises when there is little or no work. Algorithms' rating structure encourage competition between workers, a climate of uncertainty and desperation. Workers are aware that driving or delivering in slow business hours entrails only costs for them. But as peak hours slots or rides are limited, and the algorithm rewards workers availability, they are basically forced to spend long hours logged onto the app waiting for jobs, evidently, an unpaid labour time. So workers, despite being paid by piece, have to be available, disposable. This availability, this stock of labour power, is one of the most valued assets for the digital capitalist. They offer 24/7 availability at zero cost, a most rewarded value in our turbocapitalist society. New York City, aware of the situation, passed regulations in an attempt to improve drivers' pay by capping the number of drivers. Nevertheless, digital capitalists undercut these protective measures via technology, implementing a new system for drivers' log-in into the app.

Digital capitalists are overwriting their private West Coast Code, in the words of Lessig (2006: 72) 'the code that code writers 'enact' on traditional East Coast Code 'the code that Congress enact' (law). For that, they are using a set of digital machines to define the rules, assigns the tasks, punishing or rewarding workers and quantifying their productivity, in short algorithmically managing them. The power exerted by digital capitalists on workers trough their algorithmic regulation probes that, as long as the algorithms remain hidden from public scrutiny, the working conditions of the digital proletariat will continue to worsen. Just as in the past, industrial capitalist fiercely contested factories inspection, today's capitalists refuse to let enter the light to its shady machinery, whether digital or physical (Benson et al., 2019).

Digital Capitalists Limit Political Rights

Like any other capitalist social formation, digital capitalism wants no unions, no collective bargaining, no protest or organisation of workers. For this, it uses two strategies, two types of laws. The first is the afore-described East Coast Code (formal law). These companies want workers to be an entrepreneur because 'entrepreneurs' can't unionise, they do not have collective bargaining and they cannot go on strike. This misuse of the self-employed legal status has been weaponised against workers' self-organisation (Trade Union Congress (TUC), 2017; Unión General De Trabajadores (UGT), 2019). On the other hand, they use the West Coast Code (software), their legal machine, to destroy any type of union. They have built a system of valuations and work assignments by points that literally pit workers against each other. Deliveroo, Uber, Amazon and any other platform uses dark and opaque metrics to rank their operators. With this they try to establish a condition of restlessness, fear, mistrust and individualism. Point systems that combine both user valuation and worker 'effectiveness' are managed behind the scenes by corporations. These hierarchies are disguised as a false technological neutrality, the code is a political artifact (Winner, 1980) serving the interests of is owners (Unión General De Trabajadores (UGT), 2019). Of course, this goes on the top of classic anti-union strategies such as firing union organisers and funding yellow unions (Blest, 2020; Boewe and Schulten, 2017).

However, these strategies have not kept workers from organising. During the pandemic crisis, digital capitalists lowered base rate payments in places as Madrid or New York, forcing workers to overwork under critical and dangerous conditions. Considered as essential workers, deliverers were not electable for unemployment benefits; hence, these 'entrepreneurs' were forced to work. This precarious situation was worsened by the capitalists' decision of capping the rate, triggering protests and strikes. Despite the state of emergency declared by states such as Spain, the legal framework that illegalised collective action, and the code encouraging individualism, workers went to strike and even managed to organise a rally, in an attempt to call the attention of the quarantined general population (Pato, 2020). Even in the worst conditions, with East and West Coast Code against them, workers unite, workers fight for their rights, workers challenge exploitation. The digital proletariat is finding its way to organise, even in the divisive conditions imposed by their exploiters. For instance, Uber tech workers have expressed their solidarity with Uber drivers' struggles (Anonymous, 2019). Now, I will analyse the liberal legal critique to the digital capitalist offensive against workers as well as to explain why their attempts and arguments, while legally and theoretically correct, are failing to tackle labour algorithmic regulation.

The Liberal Dilemma

One of today's most relevant discussions on labour law has to do with the legal status of workers directly or indirectly controlled by digital corporations. Despite the many differences across jurisdictions, labour laws fundamentally distinguish three classifications of employment: (1) self-employed or contractor, that is the classical entrepreneur; (2) employee, historically embodied by the proletariat – blue and white collar (Government of the United Kingdom, n.d.); and the (3) dependent worker or worker, a *third way* of employment classification born and rose in the 'progressive' aftermath of the neoliberal revolution (Dubal, 2017b). The conventional legal characterisation as an employee or as a self-employed defines one's labour rights, both political and economic. However, this taxonomy is fiercely contested by digital capitalists advocating an even more capitalist-friendly legislation characterised by an hyperprecarised legal subjectivity (Dubal, 2017a, b: 103) – the on-demand worker, here labelled as the digital proletariat – and a massive reduction of cost at the expenses of workers.

The *liberal dilemma* is engaged. On the one hand, liberals are aware that the new players in the corporate town play a very different game, with new technologies and ways of organising work. On the other hand, as a gesture of political pragmatism, liberals put aside progressive ways of regulating production. As progressive thinkers, they are aware that digital capitalists systematically violate labour laws. But as liberals, going further, deeper, to the root of the problem, seems excessively socialist. In their view, what we need is an adequate and updated legislative framework, functional and flexible enough to put relations of production back on track. Hence, liberals are drawn into a Byzantine dispute around the legal status of workers. A legal status that used to be legally clear but became blurred with the disruptive arrival of digital capitalism. In the US, each jurisdiction has been tackling the issue in a different way. Digital capitalists have been lobbying for a corporate-friendly legislation more prone to determine digital proletariat as entrepreneurs (Thelen, 2018). In this struggle, liberals have pushed for the ABC test, which is a way of determining worker's legal status.

Despite liberal's claim on law's neutrality, labour law is taken in a stricter or lenient way depending on the jurisdiction, the laws linked to it, and the political climate (Collier et al., 2017). Other jurisdictions do not use the ABC test, although the key elements where legal operators look at to determine the status, do remain (e.g. pp. 27–31 of UK Supreme Court decision in **Uber BV v Aslam** [2021] UKSC 5). Worldwide, legal decisions are also contradictory, as courts vary in their readiness/ability to fully grasp the business model of digital capitalism. For instance, in the landmark UK labour law case of *Uber BV v Aslam* noted above, Uber drivers were considered workers (after careful analysis), but an earlier High Court decision in *R* (on the application of the Independent Workers Union of Great Britain) *v Central Arbitration Committee* [2018] EWHC 3342 (Admin) accepting the ruling of the Central Arbitration Committee that Deliveroo riders are contractors for the time being stands. In Spain, different jurisdictions ruled one thing and the contrary regarding Deliveroo and Glovo raiders or Uber drivers (Todolí-Signes, 2017).

For some, this ongoing sterile debate will not end until a clearer and updated legal framework is passed. The EU is embarking on a legislative initiative (European Commission, 2021) to improve the working conditions of platform workers; in the meantime, the 'transparent and predictable working conditions' Directive (2019) tries to rise minimum standards for all 'precarious workers.' In the same way, multiple national and regional lawmakers and political actors have expressed their concerns with regard to the platform-based work, promising new legislations (Albanese, 2021), or publishing critical reports and briefings addressing the question (Ainsworth, 2018).

The Liberal Fallacy

Those debates are important and relevant. The misclassification of workers as self-employed is a win for digital capitalism that comes directly at the cost of digital workers. The UK Trade Union Congress (TUC) (2017) published a revealing report demonstrating how the precarisation of the working conditions under the algorithmic exploitative system affects individuals and public finances. In the report, called *The Gig Is Up*, they stated that workers are missing rights (collective bargaining, strikes); pay (weekly pay penalty ranging from 37% on zero hours contracts to 44% on self-employments); and social security protections such as full maternity or sick leaves. In terms of public finances, the Trade Union Congress (TUC) report estimates a loss of revenue of between £5.3bn. In a similar vein, the Spanish union Unión General De Trabajadores (UGT) (2019) estimated a loss of taxes and social contributions per worker ranging between 55.6% and 80.5%.

The fundamental problem with the liberal mentality is that even the most progressive interpretation of current or future liberal legal developments won't go to the bone of the exploitative nature of digital capitalism. That is, to the antagonistic relation between workers and capital. In

short, the liberal comprehends work and relations of production within the liberal framework, which has as central faiths the belief in: (1) the rule of law, and (2) the causal interrelation between law and relations of production. Under this liberal framework, a good labour law will frame the way work is organised. Yet, this has been proved to be wrong. Digital capitalism runs faster than every possible law or court decision. Besides – and above everything – labour exploitation is not a crime (Snider, 2018) since it is the pillar of the capitalistic regime.

Second, the relation of law and capital is not causal. Law is not neutral but rather determined by the social formation producing it. The legal epicentre of the relations of production in contemporary capitalism is not a net of private contractual agreements, between workers and capitalists. Even changing the nature, the form, even the contents of the contracts (e.g. extending employees benefits to every worker, which would be a great improvement), the overall course of events will not change. This is demonstrated by the way digital capitalists won in 2020 an important political battle in the US. In 2019, California passed the Assembly Bill 5 (2019); it was a major victory for those advocating for the implementation of the ABC test as a way of combating worker's mislabelling as contractors. It took effect in January 2020, just to be overruled 10 months later by the corporate-backed Proposition 22, which legalised the worker-unfriendly previous status quo (Siddiqui and Tiku, 2020).

The ABC test is one of the declinations of the liberal fallacy that existing law can be adapted or extended (or reinterpreted) to address the problems of the digital proletariat. In order to determine the legal status of the worker as employee or contractor, the test looks at something as ethereal as 'the employer's control or direction in performing the work'. Digital capitalists have been able to game labour legislation, both using East Coast Code and West Coast Code, 'the code that code writers "enact"' (software) (Lessig, 2006: 72). Creativity does not remove the exploiter. A judge in Valencia (Spain) put on paper what is obvious to workers, clients, and the general public: 'the true means of production in this activity are not the bicycle and the cell phone that the delivery person uses, but the digital platform for matching supply and demand owned by the company, outside of which the provision of the service is not feasible' (Pitarch and Marco, 2019).

The main issue with the legal liberal mind-set is that, deep, rich and thorough as it is, it is limited by the burdens of the capitalist legal form. And this impedes liberal lawmakers and scholars in their ability to realise that the central aspect of the relations of production is the production process itself. The working class' material conditions won't change until power relations in contemporary spaces of production change as well. The only way to deal with the exploitative nature of labour is by thinking from a non-capitalist epistemology.

It is necessary to learn from the digital proletariat struggles. Attention must be paid to the way the digital proletariat is circumventing digital capitalist's anti-union strategies – how they are overcoming the individualism imposed by the system. It is necessary to investigate how they are managing to articulate traditional struggles and tools, with more contemporary forms of struggle. It is necessary to carefully study how they are coordinating legal strategies with old-school workers' weapons, such as demonstrations and strikes. In short, it is necessary to comprehend how the new exploited class is getting organised.

Conclusion

Digital capitalism relies on digital machines intangible fixed capital inasmuch as on the very material public (roads, networks) and private (data centres, cables) infrastructures. Algorithms have become platform corporations' strategic means of production, and as we have seen, algorithms are machines inasmuch as they are codes regulating relations of production. Any attempt to change or relieve the exploitation of the digital proletariat via legislative action will be in vain,

as long as the codes in which the digital means of production are written remain under control of the capitalist class.

Factory owners are coding an exploitative legal regime, regulating – without public oversight – the areas that for centuries have triggered class struggle: the working day, wages, working conditions and political rights. Any attempt to change the working conditions of the digital proletariat would have to deal with a new situation in where machines are not only the law of the production, but the law itself. And that law is written in a way that is inaccessible – first, because of technical reasons (code language is not as generalised as other languages); second, and perhaps more important, because code is protected by trade secret law.

Digital capitalism is using law/code to institute and strengthen a system of production based on algorithmic exploitation. As indicated, rather than being a brand-new phenomenon, this process draws on previous stages of capitalist regulation of the relations of production. Marxism has been attentive to that relation in the past. Its theoretical tools remain fundamental to avoid the false liberal dilemma and to truly grasp the central exploitative nature of digital capitalism. Heretofore, with technological changes new challenges arose. Like other industrial modes of production, this system makes extensive use of machines, but in many cases, they cannot be smelled, seen or touched, although they do serve to produce. Algorithms are machines because they transfer the value of workers labour to the commodities they produce. They are instrumental to the production processes. Algorithms are portable machines – abstract (as they are diluted in the network), but also incarnated in the mobile devices that we all carry. So now, when they tell us that the city is a factory, we see that it is not an abstraction. What makes Uber is not the car, but the different algorithms in motion. The one setting the prices, the one deciding the route, the one that assigns drivers to passengers. And of course, the ones surveilling workers and passengers. Uber's software is its machinery, and the city (virtual and physical) is the factory.

Everything will change, but not as expected. It is not about automation, flying cars or quantum computers. It will be machines and workers. True, there are cyborgs now, but they are not like Terminator. The new cyborg is a biker with a cell phone. An algorithm is their boss, their evaluator, their co-pilot. An algorithm is the machine they work for. At the moment, we will not travel to another dimension. What was produced before will continue to be produced, but in a different way. Production relations are going to be brutally shaken. They already are. Digital corporations have increased their profit margin by intensifying exploitation and extending the length of the workday. This system has not come to replace the previous exploitation systems, it will improve them, take advantage of some, swallow others and some will render them obsolete. Every aspect of production will be altered, from the way we conceive work and time, to remuneration and control, and of course the regulatory framework tying everything together.

Just as society changed in the heat of the industrial revolution, the new society will be the image of the system of production. However, exploitation will continue to be exploitation. There will be those who possess the means of production and those who do not. There will be those who enjoy privilege and those who do not. There will be those who accumulate the wealth generated by society as a whole and those who are dispossessed of it. Therefore, because there is a new, concrete, recognisable system of exploitation, we can say that there is a new productive subject, a proletariat. . . digital? Platform? Gig? The name does not matter. But its existence is incontestable. It is not about their number, nor how much they represent today in terms of overall production. More and more productive fields are adopting this mode of production and sooner or later this system will be hegemonic. However, the terrifying future dreamed by digital capitalist is not an iron law, no end of history whatsoever. As Murtola and Walsh (2020) put it, there is a future to fight for. For instance, in March 2021, the Spanish third Vice-President, Minister of Labour, and member of the Spanish Communist Party, Yolanda Díaz, reached an agreement with workers' unions to

tame algorithmic exploitation at both levels East and West Coast Code. The incoming legislation will consider digital proletarians as employees and not as contractors, and hence they will be protected by labour law. Also (what is perhaps more relevant for future struggles), the future law will make compulsory for corporations reporting to the public authorities and union delegates the algorithms regulating working conditions (Spanish Presidency, 2021). Yet tiny, this pathbreaking step forward wides the possibility for further struggles, enables unionisation among the digital proletariat, and sets the legal basis for corporate algorithmic accountability. Even those advocating for a less interventionist take on the regulation of relations of production have to admit that, if we are to limit the power of capitalists over workers, code must be taken into account. No labour law will be useful to protect workers unless code becomes subject of public scrutiny. Coding is legislating; hence, labour law should be coded as well. As it was in the past, the question of the means of production is central to think relations of production, but today is also central to think labour law.

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