

Militaries, militias and unicorns: platform authoritarianism in Brazil

Militaires, milices et licornes : autoritarisme de plateforme au Brésil

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Technological appropriation in the Global South

In the present article we will discuss the appropriation of digital technology in Brazil, based on two ethnographical examples, with emphasis given to the relationship between local populations and the State, and on how they develop patterns and regularities by employing practical-use processes. By examining the workings of a command and control center and a food delivery platform, we will demonstrate how the technological devices developed in the Global North are used by various social actors to produce, or reinforce, relations of power and exploitation that are characteristic of the Global South.







Revolving around the command and control center, a managerial-militarized model started to be experimented with and take shape, in which more and more aspects of day-to-day governance, and later of the State itself, become defined and run by members of the military police or of the armed forces. The election of Jair Bolsonaro¹ and his administration have typified the radicalization of this process, justified by argumentative superimposition², or translation (Callon, 1984), of *authority* (authoritarianism) and *integrity*, on one side, and, on the other, of these two concepts and *efficiency*, a relationship that does not happen in practice. In addition, simultaneous to this process, one can also observe the recent territorial expansion of the "militias"³ and of their business model.

The second case concerns the different work regimes applied to food app delivery workers all based on the diversity of compositions/arrangements between restaurants, platforms/apps and workers, but also taking into account the work done by the middlemen, such as "logistics operators", in this chain. In this sense, the precarious position characterized by the *platform economy* (Srnicek, 2017; Grohmann, 2020) leads to the creation of informal protection and "relative stability" markets, a new and fertile terrain for the expansion of groups linked to the illegal exploitation of services and protection markets in Rio de Janeiro.

The analysis conducted on the practical activities linked to technological appropriation often sheds light on the aspects of innovation that are commonly ignored or taken for granted by the mainstream discourse on technology and society, be it apologetic or catastrophizing. As discussed in the STS⁴ bibliography (Latour, 1990; Hughes, 2012), the struggle over the forms of appropriating technological devices is constitutive of both the innovation process and of society itself. The different forms of appropriation, with different degrees of creativity inputted⁵, produce specific sociotechnical agencies (Callon, 2003), composed of multiple and heterogenous actors that are constantly transforming not just the technological devices but also the relations between individuals, as well as the individuals themselves. The platform economy, with all its components, is a compelling example: the distributed action chains for ride-sharing and food delivery apps encompass, in addition to the apps themselves, delivery workers, means of transportation, customers, restaurants, smartphones, credit cards and satellites, among other actors. And, simultaneously, each actor is transformed by their participation in this assemblage, leading to the rise, for instance, of the iFood delivery worker⁶ - entregador, in Portuguese -, who is in many aspects different from the motorcycle delivery worker of the previous decade⁷.







The architecture of these digital platforms (Cheney-Lippold, 2011; Badouard, Mabi and Sire, 2016), such as iFood, or of organizational platforms (Kallinikos, 2010; Zuboff,1989), such as those that comprise a command and control system (Walker et al., 2017), builds possible, or probable, chains of action, which tend to create behavioral or organizational patterns, or regularities, defined by the pathways, functions and spaces inscribed in the lines of code that comprise the software and the platforms (Fuller, 2008). The software demands that we provide data on ourselves, attach documents, answer "mandatory questions", or follow some specific order for filling out information, in order to achieve certain tasks within their associated platform. Latour and Akrich refer to these regularities inscribed in the technology as programs of action (Latour, 1992; Akrich & Latour, 1992)8, onto which the technology's various components, as well as its users, often interpose anti-programs, thus subverting, transforming or even impairing what was originally intended by the designers. In this sense, we can affirm that these platforms produce important regularities that are more or less generalized. In addition, we can also affirm that the actions, relations and effects produced can vary considerably, depending on a wide range of factors, from group to group, from society to society and from assemblage to assemblage The present discussion is interested precisely in this intersection, which makes the possibilities for action inscribed in the platforms subject to slight modifications, or to being "twisted", but also in the fact that this "twisting" is used as an instrument for various social disputes. More specifically, we will tackle situations that evince the particularities associated with contexts that are very different from the ones in which the platform economy appeared (Morozov, 2018; Sadin, 2016), or in which the command and control systems were created (Walker et al., 2017; Graham, 2017). This does not mean that the contexts found in the Global South are exceptions, or residual and anecdotal distortions, of technological appropriations and their effects. Apart from the fact that the Global South's population constitutes a significant majority in the world - over three fourths of the planet's population, as Chaterjee (2004) reminds us -, technological subversions such as the ones described in this article are not necessarily absent from Global North contexts, though they may manifest less visibly. Some qualitative studies on technological appropriation in the Global South highlight even further the limitations of technological solutionism (Morozov, 2018), which is a mix of inordinate optimism and market opportunism that relies on technological solutions to solve every problem created by the current living conditions. The technopolitics that spring from these appropriations are not inherently flawed and do not arise from shortcomings in the democratic - and civilizing - process, which would represent a direct and negative comparison with the white, European and North American contexts. Rather, they are as valid a model as the others, and are also based on rationalities, power







relations, chains of cultural significance, etc. With that in mind, case studies that focus on the Global South frequently have the advantage of being uncoupled from the normativity inherent to the analysis of technology use in wealthy countries, allowing us to think beyond the dichotomy of whether something works or not.

The technologies created or produced in the Global North are also transformed and adapted to the forms and possibilities that come from the appropriations made in the Global South, some times incorporating these transformations into their global design, while at other times developing specific functionalities for certain countries. The recursiveness of the algorithms and the flexibility of computer programming, which inscribes programs of action into lines of code undergoing constant transformation, lead digital technologies to greatly accelerate the standardization processes (for apps and/or systems), but they also enable them to absorb fairly quickly and substantially a series of transformations and adaptations, be they large or small.

Although some authors are counting on this contest for technological appropriation to set the stage for more horizontal and democratic struggles against the "neoliberal economy" and for greater general freedom (Scholz, 2016; Grohmann, 2020; Castells, 2017), in many cases what we see in action are new ways of reinforcing preexisting inequalities and of producing more expropriation, as well as renewed forms of authoritarianism (Abílio, 2019; Cesarino, 2020; Solano, 2018). In societies where inequality is rampant, social hierarchies are strict, democratic practices are poorly consolidated or non-existent and the State's legitimate monopoly on the use of force can be bought and sold (Misse, 2007), the possibilities for creatively appropriating technologies tend to be even more elastic, though this phenomenon can also be attested in wealthy countries.

Broadly speaking, technology is, thus, understood as a way of producing and reproducing society, building relations and keeping them stable by establishing and coordinating programs of actions. The contest around it, to put it very simply, seeks to revert or reinforce the different power relations that constitute these societies by arranging new types of socio-technical assemblages - such as in the case of *militarized managerialism* and of food delivery apps' logistical operators, upon which we will expound shortly.

Technologies for command and control: the ICCC-RJ







Since the mid-2000s, Brazil, and more specifically Rio de Janeiro, have been investing in command and control technologies as a strategy to guarantee public safety. This process is directly related to the cycle of mega-events hosted by the city between 2007 and 2016, fostering large investments in areas deemed sensitive. In light of the high crime and urban violence rates in the region, public safety undoubtedly became a priority matter⁹. In addition to the significant costs they incur, which themselves have an impact on important international markets, these technologies also come with a series of promises, synthesized as the events' so-called "legacy" (Cardoso, 2013).

As was advertised at the time, the chief public safety legacy that would come from these mega-events would be that of a paradigm shift in the work done by security forces, based on technological modernization. The transformation would consist of more efficient and less violent policing, with emphasis given to the investments made in information gathering, institutional organization and intelligence, to the detriment of the older, historically predominant model, based almost exclusively on the use of force and police violence/lethality. The direct convergence between what was promised by the manufacturers, vendors and lobbyists for the security technologies industry and what the technology systems are capable of delivering - or the types of assemblage they actually produce - usually justifies the significant costs that go along with the urgency of organizing a mega-event. That is how the Integrated Command and Control System, also known as ICCS), inspired by Rio de Janeiro's Integrated Command and Control Center, also known as ICCC-RJ), was adopted as the "backbone" of the public safety system, not only for the mega-events, but also for building a public security model based on "institutional integration".

Public security in Brazil is the responsibility of a plethora of actors operating at the federal level and especially at the state level, but also at the municipal level, though to a smaller degree. In short, among these actors we can find the Federal Police, the Federal Highway Police, the National Security Force, civil and military police forces from each of Brazil's 27 federative units, municipal guards in mid-sized and large cities, as well as the Armed Forces, in cases prescribed by law, since they are national defense institutions. Furthermore, these institutions tend to act separately, often competing amongst themselves for funding, visibility and responsibilities, which prevents resources - both financial and operational - from being used efficiently or rationally. That is why, together with the broad-ranging technological system employed by the Brazilian government, composed of several organizational platforms, came the promise of also modernizing the administration as a response to the concerns raised over efficiency, goals and accountability. This integrated command and control system,







comprised of integrated command and control centers in all state capitals and in some towns on Brazil's borders, would be capable of integrating, or at least coordinating, all these agents into a single chain of action, in a way that they could be led to work together in an optimized manner. This would be achieved through a mixture of architecture¹⁰, technological devices (hardware) and organizational platforms (software), powered by the basic principles of New Public Management (NPM), many of which were already embedded in the platforms.

All the elements underpinning these promises for a paradigm shift and institutional change have one thing in common: they all purport to be "universal". In other words, they claim to be solutions based solely on technical methods and rationality. Moreover, it is precisely this universality, associated with technical overdetermination¹¹ (Cardoso, 2014), that would enable the modernization of Brazil's security forces and the work they conduct. A technical framework produced and exported by the Global North would be capable of molding, in its own image and likeness, actions and agents in contexts and societies entirely different from it. It would be like witnessing the magic of technical craft, transforming relations and societies on a whim, as though it were an incantation performed by engineers and coders.

However, it is not solely based on blind, and rather naïve, faith in the power of technology and on the promises made by sellers that such acquisitions are made. Linked to security technologies purchases, there is an intense lobbying activity that makes these negotiations move substantial amounts of money through small commissions here and there, contracts with inflated prices, additional features, etc. In addition to the financial interests involved in this web of corruption, the ambitions revolving around the appropriation of these systems, as well as the positions, responsibilities and possibilities that come with this web, are central to understanding the speed with which the command and control technologies were adopted during the preparations to the megaevents. For instance, while preparing to the 2014 FIFA World Cup, Brazil's Ministry of Justice created a special bureau with the goal of coordinating public security for the mega-events. This bureau alone had a budget of 240 million euros, allocated over just three years, which mostly went towards building the ICCS (Cardoso, 2016). The Armed Forces also had a significant increase in their budget (approximately 370 million euros channeled specifically to the mega-events) and took on new responsibilities over the event's public security. Additionally, many servicemen received bonuses because of this budget increase, while some of the higher-ranking members were placed directly in high offices pertaining to the events' management, as in the emblematic case of General Augusto Heleno, former commanding office of MINUSTAH¹², who later became one of







Bolsonaro's strongmen during his campaign, and was made head of Institutional Security during his administration¹³.

However, the analysis put forth in this article does not focus on the ICCS as a whole, or even on the security apparatus employed at Rio de Janeiro's mega-events¹⁴. Its focus is placed on Rio de Janeiro's Integrated Command and Control Center (ICCC-RJ), which is where the fieldwork for this analysis took place, between 2013 and 2015, and also where were conducted interviews between 2016 and 2018. In addition to being the main center of its kind in the country, specific local aspects turned the ICCC-RJ into a prime stage for the State transformations that were directly linked to the role played by militarism in present-day Brazil, as well as the role played by authoritarianism in Brazilian society.

The studies conducted in Rio de Janeiro's command and control centers (Cardoso, 2014; 2019a; Edler Duarte, 2019) show that the day-to-day workings of the systems fall far from the promises of impacting and transforming daily affairs, which were made when these systems were announced. However, these operational platforms, based on their real-world appropriations, actually do enact transformations, even if they are very different from what was planned and promised. In this case, it is worth mentioning the way in which the ICCC was gradually incorporated into the daily management of events, spaces and flows, having become an obligatory passage point (Latour, 1988; Law, 1986) for important activities pertaining to governing the population (Foucault, 2008). In this sense, the ICCC gradually remakes the State, understood here as a composite agent in constant transformation (Foucault, 2005; Gupta, 1995; Mbembe, 2001; Hibou, 1999), bringing new actors (such as technology companies and the organizational platforms themselves) to run the State together with it, all the while reconfiguring the role played by traditional state actors, such as the military and police forces. Embedded into these platforms, in the form of programs of actions, quantifications and, consequently, measurements, principles that are dear to NPM - and to neoliberalism - are gently imposed on the State's actions (Cardoso, 2018). This process is related to the discourse on paradigm shifts pertaining to public security and, through rhetorical and practical devices, it was employed as a way to prove the system's efficiency, thus justifying its costs (Cardoso & Hirata, 2017; Cardoso, 2019b). In this view, not only did the ICCC achieve its goals, but it was also fulfilling its promise of transforming public security. Thus, its expansion to other spheres of state action was deemed rational and desirable. Along with the system, of course, the actors that operate it gained a more central role within the State.







Though the core of the ICCC's (as well as the ICCS's) work consisted of integrating, or coordinating, the different agencies responsible for public security (Hirata & Cardoso, 2016), its daily operationalization and management were mostly under the supervision of Rio de Janeiro's Military Police. As the ICCC gradually became more embedded as an obligatory passage point for State action, being involved in more and more day-to-day affairs (from mega-events to climate emergencies, but also including armed operations in Rio's *favelas*, special car traffic arrangements, elections, protests, handling police and firefighters' dispatch, civil defense, etc.), the Military Police became increasingly more inserted in certain fields of action that it did not otherwise occupy. In its many aspects, this process is related both to the militarization of daily life (Leite, 2012; Bonditti & Olsson, 2016) as it is to the exporting of the military urbanism model, which, in the international stage, is linked to the hosting of mega-events and to the building of integrated command and control centers (Graham, 2017).

Federal intervention and its HQ: the materiality of militarized managerialism

In 2018, however, this process was greatly accelerated by a federal intervention in Rio de Janeiro's public security issues, brokered by then-state governor Luiz Fernando Pezão after almost a year and a half of administrative and fiscal crisis that led to delays in the payment of the state's civil servants' salaries. Although they were not as affected by these cuts, seeing as their wages were kept, the state's public safety agents also had delays in the payment of their benefits and bonuses, including the ones promised during the training for (and the work done during) the 2016 Olympic Games. On February 16, 2018 Brazil's then-president Michel Temer issued a federal intervention in Rio de Janeiro's public security operations, at the request of Pezão, as a way to minimize or keep under control the state's military and civil police forces' growing discontent and the accompanying signs of unrest. The Army was chosen to carry out the intervention and, with that, General Walter Braga Netto, head of Brazil's Eastern Military Command, was appointed as Intervenor, putting together a cabinet (GIFRJ) comprised of six generals, one chief of police (to handle issues related to the prison system), and a colonel from the Military Firefighters Corps, responsible for civil defense.

By the end of 2018, Governor Pezão went to jail for corruption, but since the beginning of the federal intervention his ability to govern had been significantly impaired, with the Intervenor increasingly becoming more important, seen by some as







the state's de facto governor. Two years later, General Braga Netto would be appointed Chief of Staff for Jair Bolsonaro's administration, and was also chosen by the president to coordinate the "Crisis Committee to Monitor and Supervise the Impacts of Covid-19", which was one of the central roles within the State's structure, as well as a position of prominence in Brazil's government structure during the more critical period of the Covid-19 pandemic. Lastly, he was also picked to be vice-president for Bolsonaro's reelection campaign.

The language used by the Intervention Cabinet (GIFRJ) in the various action plans that were released to the public was based on simplified NPM principles. Taken from handbooks and documents produced by the Army, the employment of these concepts and categories reinforces the idea that military servicemen are more efficient administrators, especially due to them supposedly being strictly technical in their work (as opposed to being political) and due to their rigorous adherence to hierarchyauthority, which would lead to tighter controls on individual behavior and, thus, prevent corruption. This translation of militarism into technical, efficiency and integrity would eventually give shape and underpin the reasoning behind militarized managerialism, which had gained a foothold in Brazil during the 2010s. In a process contiguous to the national crisis begun in 2013¹⁵, which eventually led to the delegitimization of politics and to the stigmatization of the left, the military presented itself as being impervious to the vices of corruption and lawlessness associated with the civilian administrations that came after the end of Brazil's military dictatorship in the late 1980s. As verified by opinion polls taken at the time, the period during which the country was ruled by military dictators (1964-1985) had record-high public approval ratings, and the public's trust in the armed forces was greater than in any other State institution¹⁶. This is the context that helps understand the federal intervention in Rio de Janeiro during 2018, coordinated by the Army¹⁷ to better "organize" public security efforts and the State apparatus in Rio de Janeiro.

During the nine and a half months of federal military intervention, the ICCC, together with the Eastern Military Command, was used as the GIFRJ's headquarters, and was presented as a key element for restructuring public safety efforts. This restructuring would constitute the true legacy of the military's provisional "parallel government", the mandate of which would run out by the end of 2018. Though the effects on violent crime rates and general insecurity were underwhelming¹⁸, the center's operations, its technological apparatus for institutional coordination and its multiple possibilities for data quantification¹⁹ were able to build (and maintain) specific types of assemblage, bringing together technological devices, institutions and agents, thus materializing the







very logic of militarized managerialism. The ICCC materially embodies the ideal of a State run by the military (who are supposedly technically-minded and honest), employing an advanced technological apparatus that can ensure transparency in every incident, a solid single centered²⁰ institutional network and a clear-cut chain of command. Shortly thereafter, this movement would be extended to the whole of the State apparatus, beginning with the Bolsonaro administration, inaugurated in January 2019. As an example, in 2020, the number of military servicemen appointed to civilian positions within the government was that of 6,157, which constituted a 300% increase when compared to the 1,427 that were appointed ten years prior (Nozaki, 2021)²¹. Furthermore, in 2021, military servicemen occupied 18.3% of all commissioned positions within the federal government²². If we were to include the number of police officers into this calculation, these figures would be a lot higher. Among the high-level officials, no fewer than ten ministries were headed by members of the armed forces in just the first two years of the Bolsonaro administration (Nozaki, 2021).

Other paradigm shifts

The event that had the greatest impact on the federal intervention period was the murder of Rio de Janeiro city council member Marielle Franco and her driver, Anderson Gomes. The killings took place in the first few weeks of the intervention and, after over four years and many setbacks in the investigation, the person who ordered the hit has not yet been identified. Five ICCC surveillance cameras installed near the area had been switched off between 48 and 24 hours before the double homicide was perpetrated²³, which raised suspicions over the relationship between the hitmen (former police officers connected to militias, as it was later discovered) and internal agents of the ICCC. However, by combining footage taken by private security cameras, as well as footage taken by the municipal government's traffic control system and from other regions monitored by the ICCC, it was possible to recreate the route taken by the killers and to ascertain their identities. They were arrested in March 2019, over a year after the murders took place and three months after the end of the federal intervention in Rio de Janeiro. Because the digital technology used in this case produced such an overabundance of footage and information, the criminal appropriation of the ICCC's resources, represented by the deactivation of the surveillance cameras, did not have the expected effect, even though it delayed the investigation and possibly bought the criminals more time to conceal or get rid of the evidence. What we should take from







this, however, is that this case reinforces the suspicions that the militias also operate within and through the ICCC, in one way or another.

If the goal of this process of technological modernization was to transform Rio de Janeiro's public security efforts, what we observed was that, since the creation of the first command and control system in 2006 (to help with security during the following year's Pan American Games in Rio), a new paradigm was unveiled for organized crime. During this period, Rio de Janeiro saw the rapid expansion of militias, comprised mostly of (former) police officers, but also of (former) military firefighters. These militias are currently the armed group that control the largest swathes of territory in the greater Rio de Janeiro area (GENI, 2021²⁴), superseding even the various drug-trafficking factions in this aspect, which had previously dominated the news and the collective imagination regarding criminality in the city. Although it is not possible to establish a direct link between the expansion of the command and control systems and that of the militias, it is worth noting that the planning and carrying out of armed police operations in peripheral areas (the *favelas*) would be conducted from the ICCC, using the information produced and analyzed through the various organizational platforms that comprise the system. The distribution of police operations throughout Rio de Janeiro's urban territory has been pointed out as one of the factors contributing to the expansion of the areas under militia control²⁵. In stark contrast with the often-violent police incursions, rife with intense shootouts and carrying a high lethality rate in territories controlled by drug-trafficking gangs, the areas under militia control seem quite tranquil, with the occasional execution and various forms of threats and intimidation taking the place of the shootouts and the more arbitrary executions conducted by the police (Manso, 2020; GENI, 2021; Araújo Silva, 2017). As a hypothesis, rational planning based on maps of criminal hotspots, substantial investigations and intelligence information may not be as important in deciding on police operations in city territories as the undeniable interests in the territorial dispute of criminal groups in Rio de Janeiro.

Attributing such broad-ranging phenomena those of militarized as of managerialism, Bolsonarism or the expansion the militias construction/installation of a given technological system would not only be rash, but it would also reinforce, perhaps in an inverted manner, the same premises that underpin the belief that technology works magically to transform individuals, behavior and societies. Although transformations are constantly taking place, the process that connects all these elements/dimensions, apart from obviously not being magical at all, only rarely follows what the engineers and coders planned for it. The practical forms of appropriating command and control technologies were already being developed while







the system was built, launched and expanded. Thus, this appropriation was gradually absorbed by the various disputes springing from governmental instruments, either as a way to obtain personal benefits, to favor certain groups, or to produce reports on themselves and on the quality/importance of their own work. With that, the ICCC became part of the toolset at the disposal of security agents and, as such, it has been appropriated by them. Militarized managerialism and the criminal paradigm shift in Rio de Janeiro, as well as the expansion of the militias into more regions and even into public security organs, are certainly phenomena that are prior and external to the adoption, in the local and national scale, of a public security policy based on command and control centers. However, both phenomena were reinforced by the assemblages between certain actors - police officers, military staff, militiamen - and the integrated command and control centers.

This same combination between the growing influence of the militias in public safety organs and militarized managerialism as an administrative solution is what distinguishes Bolsonarism from other far-right *digital populism* (Cesarino, 2020), or *illiberal*, movements that have been on the rise and gaining strength in the second decade of the 21st century across the world²⁶). In this sense, the "technological modernization" policies that accompanied the security preparations for the megaevents²⁷ must be taken into account when we think of a genealogical analysis of Bolsonarism as a phenomenon that catalyzes and produces the questioning and corrosion of the liberal democracy and Rule of Law paradigms, both integral parts of the constitutional pact of 1988²⁸.

Work management technologies: the case of Logistical Operators (LOs)

The Brazilian company iFood is categorized as an *unicorn*. *Unicorns* are startups that reach a market valuation of over one billion dollars by employing aggressive strategies for growth, called GBF ("Get Big Fast"), while simultaneously delaying their entry into the stock market and the launch of their IPOs. The proliferation of unicorns is one of the main characteristics of the platform economy and is a crucial component of its business model. As we shall see, the decrease in the value of labor, as well as in the value of workers management, is part of iFood's aggressive GBF strategy, which works due to both the opacity in the amounts paid to "cloud" (freelance) *entregadores*







and the inclusion of middlemen in the daily management of deliveries and final payments (LOs).

The company is built on a food delivery platform on which restaurants can list and display their menus and through which customers can place orders completely online, which are then delivered to the address chosen by the user. According to iFood (2021), the platform handles 60 million orders a month, in over 1,200 cities in Brazil²⁹. Although the company delivers an average of 23 orders per second, by deploying over 160,000 *entregadores* registered at the "iFood Para Entregadores" [iFood for Delivery Workers, in free translation] app, its institutional webpage states that: "We do not sell nor deliver any products! We are a tech company that acts as a go-between [...]" (iFood, 2021).

Apart from not taking responsibility for the deliveries (even though it depends on them), the company also keeps a distant relationship with its delivery workers, creating new forms of affiliation, exploitation and, possibly, "militiafication" of the economic activities involved. With that, the largest company of its kind in Latin America innovates by incorporating different types of "associate" delivery workers into its platform. Through the various affiliation categories it presents to delivery workers, iFood uses technology to transfer the responsibility for managing this labor to other actors in the network (Abílio, 2019). In addition to the algorithm itself, management falls to either the delivery workers themselves or to the restaurants (as has been the case with food delivery apps in the Global North³⁰), or, in iFood's case, it falls under the supervision of other companies with secretive contracts and offline "managers".

The company's *entregadores* are divided into three categories: cloud, fixed and LO *(nuvem, fixo* and OL, *in Portuguese). Cloud* is a term used by iFood to refer to freelance workers, which is to say the same model that is usually employed by platform-companies around the world, such as Uber, for instance. Cloud workers are paid for each delivery made and, according to the company, they are completely independent in how they work: each worker individually chooses for how long they will stay logged³¹ into the app, being able to make deliveries in any region covered by it (Desgranges, 2021). In this case, iFood is responsible for processing payments, transferring the delivery fees to the worker's bank account.

Should the *entregador* work exclusively for one of the restaurants listed at iFood, said restaurant may choose to register them in the *fixed* category. In this category, iFood acts merely as a platform for managing the restaurant's orders, with the delivery service







being paid for by the restaurant itself, which in turn will negotiate directly with the *entregadores*.

However, iFood's true innovation in comparison to its competitors is in the LO category, which stands for "logistics operator". An LO is a company that works in the delivery segment, with which iFood has a contract³². In this case, LO entregadores are those hired by these logistics operator firms. With that, the delivery industry unveils a kind of "sub-subcontracting", incorporating local practices for managing precarious employment into the "food tech" companies' innovation environment (iFood, 2021).

Differently from the *cloud workers*, for whom the Terms of Service are available at the company's institutional webpage (iFood, 2022), iFood's contracts with the logistics operator firms, as well as said firms' contracts with their *LO* delivery workers, are not available for scrutiny. This is due to two infrastructural issues: the opacity and flexibility with which these platform-companies are run. At the same time that they close off their black boxes - protected by cryptography, by Terms of Use contracts and by the fact that there is no official employer (D'Andrea, 2017; Guerra; Duarte, 2019; Desgranges, 2021) -, these companies are also in constant transformation, continually updating their programs of action (Latour, 1992).

The information presented in this article is the result of ethnographical research conducted on YouTube channels pertaining to iFood delivery workers and through interviews with *entregadores* from Rio de Janeiro. Being so difficult to find official information on how these deliveries are managed, YouTube (as well as other social media platforms³³) works as a space for exchanging experiences, reporting on wrongdoings and collectively producing knowledge on the apps: it is the venue in which delivery workers can build a dense knowledge network concerning their work and the platforms associated with it. After almost four years following delivery workers who also frame themselves as "digital influencers"³⁴, we were able to gather empirical information on how the *LOs* work, which could not be gleaned from the platform's Terms of Use.

As was previously mentioned, *LOs* are companies that have been subcontracted by iFood which have their own delivery workers. They are comprised of: the head of the company, known by the workers as the *dono da praça* (the "direct regional manager", in free translation), also known as the *líder de OL ou de praça* ("the LO or regional leader", also in free translation), who is almost always a former motorcycle delivery worker that was promoted and now works as a kind of manager, responsible for allocating the







entregadores to different work schedules; and the deliverers themselves, who work in accordance to the rules set by the company. Because of this, the *LO delivery workers* have no formal ties to iFood, which pays the *dono da praça* for the service, who in turn pays the *entregadores* for their deliveries.

The contract between the logistics operator firms and the delivery workers varies from company to company, but they all have in common that the *LO entregador* is required to work in fixed shifts. The operator firms divide each day into a number of work shifts (usually between three and five), also known as "schedules". In some *LO firms*, the *dono da praça* is responsible for organizing the work schedules. Other firms allow the delivery workers to choose their shifts but, once they have chosen, they are required to complete them, and are not allowed to become inactive on the iFood for Delivery Workers app. Some operator firms offer a minimum fee for every work shift completed, known as *garantido* ("the steady pay", in free translation). In other words, in case the delivery fees exceed this minimum fee, the delivery workers get paid the amount relative to the deliveries they have made, otherwise they get paid the *garantido* fee. In addition to completing the fixed work shifts, the *entregador* may be required to comply with certain other norms "such as never declining any orders, or never working for other apps", which vary from firm to firm (Desgranges, 2021).

Thus, with these *LOs*, iFood ensures that the delivery market is not as free as it says it is, securing a share of workers that will supply its demands. iFood hires logistics operator firms to make sure that in any given region there will always be at least a certain amount of delivery workers available - regardless of whether it is raining, or if it is a holiday, which is when many of the cloud workers turn off their apps. Furthermore, according to accounts given by former *donos da praça*, whenever a given region requires an X amount of iFood delivery workers, the operator firms always deploy an X+Y amount, which is to say an extra share of workers. With that, some *LO entregadores* are mobilized unnecessarily, standing by in case demand goes up in the region or in case something else happens, such as someone's motorcycle breaking down, for instance. According to former *donos da praça*, the *LO firms* allocate this extra share of workers because, should anything unexpected happen, they would have to pay for any losses incurred, seeing as iFood deducts from the amount paid to the *LOs* whenever the previously agreed-upon share of workers are not online ("Guerreiro sobre Rodas" motovlog, 2021, online).

Although it comes with less work flexibility, the *garantido* fee is seen by many delivery workers as one of the upsides of working for *LO firms* instead of working in the







cloud category, as it represents a modicum of stability in their monthly earnings in a line of work that offers no guarantees whatsoever. However, during the Covid-19 pandemic, many *LO firms*, especially in cities like Rio de Janeiro and São Paulo, stopped offering the *garantido* fee. Despite terminating this fee, many operator firms offer motorcycle repair assistance, as well as some support in case of accidents, and they also loan out money for purchasing fuel, which provides a feeling of greater security to some delivery workers.

On the other hand, *cloud* workers serve as the poster boys for what the platform-company (or, in this case, the "Food Tech" company) sells as freedom and entrepreneur spirit (Desgranges, 2021). The concept of not having to deal with a boss seems seductive to many *entregadores*, who often go on social media to argue that this is the category's greatest strength (Entregador de Lanches, 2018; Ticoloko Motoka, 2018; Bidu 2 Rodas, 2019). In addition to not having to submit to an authority figure (such as the *donos da praça*), *cloud delivery workers* are also able to work for several different apps at the same time, which is another advantage they mention with regards to working in this category³⁵.

However, the long waiting times for the platform to approve one's registry as a *cloud* worker, in a context in which working in delivery service is often seen as an "emergency exit" when faced with unemployment, are a direct influence on the choice of category. Many *entregadores* choose to work for *LOs*, seeing as they are able to register and approve the workers on the same day they apply. Furthermore, whenever a *cloud* worker's account is blocked or deactivated by iFood's platform, they often migrate to *LO* firms, in order to not lose their income.

The dynamics of choice : accounts from a delivery worker in his "corre"

The life of Jeff Fernandes, a delivery worker from the Brazilian state of Pernambuco who is also a digital influencer³⁶, illustrates the complex labyrinth that iFood *entregadores*, need to navigate before choosing their work categories. On Tuesdays and Thursdays, Jeff uploads a video to his more than 117,000 subscribers, talking about his daily life in delivery service. This journey began in 2019, when, after waiting for 21 months, his application to work in iFood's *cloud* category was finally approved by the platform (Jeff Fernandes, 2020a, online). Initially, the idea was to work







making deliveries just as a "bico"³⁷ while he prepared to take a exam and become a civil servant³⁸, using YouTube as a sort of digital journal of his "corre"³⁹. After four months working in the *cloud* category, in March 2020, his account was deactivated due to allegedly violating the Terms of Use (Jeff Fernandes, 2020b, online; iFood, 2022)⁴⁰. Thus, on April 21, Fernandes decided to become an *LO delivery worker*, because he wanted "something safer", but also because he believed *LO entregadores* were given more deliveries (Jeff Fernandes, 2020c, online).

The physical figure of the *dono da praça*, someone who makes demands on workers but who can also offer support in cases of emergency, in addition to the very existence of a steadier work routine, gives a sense of stability to *LO workers*, even if they no longer get paid the *garantido* fee for completing work shifts. In social media, one can observe an argument brewing, with *cloud* workers highlighting the sense of freedom their category offers, while labelling *LO workers* as being "exploited" (Entregador de Lanches, 2018; Ticoloko Motoka, 2018; Bidu 2 Rodas, 2019). This kind of "bickering" is intensified due to the fact that many delivery workers, including Jeff, believe that iFood's platform - more specifically its algorithm for distributing deliveries - prioritizes *LO workers*, sending more work their way.

On July 15, 2020 Jeff told his *dono da praça* he would no longer be able to continue working as an *LO entregador* because he had begun making and selling candies with his girlfriend, but also because he wanted to focus more on his YouTube channel (Jeff Fernandes, 2021a, online). The flexibility that came with becoming a *cloud entregador* spurred this change, seeing as he no longer wished to work exclusively for iFood.

A few months later, in February 2021, Jeff announced to his followers that he was going back to working as an *LO delivery worker*, because he was not getting as many deliveries in the *cloud* category (Jeff Fernandes, 2021b, online). He reported that, since October 2020, his earnings had fallen by an average of 500 Brazilian reais per month and that, in December 2020, even though he worked every day of that month, he was only able to make 1,000 reais (which is less than the minimum wage). Fernandes took footage of his smartphone screen so his followers could see that, in the first week of January 2021, during which he worked every day as a *cloud entregador*, he had only made R\$ 58.62. In the second week of that month, after he became an *LO worker*, taking two days off, he made R\$ 441.50. Jeff attributed this increase in his earnings to the newlyminted *sub-praça* category (Ibidem).







In 2020, *LO workers* started being divided into two sub-categories: *sub-praça* and *regular* (or *free-range*). With iFood's new update, *LO entregadores* working in the *sub-praça* category make deliveries only within a certain perimeter, known as their "*praça*", which usually corresponds to a given neighborhood. On the other hand, *regular*, or *free-range*, workers are not restricted to any region, and they are allowed to make deliveries all over the city. Before the *sub-praça* category was implemented, many delivery workers were already expressing in social media their suspicion that *LO entregadores* were given more deliveries. After this update, the number of complaints made by *cloud* and *regular* workers rose considerably. Even Jeff himself said he tried to work as an *LO regular* but, just as during the time he worked in the *cloud* category, he reported that he was not given many deliveries, so he opted for the *sub-praça* category instead.

After less than two months working in this category, on February 24, 2021 Fernandes went back to being a *cloud* worker (Jeff Fernandes, 2021c, online) because, due to his busy schedule, he was only able to work one shift in the LO category, and was often not offered the *garantido* fee. He told his followers that his intention was to switch to a different LO team, but he ended up going back to the cloud category after seeing other *cloud* workers post in social media that their situation had improved (Ibidem). In the comment section for this YouTube video, other *entregadores* suspected Jeff was given priority due to being an "influencer", seeing as he was able to switch from LO to cloud straight away. According to many delivery workers, the donos da praça say that a person's account must first be inactive from 60 to 90 days before they can change their category, which led to renewed complaints (Ralf MT, 2021, online). Since the majority of entregadores use the delivery work as their sole source of income, and not as a source of "extra" income⁴¹, becoming unable to take deliveries for over a month just so they can change categories, does not seem to be a simple choice. At ReclameAqui⁴², many entregadores recount the trouble they had when trying to make this change, which led the company to update its process:

"In this case, the path you need to take to switch categories has changed, and you can make the request yourself via the 'iFood for Delivery Workers' app: you just have to click on Home> Help > register > I want to be a *cloud* worker. It is worth mentioning that the change will be concluded in up to 5 working days, after we check the documents attached to your application. Approval is not guaranteed even after we have analyzed your information and documents, seeing as iFood wants its Platform to be used in the best way possible, and we want to avoid over-saturating any delivery regions. Thus, we will only approve your profile after analyzing the region in which you have chosen to work. We remind you that, in order to be approved, you must have gone at least 35 days without making any deliveries as an *LO delivery worker*."







(Answer given by iFood on the website Reclame Aqui, in free translation, sent on April 2, 2022).

In addition to waiting the aforementioned 35 days, any worker who wishes to switch from the LO category to the cloud category will also be subject to market forces, seeing as their application will only be approved by the platform if there is enough demand in the corresponding region, which is something that can take an indefinite amount of time. The unpredictability in the waiting times $\bar{}$ which in Jeff's case took 21 months back when he started working for iFood $\bar{}$ is a strategy used by $donos\ da\ praça$ to keep delivery workers bound to the LO category.

Threats, reprisals and abuse: the dark side of Food Tech companies

In addition to the risk of going without a source of income for an undefined period, some delivery workers go on social media to report having received threats and being verbally abused by *donos da praça*. The abuse was used to allocate workers in each work shift, the threats were made whenever they expressed the desire to switch to the *cloud* category, and anyone who took part in strikes and work stoppages suffered reprisals (cf. fig. 1⁴³ and fig. 2⁴⁴ translation).

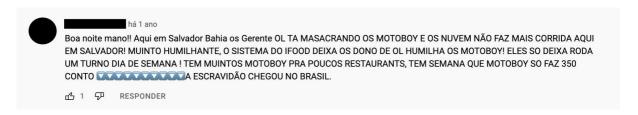


Figure 1 - Comment found on Ralf MT's YouTube channel. Source: "Ralf MT" YouTube channel (2022).

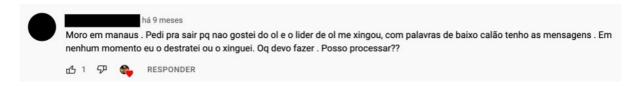


Figure 2 - Comment found on Ralf MT's YouTube channel. Source: "Ralf MT" YouTube channel (2022).

During the "App Break" (*Breque dos Apps* in Portuguese)⁴⁵, which is the name given to two large, national-level work stoppages conducted by food app *entregadores* in **2020**, many workers reported that *LO regional leaders* threatened to block their accounts as







an attempt to stop them from taking part in the demonstrations (Desgranges; Ribeiro, 2021). Liberato (2021) mentions reports involving *LO firms* and militias in Rio de Janeiro trying to intimidate delivery workers. Rio-based motorcycle *entregador* Ralf MT has a YouTube channel⁴⁶ through which he shares several reports made by delivery workers and helps politically organizing workers. Since before the App Break, Ralf has been posting videos sharing audio and text messages in which *donos da praça* threaten *LO workers* that were supposedly complaining about work conditions.

In addition to the opacity created by iFood when it comes to fully understanding this category of delivery service, the workers themselves are reluctant to talk in depth about how the LOs work, either because they do not actually understand it or due to fear of reprisals. In October 2021, we conducted interviews with five *cloud delivery worker* from Rio de Janeiro, who mainly work in the city's more upscale neighborhoods. When asked about how the logistics operator firms work, they all declined to answer, because they "feared for their physical well-being". On Ralf's channel, one *entregador* said he deleted a comment he had made criticizing his LO firm because he had used his personal account for that and, in order to not suffer any reprisals, chose instead to make the following complaint (cf. fig. 3^{47} and fig. 4^{48} translations) under a fake username:

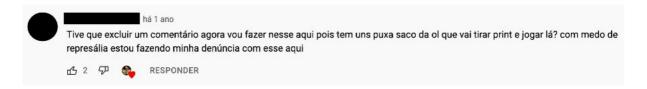


Figure 3 - Comment found on Ralf MT's YouTube channel. Source: "Ralf MT" YouTube channel (2022).

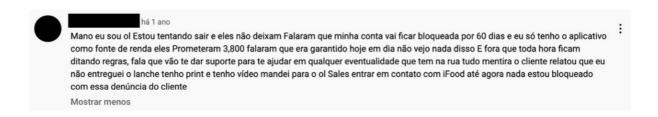


Figure 4 - Comment found on Ralf MT's YouTube channel. Source: "Ralf MT" YouTube channel (2022).

The "apple-polishers" to whom this delivery worker is referring are the entregadores who have good relations with their respective dono da praça, who in turn







gives them preferential treatment in the work schedules. In this context, it is common to see delivery workers sharing strategies for becoming closer to their regional leaders, in the hopes of being given more and better routes and shifts, especially in logistics operator firms that have a large number of affiliated deliverers (cf. fig. 5 translation⁴⁹).

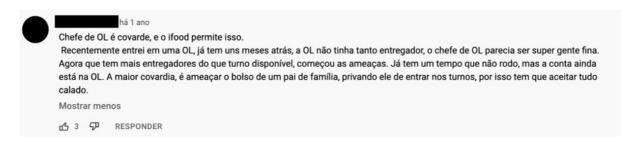


Figure 5 - Comment found on Ralf MT's YouTube channel. Source: "Ralf MT" YouTube channel (2022).

This combination of paternalism and intimidation employed by LO firms is very similar to how Rio de Janeiro's militias manage non-regularized businesses. In this sense, iFood distinguishes itself from the food delivery platforms developed in the Global North in that it transfers its labor management efforts not only to its algorithm but also to an assemblage of outsourced code and managers. The "unicorn startup" 50 tries to copy the aesthetic adopted by Silicon Valley's app market, all the while adding $^-$ through the LO firms and their donos da praça $^-$ a more tropicalized command structure. Thus, iFood creates innovation in the sense that it brings the conventional logic of managing Brazil's precarious labor pool to the platform economy, (re)producing and (re)adapting strategies for control by creating new exploitative relations via a new type of informal work.

Conclusion

Both case studies showed how technologies mold assemblages and networks, which not only transform economic and power relations but also, precisely because of that, contribute to the production of society. The ICCC, with its materiality and the relations it creates, lends a sense of concreteness and stability to what is, at best, a fairly questionable conflation of militarism with good governance, which reached its peak in the Bolsonaro administration, the preview for which was the Army's 2018 federal intervention in Rio de Janeiro. Furthermore, with the ICCC and other similar initiatives, security and defense technology companies become increasingly more embedded in the functioning of the State, thus becoming an integral part of it and securing a significant







flow of public resources for the installation, running, expansion, maintenance and renewal of the technological devices that constitute the command and control system in question.

The relationship between iFood and delivery workers also takes on certain specific aspects intrinsically tied to the Brazilian context. We have already expounded on the precarity of platform work (Abílio, 2019), but the structure created to host the various types of relations established between the platform, the restaurants and the workers (fixed, cloud and LO) causes this lack of formal bonds and job security to be turned into a commodity to be traded in opaque markets. This opacity is guaranteed by secretive contracts, intimidation from outsourced contractors, obscure work management strategies and the workers' fear of reprisals. Social media (YouTube, in this case) are used to lay bare the workings of the platform's algorithms, which give preferential treatment, punish, segregate and reward workers that are largely unaware of how their payment is calculated. They are also used to shed light on how the *LO firms* work and what their relationship to iFood is. In this context, we see the rise of *delivery influencers*⁵¹ and their channels, functioning as catalysts for this knowledge production, with hundreds of thousands of followers, some of which leave comments, recount experiences, give their opinions, ask questions and share their insights on how the platform's chain of action, its rules and hidden logic, work.

Furthermore, both cases are related to the process of "militiafication" as a new paradigm for organized crime and territorial occupation in Rio de Janeiro, and to the expansion of the militias into new economic activities. Within the ICCC, the close relationship between these militias and public security officials raises questions over how police operations are planned, why they are concentrated in certain regions and why they are rarely carried out in territories under militia control. The strange case of the deactivation of ICCC surveillance cameras in the area where Marielle Franco was murdered, the day before it happened, also raises suspicions about the embeddedness of criminal groups in the command and control system, which is an obligatory passage point for important State activities, but also molds State action itself. The relationship between the "militiafication" process and militarized managerialism, materially embodied into the ICCC, is crucial to understanding Brazil's more unexpected political developments of the 2010s: Jair Bolsonaro's election to the presidency in 2018, and the rise of Bolsonarism as a far-right political force and as an illiberal, authoritarian and corrupt government platform.







In turn, the model put forth by the *LO firms* has also been increasingly linked to militias in news reports, interviews and comments. In this case, the appropriation in question should, in theory, work from a model of multi centered networks, in which each *LO firm* would create a smaller network around itself, while iFood would distribute the risks and their control over the labor pool. By distributing this important piece of the work process, the platform-company would also be able to shed responsibility for the strategies employed by the LO firms, thus making room for the use of violent methods, abuse and intimidation. However, in contrast to regularized economic activities that become non-regularized after the militias enter a given market (such as in selling natural gas, alternative public transportation, cable TV, civil construction and real estate development⁵²), thus becoming open to being illegally exploited, the case of the *LO firms* does not work that way. By appropriating a part of the food delivery platforms' chain of action, LO firms are able to trade labor bonds, although feeble, and thrive on the relative stability found in a market characterized by a lack of regulation, great flexibility and the extreme individualization of work. In this case, the militias did not appropriate political commodities (Misse, 2007), they instead took the window of opportunity opened by the growing precarity in labor relations and offered a modicum of security (even if it was obtained through violent means and by further exploitation) to workers who got disillusioned, or to the ones that had never been true believers, with the promises of entrepreneurial autonomy in the cloud category.

Both cases of technological devices appropriation have had varied effects on the construction of economic and power relations. Supported by these technological devices, both forms of appropriation have been contributing to the erosion of democratic principles within the Brazilian State. They are also helping to create an unregulated market in which a minimum amount of informal "job security" is traded with workers who are eager to attain some predictability in their earnings, through persuasive strategies that range from the opaqueness in the platform's functioning to the use of violence to exert control over them.

³ According to a report by the Grupo de Estudos sobre Novos Ilegalismos ("Study Group on New Illegalities" in Portuguese, also known as GENI) on the expansion of militias, it is "(...) widely known that public agents working







¹ Brazil's far-right former president (2019-2022), who was also a retired army captain and served as a federal-level congressman for almost 30 years.

² This line of argument goes well beyond a verbal dispute on different versions of reality, because, as we will see, the socio-technical dimension present in the argumentation gives materiality to the arguments made, going beyond mere words, constituting *programs of action* (Akrich & Latour, 1992).

in security organs and holding public offices take part in these armed criminal groups, acting in low-income residential areas, where they either illegally control or charge extortionate fees on essential services, such as water, electricity, gas, cable TV, transportation and public safety, not to mention the real estate market. We know that such controls are exerted in an arbitrary manner, through coercive actions, such as beatings, torture and murder. We also know that the militias get involved in violent territorial disputes – both amongst themselves and with drug-trafficking gangs – and that, in many different areas, they also profit from selling drugs." (GENI, 2021, p. 5).

4 "Science, Technology and Society", a field of study mostly comprised of Sociology, Anthropology and History scholars that focus on matters of science and technology.

5For a discussion on jerry-rigging (gambiarra, in Portuguese), see Bruno (2017).

6 [NdT]: iFood is the largest food delivery app in Brazil.

7 See Abilio (2019).

- 8 The programs (and anti-programs) of action are always a "negotiation" process between the various actors involved, ranging from the human (the engineers, coders, users, manufacturers, vendors and advertisers) to the non-human (smartphones, computers, data networks, etc.).
- 9 For more on the public safety expenditure in Rio de Janeiro, see Cardoso (2016) and Pauschinger (2017), and for more on the relationship between mega-events and expenses related to security technologies, see Bennet & Haggerty (2012) and Giulianotti & Klauser (2010).
- 10 The ICCCs bring together in the same space the various institutions involved in public security.
- 11 Technical overdetermination is the idea that the functioning of a given technological system is entirely embedded in the system itself, ignoring the central role played by its users/operators, which often leads to neglecting their training process, in turn leading to problems in the system's functioning.
- 12 This was a United Nations peacekeeping mission in Haiti, led by the Brazilian Army. Although it is not possible to further develop this line of thinking in the present article, MINUSTAH also was an important moment for understanding the rise of militarized managerialism. For more on the Army's role in MINUSTAH, see Gomes (2016).
- 13 General Heleno headed Brazil's Olympic Committee for six years, being paid R\$ 58,000 a month, using the year 2017 as a baseline for calculating the amount. Furthermore, he was not the only general out of MINUSTAH to occupy a position in the Olympic structure, seeing as General Marco Aurélio Costa served as director of the Committee for Organizing the Olympic Games (CORIO). https://agenciasportlight.com.br/index.php/2021/03/16/relatos-sobre-o-melhor-emprego-do-mundo-a-doce-vida-do-general-heleno-nos-6-anos-como-diretor-do-cob/
- 14 For more on this subject and the specifics of the mega-events period, see Pauschinger (2017).
- 15 This political crisis can be summarized by the large-scale protests held across the country during June 2013, but also by then-president Dilma Rousseff's impeachment in 2016, the arrest and imprisonment (which was later overturned) of former president Lula and, lastly, the election of Jair Bolsonaro, an obscure far-right congressman and former Army captain, as president of Brazil, who has since then constantly threatened coup d'états and the closure of the country's Supreme Court whenever he feels he is being curtailed in his actions or that he will not be reelected.







- 16 The public's trust in 2017 and 2019 surpassed 80%, which was greater than any other institutions included in the survey: https://www1.folha.uol.com.br/poder/2017/06/1895770-forcas-armadas-lideram-confianca-da-populacao-congresso-tem-descredito.shtml.
- 17 For a more authoritative discussion on the military's political conduct during the last decade, see Leirner (2020).
- 18 Concerning the violent crime rates, there is a discussion to be had on how to "spin" them in order to make them look better, which will not be possible to expound upon here, due to matters of expediency.
- 19 The proliferation of data produced and subject to analysis through the use of managerial software ensures that there is never a shortage of examples to prove the system's efficiency, thus justifying its expansion.
- 20 Networks can have a single center, such as the command and control ones, or multiple centers, as is the case with the internet, for instance.
- $21\ https://fpabramo.org.br/observabr/wp-content/uploads/sites/9/2021/05/Cadernos-Reforma-Administrativa-20-V4.pdf$
- 22 https://www.metropoles.com/brasil/em-70-orgaos-militares-ocupam-183-dos-146-mil-cargos-comissionados-no-governo-bolsonaro
- 23 https://extra.globo.com/noticias/extra-extra/camera-no-estacio-foi-desligada-na-vespera-das-mortes-de-marielle-anderson-22647648.html
- 24 http://geni.uff.br/wp-content/uploads/sites/357/2021/04/boll expansao milicias RJ v1.pdf
- 25 In 2019, even though 58.6% of the area occupied by criminal groups in the city of Rio de Janeiro (and 33.9% of the population living in these regions) was under militia control, only 6.5% of the city's police operations were conducted in these places (GENI, 2021).
- 26 For more on this, see Alexander (2018), Thompson (2016), Rupnik (2012), Szelewa (2016), Kompatsiaris & Milonas (2015), Gerbaudo (2017) and Da Empoli (2019).
- 27 However, it would be too facile an argument to say that the mega-events were a non-negotiable condition for the installation of the integrated command and control system and the integrated centers that comprise it. For instance, in Rio de Janeiro's case, the ICCC's two main administrators stated that, during the preparations for the mega-events, the center, which was already being built in Rio de Janeiro, served as inspiration for the adoption of the ICCC's policies by the Ministry of Justice and the Armed Forces. The literature on the security efforts pertaining to the mega-events emphasized that there is a transnational standardization process revolving around surveillance and command and control technologies, heating up already-booming international markets (Giulianotti & Klauser, 2010; Bennet & Haggerty, 2012; Samatas, 2007; 2011).
- 28 In 1988, three years after the end of Brazil's military dictatorship, the most recent Brazilian Constitution was ratified, also known as the "civic constitution".
- 29 Information taken from the company's institutional webpage in March 2021. Available at: https://institucional.ifood.com.br/ifood/ .
- 30 For a more in-depth discussion on "platformized" work in the United States and Europe, see Rosenblat (2018) and Woodcock (2020).







- 31 Being "logged in" in this context means having an account that is active and available for taking on jobs through the delivery app.
- 32 This information is available at: https://entregador.ifood.com.br/abrindo-a-cozinha/transparencia/ . Last accessed on: April 10, 2022.
- 33 Nemer (2021, p. 128) further develops the discussion on how the residents of Brazil's *favelas* appropriate social networks as a way of dealing with different forms of oppression.
- 34 For a more in-depth discussion on digital influencers and Instagram's "selfie influencers", see Bentes (2021).
- 35 With UberEats' recent withdrawal from Brazil and with iFood's growing monopoly over the sector (Fairwork, 2022), the free and diverse market seems an increasingly remote reality.
- 36In April 2022, the "Jeff Fernandes" YouTube channel had 331 videos totaling 13,243,130 views and over 117,000 subscribers. More information available at: https://www.youtube.com/c/Jeff160/about. Last accessed on: April 15, 2022.
- 37 "*Bico*" is a Brazilian slang word used to refer to informal short-term odd jobs, usually associated with Abilio's (2017) concept of "*viração*". It holds some similarities (and differences) with the anglophone concept of a *gig*.
- 38 In Brazil, becoming a public servant represents financial stability, and it's a desired career by many, who often spend years preparing for the exam.
- 39 The term "*corre*" pertains to the idea of always being busy with work, used popularly in Brazil to refer to workers who carry out "strategies for survival, performing a range of activities between the formal, informal and illegal job markets, as well as in 'non-work'" (GUERINO, 2018, p. 12).
- 40 Apart from its Terms of Use, iFood has also created a portal in which it explains how temporary restrictions, temporary inactivations and deactivations (carried out with prior warning or otherwise) work. This can be found at: https://entregador.ifood.com.br/para-suas-entregas/regras-de-ouro/restricoes-inativacoes-e-desativacoes/. Last accessed on: April 15, 2022.
- 41 Eight out of every ten delivery workers say that this is their only source of income, according to a survey by Instituto Locomotiva, commissioned by iFood and divulged in one of the company's advertisements. Available at: https://youtu.be/RJQWzr55Ugc . Last accessed on: April 15, 2022.
- 42 The Brazilian website ReclameAqui is a platform for presenting grievances and complaints to companies in matters of customer service, purchases, sales, products and other general services. Within the website, customers are able to log in and make complaints, while companies have the opportunity to give an answer.
- 43 Translation for Figure 1: "Good night, man! Here in Salvador, Bahia, the *LO managers* ARE WRECKING THE MOTOBOYS, AND THE *CLOUD* WORKERS CAN'T MAKE ANY MORE DELIVERIES HERE IN SALVADOR! SO HUMILIATING, IFOOD'S SYSTEM ALLOWS THE *DONOS DA PRAÇA* TO ABUSE THE MOTOBOYS! THEY ONLY LET US WORK ONE SHIFT PER WEEK! THERE ARE MORE DELIVERY WORKERS THAN THERE ARE RESTAURANTS AND, IN SOME WEEKS, WE MAKE ONLY 350 REAIS [...] SLAVERY HAS COME TO BRAZIL."
- 44 Translation for Figure 2: "I live in Manaus [in the state of Amazonas]. I asked to leave the *LO* category, because I didn't like it, and the *dono da praça* verbally abused me, calling me names, I still have the messages he sent me. I've never treated him poorly, nor have I called him any names. Can I sue??".

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- 45 For more on the Breque dos Apps, see: Desgranges & Ribeiro (2021) e Abílio & Grohmann & Weiss (2021).
- 46 In April 2022, Ralf MT's YouTube channel had 441 videos totaling 1,896,743 views. More information available at: https://www.youtube.com/c/RalfMT0903/about. Last accessed on: April 15, 2022.
- 47 Translation for Figure 3: "I had to delete a comment just now, I'll try again with this account because there are some *LO* 'apple-polishers' who are going to take a screenshot and show it to them? [sic] I'm afraid they'll come after me, so I'm making my report through this account".
- 48 Translation for Figure 4: "Man, I'm an *LO worker*. I'm trying to leave the category and they won't let me. They said my account will be blocked for 60 days, and the app is my only source of income. They promised 3,800 [reais], saying it was *garantido*, but today I don't see any of it. Not to mention that they are always coming up with new rules, they say they'll help you in case anything happens on the street: it's all a lie, the client said I didn't deliver his food, but I have the screenshot and a video, and sent it to Sales, the *dono da praça*, so he could talk to iFood, but nothing's happened so far. I've been blocked because of this client's complaint".
- 49 Translation for Figure 5: "LO bosses are cowards, and iFood just lets them do what they want. A few months ago, I started working for an LO firm, they didn't have many delivery workers, and the dono da praça seemed like a super nice guy. Now that there are more entregadores than there are available shifts, he started trying to intimidate us. It's been a while since I last took on a delivery job, but my account is still active at the LO firm. The greatest injustice, though, is jeopardizing a family man's livelihood, barring him from taking shifts so that he'll agree to everything without complaining.
- 50 The company refers to itself in this way, as can be seen at: https://news.ifood.com.br/startup-unicornio/.
- 51 *Entregadores-influencers*, by positioning themselves as obligatory passage points, bring a certain "influencer aesthetic" to the stories they share (for digital influencers, see Bentes, 2021).
- 52 For more on this topic, see Manso (2020) and GENI (2021).

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Abstract

The article presents two cases in which the appropriation of technological innovations leads to renewed economic and power relations, which in turn reinforce local transformation processes of governmental management and of barely-regularized economic activities. The workings of a command and control system in Rio de Janeiro and the delivery structure of a "food tech" company reinforce authoritarian or violent modes of operation, all the while enabling the development of illicit activities linked to the "militianization" of crime, as well as of security forces, of economic activities and of politics in present-day Brazil. Based on these cases, we present a discussion on a few specificities concerning the technological appropriation of certain devices in the Global South and its effects on the production of society and social relations.

Keywords: Platform, Global South, technology, security, delivery workers

Résumé

L'article présente deux cas où l'appropriation d'innovations technologiques conduit vers des relations de pouvoir et économiques renouvelées, qui renforcent des processus locaux transformation de la gouvernementale et des activités économiques qui se développent à la limite de la formalité. Le fonctionnement d'un système commandement et contrôle à Rio de Janeiro et la structure de livraison d'une "food tech" renforcent des modes de fonctionnement autoritaires ou violents, tout en permettant le développement d'activités criminelles associées à la milicianisation du crime, des forces de sécurité, des activités économiques et aussi de la politique au Brésil contemporain. Par ces cas, discutées certaines spécificités l'appropriation technologique des dispositifs dans les pays du Sud et ses effets sur la production de la société et des relations sociales.

Mots-Clés: Plateforme, Sud Global, technologie, sécurité, livreurs

Citation

Nina Desgranges et Bruno Cardoso, «Militaries, militias and unicorns: platform authoritarianism in Brazil», Cultures-Kairós [En ligne], paru dans Théma 11, 2023, URL: https://revues.mshparisnord.fr:443/cultureskairos/index.php?id=1957.





