Shared Mapping as a Spatial Practice of Reterritorialization by Digital Platform Delivery Workers in Brazil

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Introduction

The mobility of ideas, values, habits, norms, and ways of life traverses space, albeit in unequal and often conflictual ways. Far from merely representing the transfer of cultural or technical content from one point to another, these circulation vectors are inscribed in space through material and symbolic disputes and involve local actors, institutional structures, and historical processes of power. Digitalization stands out as one of the main infrastructures framing human experiences in contemporary times, mediating practices, social relations, and forms of what we conceive as the constitution of the self. While cultural flows might aim to preserve the original content, the effects of their "incidences" are always geographically situated, marked by conflict, negotiation, and by context-specific appropriations. Digitalization is often described by critics as a technical rationality that is aimed at intensifying mechanisms of control, surveillance, and exploitation that is governed by both algorithms and digital infrastructures (Zuboff 2019; Sadowski 2020). Digitalization has certainly proven effective for these purposes. However, it is insufficient to conceive of space and its actors as passive instances in the face of digital vectors. Rather, they are continuously recreated through spatialized practices in which local actors mobilize their own repertoires, reinterpret meanings, and produce responses that challenge, and sometimes even reconfigure, hegemonic frameworks.

Digitalization processes have led to the consolidation of platformization in recent decades, understood here as a specific and increasingly structuring form of economic and social organization. This configuration is characterized by the systematic and continuous extraction of data, the technical mediation of interactions between actors, and by the generation of value through the real-time remote coordination of supply and demand relations (Altenried 2020; Ecker and Münßinger 2024; Srnicek 2016; van Dijck, Poell, and de Waal 2018). Multiple dimensions of social life have been reorganized as a direct effect of this and have generated a range of impacts; this

has, in turn, provoked both individual and collective reactions. The reconfiguration of labor activities and their geographies stands out from among these dimensions, becoming one of the central pillars of the digital infrastructure that is operated by platforms.

Our research is situated within this context and aims to understand how actors have been affected by these dynamics and how they are articulating spatial practices that are now contested, reorganized, and in many cases controlled by platform logics. A central point of reference for our discussion stems from the concept of territory, understood not only as a physical base, but also as a space of social relations, identities, and power (Haesbaert 2004). From this perspective, it is understood that digital platforms, from their inception, require territorialization in order to impose their regimes of management and control. This process entails the deterritorialization of actors with established power in space, among whom are workers who see their autonomy and capacity for action diminished under these new companies' influence. In response, these actors have mobilized strategies of resistance and have begun to reappropriate their spaces and practices in a reaction that we understand as reterritorialization. Accordingly, the phenomenon of labor is interpreted dialectically through the lens of both the territorialization of digital platforms and the deterritorialization and reterritorialization of workers and draws upon the approach of geographer Rogério Haesbaert (2004).[1]

Our research focuses specifically on platform workers in Brazil, popularly known as delivery workers. These workers have been developing a range of spatial practices[2] that are understood as actions aimed at reterritorialization, that is, the reclaiming of spatial control. Examples of such practices include the creation of support hubs,

1 The conceptual triad of Territorialization, Deterritorialization, and Reterritorialization (TDR) was disseminated through the work of Deleuze and Guattari (1995). While we acknowledge the influence of these authors in our research, we adopt an epistemological position more closely aligned with the approach of Rogério Haesbaert, who aimed to geographicalize the philosophers' approach. In one of his critiques, Haesbaert (2004) points out that the formulation of the TDR triad was not directly associated with its foundational concept: territory. The author's main work on these themes can be found in the book "O mito da desterritorialização" (2004), referenced at the end of our text. For German-speaking readers, we particularly recommend the article "Geographische Überlegungen in Zeiten der Pandemie," published in 2020 and in which the concepts of territorialization and deterritorialization are analytically applied to understanding the spatial effects of the COVID-19 pandemic.

2 Spatial practices are, above all, social practices, but they differ by assigning a central role to the spatial dimension. In such practices, space is not merely the backdrop for social action, but rather a visible and structuring element through which the objectives and meanings of action are prominently expressed (Souza 2013). In our approach, territorialization, deterritorialization, and reterritorialization are characterized through the identification of spatial practices. While social practices may also trigger these processes, they are not the focus of this research.

mobilization through work stoppages, the use of alternative technologies, such as location simulation through GPS spoofing tools, as well as the production of maps indicating strategic points for their work activities, such as access to restrooms, safe places to park their vehicles, and restaurants that offer discounted meals for delivery workers. It is precisely this final practice that constitutes the central focus of the present text. We refer to it as shared maps, given that it seeks to reduce the control exerted by companies by ensuring continuous access to spatial representations and the possibilities for action associated therewith. In other words, these maps represent a form of reterritorialization by the workers.

In the following part of this chapter, we introduce the concepts of digitalization and platformization and examine how these can help to analytically understand the dialectical relationship between platform territorialization and the deterritorialization/reterritorialization of workers. This relationship is interpreted through the lens of spatial practices, understood as concepts that are more closely tied to the domain of the empirical. Subsequently, we describe and analyze the shared mapping practices carried out in three Brazilian cities as part of a research methodology that is grounded in cooperation with workers and that initially took place through joint actions in WhatsApp groups, was followed by research interviews, and later through mapping workshops. Finally, the concluding remarks synthesize the potentials and challenges of shared mapping as a form of reterritorialization for delivery workers in Brazil.

The platformization of space and the reterritorialization of workers

Although the activity of delivery workers on digital platforms is often portrayed as an expression of autonomous and flexible mobility in urban space, this interpretation overlooks the complex and technical-algorithmic infrastructure that underpins and directs their labor (Altenried 2022). The apparent freedom is regulated by digital systems that organize, in real time, the flows of work and movement through geolocation devices, behavioral prediction, and spatial ranking. Unlike the mode of territorialization that is typical of Fordism, in which space was appropriated through fixed forms of factory production and other institutions, the platform regime establishes a form of territorialization that (apparently) does not require the physical presence of companies. Instead, it is enacted through the remote and continuous control of urban spaces. In this process, it is important to emphasize that it is not the spatial practices themselves that are deterritorialized, but rather the actors (i.e., the workers themselves). Reterritorialization practices, therefore, cannot simply replicate forms that existed prior to platformization; instead, they must be reinvented in response to the new conditions being imposed by this model.

This section of the chapter proposes an analysis of the interdependent processes of digitalization and platformization in order to better understand the structural basis of this new territorial regime, with an emphasis being placed on their effects on contemporary forms of labor organization and spatial configuration. In recent decades, digitalization, understood as a specific intensification of technification,[3] has been driven by the spread of information and communication technologies, particularly with the popularization of the Internet. Digitalization centralizes and transforms the handling of information, which was previously dispersed across various material supports, concentrating it in digital media and reconfiguring experiences of time, networks, and space.[4] Despite promises of universality, this process has deepened technical and territorial inequalities, exposing asymmetric forms of access, connectivity, and control among different actors.

Platformization constitutes a development of digitalization, characterized primarily by the logic of massive data extraction, algorithmic control, and the reorganization of relationships between workers, companies, and territories. Platformization gained momentum in the context of the post-2008 crisis, when financial capital began to invest heavily in the technology sector (Srnicek 2016) and digital platforms became central infrastructures in the contemporary economy. As they expanded globally, these platforms imposed a territorial rationality that, although seemingly deterritorialized, relies on a precise spatial ordering of the environments in which they operate. Their algorithms and operational logics require the transformation of urban spaces into governable territories that are adapted to the dynamics of control, data extraction, and circulation. Therefore, we are faced with new elements that reconfigure the production of space, thereby requiring a reinterpretation in light of Lefebvre's (1991) ideas. In this context, the interplay between digitalization and platformization reveals a continuous movement toward the intensification of technical control, especially remote control, over urban space,

3 Technification refers to the historical process of incorporating knowledge and tools into space through human labor, thereby rendering it denser with accumulated forms of technical action (Santos 1996). Although not explored in depth in this text, due to space limitations, the concept is articulated in the research through a dialectical relationship with the processes of both digitalization and platformization.

4 From the perspective of conceptual hierarchy, we understand space as a fundamental ontological category, through which other concepts, such as territory, place, landscape, region, and network, can all be analyzed. The specific definition of space depends on the nature of the social relations under investigation. In the context of this research, the concept of territory has been adopted because we are examining social relations that are shaped by dynamics of power and control over labor.

thereby deepening the notion of abstract space and becoming manifested in the reorganization of multiple dimensions of life, including labor.[5]

The territorialization promoted by digital platforms redefines the technical organization of urban space, while also profoundly reshaping power relations among institutional and social actors. This process is marked by the algorithmic centralization of labor and mobility coordination, displacing control over activities that were historically shared among a range of actors, such as labor unions, small business owners, government agencies, and workers themselves, toward private, transnational digital infrastructures, characterized by technical opacity and operation within legal grey zones. This reconfiguration implies a weakening of traditional regulatory forms and an increasing dependence upon corporate logics that are embedded in digital platforms that operate beyond the reach of public mechanisms of democratic oversight. In the case of delivery workers, this shift entails a forced delegation of core functions, such as demand management, service pricing, and customer mediation, thus subordinating them to supralocal, previous regimes with greater autonomy over their own activity.

In this context, deterritorialization should not be understood merely as geographical displacement, but as either the loss or the reduction of the capacity for the appropriation and production of lived space. Even when workers remain physically located in the same spaces, digital control qualitatively transforms their modes of intervention, thereby altering the characteristics of the territory, which is no longer the same as it had been previously. Space is no longer predominantly structured by local references, accumulated experiences, or by geographical knowledge. Rather, it is continuously reconfigured according to the parameters of platformization: algorithm-optimized routes, constantly shifting high-demand zones, and unpredictable waiting times. Deterritorialization is, thus, experienced as a symbolic and material reconfiguration of territory (Haesbaert 2004), in which physical presence alters the conditions of social rootedness and the agency previously exercised over space.

In response, processes of reterritorialization are initiated by the workers themselves, who seek to regain, even if partially, forms of control and meaning over the territories in which they operate. These practices express a situated resistance to the impositions of platformization that is grounded in both geographical knowledge and collective strategies to reconstitute the workspace. Shared maps stand out from

5 We use the term labor because it refers to paid activities carried out by workers through digital platforms, a form of work that has also been defined by many authors as being a part of the gig economy. In this sense, we share the same perspective as Jamie Woodcock and Mark Graham: "Although there have been changes in the gig economy, it still involves work. At its core, paid work involves a relationship in which one person sells their time to another. This entails transferring the ownership of labour power (the capacity to work) from the worker to the owner of capital (the owner of the things needed to produce work)" (Woodcock and Graham 2020, 12).

among these; these maps do not merely inform, but perform a new territoriality by reinscribing the traces of a collective geographical knowledge that resists algorithmic homogenization and the invisibility imposed by digital control regimes into the urban fabric.

Territorialization and the intertwined processes of de- and reterritorialization are not merely side effects of platformization; they are, instead, its very condition of possibility. To function, the infrastructure of codified urban space is intensified by the platform model, which interweaves data, interfaces, and practices in order to render the city legible and operational within its circuits of value. This deepens what Lefebvre (1991) has defined as abstract space, as mentioned previously. Devices such as geolocation, continuous mobility monitoring, spatial ranking of users, and algorithmic behavior prediction all configure new forms of territorialization in which territory is recoded as a field of calculation and control. This territorialization is marked by an asymmetry: it does not require the explicit physical presence of companies, as in the industrial-Fordist model, but is instead realized through a functional presence that is orchestrated by APIs, platforms, and by technical networks that organize space remotely. Platformization, therefore, neither dissolves nor disregards territory; rather, it seeks to reconfigure it as an operational substrate, modulating urban life through techno-economic rationalities that extract value from the continuous capturing of mobile actors' flows, movements, and habits.

In their digital form and under corporate control, maps, which never serve a purely representational function, become active interfaces in the territorialization processes promoted by these companies. Rather than merely describing space, these maps produce it by articulating real-time data in order to organize the circulation of people, goods, and services according to constantly adjusted patterns. The territory is reconfigured according to corporate criteria that define mobile boundaries and zones of interest with each optimized route, each delineated heat zone, and each demand cluster that is notified. Thus, the map is not simply a reflection of urban spatiality, but is instead a technical device that both programs and modulates space, continuously updating the territorial logic of platformization for the purposes of value extraction.

These dynamics highlight the extent to which cartography, in the context of platformized labor, can no longer be understood solely as a technique for spatial representation. It must instead be seen as a central instrument in the struggle over the control and production of territory. While platforms codify and organize urban space through opaque and unequal algorithmic systems, workers have appropriated cartography as a reterritorialization practice, mobilizing geographical knowledge in order to reconfigure zones of support, safety, and cooperation. Shared maps emerge as a manifestation of their reterritorialization within this tension between platform territorialization and workers' spatial practices. The following section details these cartographic experiences in three Brazilian cities, exploring how these types of maps

function as everyday tools, collectively constructed knowledge, and territorial reorganization strategies that arise in response to the impositions of digital platforms.

Between WhatsApp and My Maps: shared mapping in three Brazilian cities

The territorialization of labor controlled by digital platforms in Brazil has faced significant challenges regarding state regulation.[6] Despite the rapid expansion of platformization across various sectors of the economy, institutional efforts to develop specific legislation initially focused on only two categories: ride-hailing drivers and delivery workers. According to the Brazilian Institute of Geography and Statistics (IBGE),[7] these two occupations accounted for approximately 1.5 million workers in the country in 2022, making them the primary focus of public and political debate. When this research began, in the second half of 2019, we observed that the academic literature had already accumulated a considerable number of studies on drivers. In contrast, delivery workers remained on the periphery of scholarly attention. It was only with the outbreak of the COVID-19 pandemic and the resulting need for social isolation, a period during which delivery services became essential, that these workers began to receive greater visibility, both in the media and within Brazilian research agendas.

At the beginning of 2019, one of the authors, Igor, was living in the central area of the city of Rio de Janeiro. Throughout that year, he began to notice a significant increase in the presence of delivery workers in the urban space, especially those using bicycles. As the city's landscape became increasingly shaped by the dynamics of these new actors, so too did his interest in gaining a deeper understanding of their working conditions. Faced with the limited academic literature available at the time, and aiming to gather empirical elements for the development of his doctoral

6 In Brazil, drivers and delivery workers on digital platforms have taken a leading role in the most advanced debates on the regulation of platform labor. Although a consolidated legal framework has yet to be established, several proposals are currently under discussion in Congress that aim to define minimum labor rights and forms of social protection, amid ongoing negotiations between the government, companies, and representatives of these worker categories.

7 The IBGE, the main governmental body responsible for population and socioeconomic research in Brazil, included a specific module on digital platform work in its household survey in 2022. The results highlighted the growing importance of this type of occupation, particularly in the transportation and delivery sectors, and revealed workers' high level of dependence on algorithms.

project, Igor gained access to a WhatsApp group of these workers[8] months before the COVID-19 pandemic began in September 2019. With the group members' awareness, the observation of and interaction within the chat became crucial for a set of methodologies that were developed by the research later, ranging from content used to structure individual interview scripts to the technological development of an app focused on financial organization for these workers.

During participation in the WhatsApp group, it became evident that delivery workers frequently exchange comparative information about the digital platforms for which they work. In Brazil, delivery workers often operate for two or more companies simultaneously in order to optimize their workday; this typically includes periods of idleness, that is, time intervals in which they are available to the companies, but in which they do not receive delivery requests. As a result, they hold overlapping knowledge about how each company operates, or more precisely how each one territorializes its activities. These pieces of information are "shared" through digital tools, such as WhatsApp, with the aim of reducing risks and increasing financial gains. Much of this information has a spatial character, given that it refers to specific locations that are relevant to delivery work in the metropolitan region, including safe spots to wait for ride requests, suitable areas for parking, establishments with access to restrooms, or stations for shared bicycles. Within this context, one of the group administrators began organizing a map that uses the Google Maps platform, which was later adapted to My Maps.[9] This delivery worker, who also worked at a public health center, had previously participated in dengue epidemic control campaigns in which maps were created to identify potential breeding sites of the mosquito vector. His professional background provided him with a strategic understanding of the importance of cartography as a tool for territorial intervention.

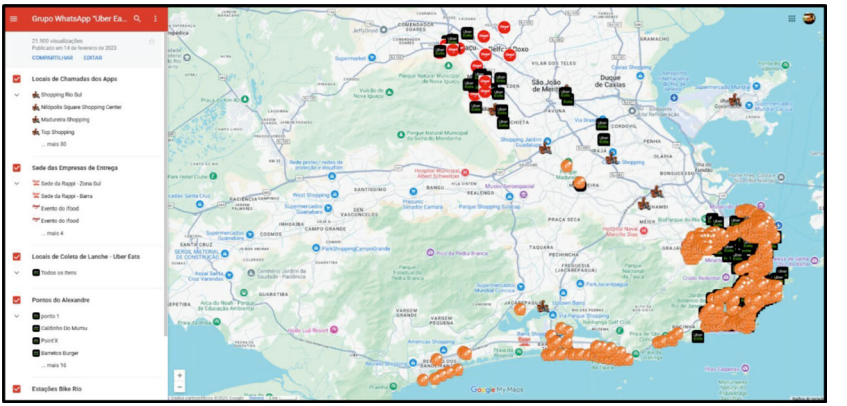
A few days after its release in the WhatsApp group, the map created using the Google My Maps tool began to register a significant increase in views, initially in the dozens and, by the following week, in the thousands. This metric is one of the main engagement indicators provided by the platform itself. Subsequently, as the research began to be methodologically inserted into other digital communities of delivery workers in the city of Rio de Janeiro and in its metropolitan region, it was observed that the same map link appeared in the descriptions of several other WhatsApp groups. The wide dissemination of the map motivated members of the

8 Access to the WhatsApp group "Uber Eats + App RJ," composed of digital platform delivery workers, was gained through a link found on the social media platform Facebook.

9 The choice to use the Google My Maps tool was due to delivery workers' familiarity with the company's applications, especially Google Maps, which is widely used by these workers to navigate their routes. For this reason, My Maps offered greater ease of adoption compared to open-source alternatives, which would require usability adaptation and which would present a higher initial barrier to engagement.

original group to establish a centralized model for managing the information: it was decided that only Igor would have editing permissions. All of the new information would be submitted to him to ensure a more secure and consistent form of curation. Research in this WhatsApp group continued until April 2020. From that point on, there was a gradual decline in the frequency and volume of daily messages, particularly after the departure of the group's main leader, the same member who had originally suggested creating the map. This weakening of collective dynamics also led to the discontinuation of submissions of new information. Despite this, the initial experience provided important empirical and methodological insights that fueled the subsequent development of the research.

Figure 1: Shared Map created with the WhatsApp Group from Rio de Janeiro.



Source: Doctoral research data by Igor Vecchia. Available at: https://www.google.com/maps/d/viewer?mid=1iMOwDZ7Gs2cm8uD_bewoZv-_2HkpEF-t&ll=-22.912781392848 77%2C-43.468006661239194&z=11 (Accessed April 2, 2025).

New possibilities for shared mapping were gradually developed throughout the course of the research through interactions established in WhatsApp groups. An interview was conducted with Douglas Sousa Silva, president of the Associação dos Trabalhadores por Aplicativo de Fortaleza (Association of App Workers of Fortaleza – ATAF) in February 2023, during fieldwork in the city of Fortaleza, the capital of the state of Ceará, in the Northeast region of Brazil. During the meeting, Igor presented the mapping experience carried out with delivery workers in Rio de Janeiro and asked about the feasibility of applying a similar methodology in Fortaleza. Douglas explained that ATAF maintained agreements with restaurants that offered discounted meals to its members and held a registry of around seventy establishments, including addresses and prices. Over the course of two afternoon sessions, this in-

formation was organized into a spreadsheet and was transformed into a new shared map that also used the Google My Maps platform. Once it began circulating among ATAF members, the map quickly gained wide visibility, accumulating over 178,000 views to date.

Considering that delivery workers often spend long hours away from home and, although they transport meals for clients, rarely carry their own food due to limited space and the added weight on bicycles or motorcycles, the cartographic availability of affordable food options emerged as a useful tool that helps maximize their earnings by the end of the day. This dimension becomes even more relevant in light of recent data showing that 32% of delivery workers live in households experiencing some degree of food insecurity, with nearly 14% facing either moderate or severe food deprivation. These figures highlight the urgency of initiatives that expand access to adequate meals during the workday (Frozi et al. 2025).

Figure 2: Shared Map created with ATAF for the City of Fortaleza.

Source: Doctoral research data by Igor Vecchia. Available at https://www.google.com/maps/d/viewer?mid=17RWJz4xkTmY8jwxwKthHKYta8NWjXYc&ll=-3.769936549943803%2C-38.533410300945036&z=12 (Accessed April 2, 2025).

In another phase of the fieldwork, also conducted in the Northeast region of Brazil, a new cartographic experience was developed in cooperation with delivery workers in the city of Natal, the capital of the state of Rio Grande do Norte, in June 2024. The activity was carried out with the support of the Associação de Trabalhadores de Aplicativos por Moto e Bike (Association of App-Based Motorcycle and Bicycle Workers – ATAMB). Just like with the WhatsApp group of workers in Rio de Janeiro, delivery workers in Natal initially lacked organized data about points of in-

terest relating to their daily work routines. Given this context, a mapping workshop was proposed to collectively identify the most relevant locations for the category. Legend icons based on previous experiences and a base map of the city were prepared in advance for this activity.

Participants discussed strategic points and marked them directly on the map prior to the ATAMB meeting began, a meeting organized in partnership with the Grupo de Estudos e Pesquisa sobre o Trabalho (Study and Research Group on Labor – GEPT) at the Universidade Federal do Rio Grande do Norte (Federal University of Rio Grande do Norte – UFRN). One of the meeting's main topics was the planning of a work stoppage that was scheduled in the coming weeks, and the new map was immediately adopted as a tool to support mobilization efforts that would guide the distribution of tasks among members of the association. After the meeting, Alexandre da Silva, a delivery worker himself and president of ATAMB, conducted on-site verification of the main points identified, paying special attention to locations in which delivery workers tend to gather during waiting periods between orders. The main objective of identifying these spaces was to strengthen political coordination around the planned work stoppage.

Figure 3: Mapping Workshop with ATAMB in the City of Natal.

Source: Doctoral research data by Igor Vecchia.

From the three cases presented, we observe that the production and use of shared maps by digital platform delivery workers constitute spatial practices of reterritorialization. These practices emerge from the workers' direct experience with urban space and operate as infrastructures of cooperation and work organization. They represent attempts at reappropriation, in which workers, excluded from the platforms' decision-making processes regarding working conditions, mobilize their spatial knowledge to mitigate the risks and vulnerabilities associated with an occupation that currently lacks specific regulation in Brazil. Unlike the planned and data-extractive logic typical of platform design, shared maps are created to counteract the atomization of labor on digital platforms. They serve multiple purposes, ranging from practical and utilitarian, such as identifying the best places to wait for delivery requests, to more politically radical uses, such as supporting mobilization efforts for strikes.

Therefore, shared maps should not be understood merely as digital artifacts that are available in interactive formats, but as living devices that are constantly in formation. Their value lies not simply in their online accessibility, but in the ongoing process of updating and in terms of their practical use that grants them concrete use value. In contrast to other forms of participatory and inclusive mapping, often marked by isolated moments of collective production, these maps are distinguished by the frequency with which they are accessed and updated by the workers themselves. They continuously incorporate information drawn from daily experiences, including support points, rest zones, and areas of either risk or opportunity. This constant updating allows the maps to function as navigation tools amid the uncertainties of both work and the city, more rapidly reflecting changes in platform operations, urban dynamics, and user turnover. It is, therefore, a cartographic practice that is embedded in the temporality of ongoing work, whose strength lies precisely in its instability, its capacity to follow, and in its ability to respond to the transformations of lived space (Lefebvre 1991).

The spatial organization of labor by digital platforms has gradually shifted support references and social ties, once associated with restaurants or commercial establishments (i.e., private spaces) towards a new logic of territorialization in public space. In this new configuration, streets, squares, sidewalks, and other urban spaces become central to work activities, thereby creating an increasing dependence on open, improvised, and sometimes ephemeral infrastructures. This territorial transformation, driven by mobile logics and algorithmic control that are shaped by corporate intentions, redefines the daily lives of delivery workers and calls for a broader understanding of their spatial practices. Within this context, shared maps become important both practically and epistemologically, not only as records, but as tactical devices that articulate experiences, identify support zones, and reinscribe territory through geographical knowledge. An analytical understanding of these practices requires connecting them to a broader set of reterritorialization processes that, while

responding to the conditions imposed by platformization, also generate alternative territorialities and challenge the dominant technical rationality embedded in algorithmic systems of labor control.

Our research has identified other spatial practices that reveal forms of technical and political appropriation by delivery workers in Brazil. Among these practices are the use of fake GPS applications that allow workers to simulate positions within the city; the institutionalization of demands for public infrastructure (such as access to Wi-Fi, seating, and power outlets) exemplified by the creation of the *Ponto do Entregador* (Delivery Workers' Spot) in Fortaleza; and the development of customized digital tools, such as the *Meu Corre App*,[10] which was also produced within the framework of this doctoral research as an autonomous technological initiative aimed at organizing workers' financial information. These initiatives, like the shared maps, seek to reclaim some of the control lost over working conditions that are controlled by digital platforms in urban space and that are, therefore, understood here as processes of reterritorialization.

Conclusion

If the geotechnological apparatus under the logic of platformization functions as a mechanism of territorial domination, which converts the space into standardized codes and subjects it to flows of algorithmic prediction and value extraction, then it becomes urgent to reflect on the possibilities for its critical appropriation. Thus, the struggle over digital maps is inseparable from the broader struggle over the uses and meanings of territory: it involves reinscribing alternative rationalities, rooted (above all) in both collective and in explicitly political experiences. However, such reappropriation does not occur in either a neutral or conflict-free manner. It faces concrete obstacles, such as unequal access to technologies, limited technical training, and the lack of continuous support networks, factors that are exacerbated by the deregulated working conditions that affect those involved in these processes in Brazil.

Although shared mapping represent practices of reterritorialization, they also carry risks that challenge their political potential. The first of these concerns the pos-

10 This project originated from the experience with shared maps, which revealed how the secure exchange of information among workers contributed to reducing risks. Building upon this insight, we proposed the development of a digital tool that, after research and dialogue with delivery workers, resulted in the creation of an application focused on financial organization. While digital platforms disclose workers' earnings, they do not account for the expenses incurred in the performance of their work. Launched in April 2024, as a methodological component of the research and active in Brazil since that time, the app forms part of a broader set of political initiatives aimed at supporting the reterritorialization of workers.

sibility of algorithmic instrumentalization: once made visible and accessible, the geographic knowledge being shared may be appropriated by the very platforms from which workers seek to reclaim space. Information about rest areas, waiting zones, and support points, for instance, can all be recoded as idle zones and, subsequently, could be reorganized by algorithms seeking to optimize productivity and to redistribute labor flows according to corporate interests. The second risk is ontological in nature and lies in the adoption of the technical grammars of dominant digital cartography platforms, such as Google My Maps. Even when built cooperatively, these maps tend to operate with normative spatial categories (icons, layers, boundaries) that reduce the lived complexity of territories to instrumental representations. In such cases, mapping may cease to be an expression of workers' experiences and everyday realities and instead begin to operate in alignment with spatial logics that are compatible with platform management strategies. What might otherwise function as a counter-cartography, rich in political and symbolic meaning, thus runs the risk of becoming a domesticated and harmless visualization, one stripped of its capacity to confront, narrate, or to transform the territory. In other words, a spatial practice initially aimed at the reterritorialization of workers may, in the medium- and long-term, become a spatial practice that enhances the platforms' territorializing power.[11]

Avoiding the risks of instrumentalization and the critical neutralization of shared mapping requires a methodological and political commitment to continued listening and dialoguing with workers, whether those are positioned outside formal structures of representation or are those engaged in associations, collectives, and unions. Maintaining continuous contact with different segments of the worker base ensures that these cartographic practices remain anchored in the concrete experiences and geographic knowledge of delivery workers, thereby preserving their potential against the algorithmic rationality that organizes urban space. While platformization tends to impose cultural devices that are aligned with hegemonic interests, shared mapping become strategic tools for the critical appropriation of these very technologies. It is also essential to emphasize that these maps do not operate in isolation, but are instead articulated with a broader set of spatial practices of reterritorialization, such as training courses for workers, public policies aimed at support points, and, most importantly, the ongoing demand for the regulation of the delivery sector in Brazil, among other initiatives.

11 It is important to emphasize that, in our research, we understand the dynamics of territorialization by digital platforms and the de-reterritorialization of workers not as continuous, homogeneous, or unidirectional processes of territorial formation. On the contrary, we identify constant tensions and ruptures among spatial practices, which led us, analytically, to propose the notion of cycles within TDR dynamics. At the present moment, shared maps are understood as a strategic resource in favor of the workers.

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