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# Trabalho Digital: o papel organizador da comunicação

### **Digital Labor: the organizing role of communication**

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**Resumo**: O artigo lança bases teóricas para entender a área de trabalho digital desde a comunicação. Para isso, discute o processo de plataformização do trabalho para além da chamada "uberização" e com clivagens de raça, gênero, frações de classe e território. Considera as plataformas como meios de produção e comunicação, com lógicas de interações e processos produtivos desde suas arquiteturas. Assim, trata do papel da comunicação como organizadora do trabalho digital tanto no controle e gestão do trabalho nas plataformas quanto nas possibilidades de organização dos trabalhadores, seja em associações, sindicatos, cooperativas de plataformas ou arranjos mais informais.

**Palavras-chave**: Trabalho digital; plataformização do trabalho; organização de trabalhadores em plataformas.

**Abstract**: The paper aims to theorize on digital labor from communication point of view. Thus, it discusses the platformization of labor beyond the so-called "uberization" and with race, gender, class and territory perspectives. It considers platforms as means of production and communication, with logics of interactions and productive processes since their designs. The article discusses, then, the role of communication as an organizer of digital labor both in the control and management of work on platforms and in the possibilities of organizing workers, whether in associations, unions, platform cooperatives or more informal arrangements.

**Keywords**: Digital labor; platformization of labor; workers' organization in platforms.

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## Introduction

Since early 2010's, many researchers have been debating the interface between digital technology and the world of work through the name "digital labor". A milestone is the publication of the collection *Digital Labor* by Scholz (2014). Between 2012 and 2016 there had been the first phase of studies on digital labor, such as Fuchs (2014) and Huws (2014), with the predominance of the discussion on free/unpaid labor of users in digital platforms<sup>2</sup>.

From 2016, with the raise of labor platforms such as Uber throughout the world, the debate was dislocated to the so-called "uberization of work", involving themes such as capitalism and platform cooperativism, human labor and artificial intelligence, datafication and labor, work regulation in platforms. Some examples are the research of Casilli (2019), Gray and Suri (2019), Roberts (2019), and Cant (2019).

Digital labor refers to an area of studies and not a concept, because the activity of labor has always been human. As an umbrella term, it comprises research from different fields, such as sociology, law, economy, geography, psychology, urbanism and information science, in addition to communication. But what all of these discussions have to do with communication? What is there of communication in digital labor?

The theme of labor appears often as a foreign matter in the area, mainly when the research does not specifically deal with the work of communicators, despite the efforts of Mosco (2011) and Figaro (2018), for instance, who show the inter-relations between labor processes and communication. We understand communication as a place of articulation and reorganization of knowledge (SODRÉ, 2014), a meeting place and a "epistemological common" in the sense of comprising not only a "unravelling the communication point of view" of objects, but all their "impurity" and sharp edges coming from other epistemic spaces.

That is because, instead of defining before what would be specific and strictly from communication studies, what would interest

<sup>2</sup> With which we agree with the arguments of Huws (2014), as explained in Grohmann (2016).

communication – regarding specifically the issue of labor – not only the labor of media workers or the communication processes in the world of work, but "everything that comes with" that, such as control and management of work, collective organization of workers, identity, regulation of work in digital platforms, among others.

Knowing those epistemological "impurities", however, does not exempt us from thinking that communication<sup>3</sup> plays a role that involves the area of digital labor, being that the goal of the present article<sup>4</sup>, in the sense that releasing theoretical basis for a research agenda on the theme in the area. We consider that communication works as an organizer of labor through the process of platformization of labor – beyond the socalled "uberization" – and the understanding of platforms as means of production and communication, with logics rooted in their digital infrastructures. The text, then, analyzes the role of communication both in control and management of labor and in the possibilities of collective organization of workers, either in unions and associations or in the cooperativism of platform, or even in informal interactions, as emerging collectivities.

#### **Platformization of labor**

Platforms are digital infrastructures fed by data, organized by algorithms and formalized by relations of property (VAN DIJCK; POELL; DE WAAL, 2018; SRNICEK, 2016). As any other technology, they present values and norms inscribed in their designs and interfaces, possibly presenting mechanisms of race, gender and class bias (NOBLE, 2018). As digital structures, they are, therefore, communication media and infrastructure (COULDRY, 2019).

<sup>3</sup> In a Google Scholar search (December / 2019) for digital labor and digital labor, the journal that appears most often among the ten most cited is from the media: New Media & Society, with four mentions.

<sup>4</sup> This is a theoretical article in the light of empirical research - carried out between September 2019 and February 2020 - in the researcher's inroads on the Discord platform (specifically on the Means.TV, Co-op Mode and Game Workers Unite channels), on Facebook pages associations and unions and interviews with unions and platform cooperatives.

There are materialities that involve the platforms, in the sense that they depend on the extraction of natural and physical resources and are transformed into artifacts through production chains (MURDOCK, 2018). These materialities of platforms work to understand them in relation to work processes and the environment and their platform interfaces – while medium – regarding possibilities and boundaries (or affordances) that are inscribed in their architectures. The platform infrastructure are basic conditions for the scenario of digital labor, "bringing the technical basis for new labor organizations" (WOODCOCK; GRAHAM, 2019, p. 20). That means to understand labor circuits in their different moments and articulations.

The current context of the relation between labor and digital technologies is marked by the platformization of labor, understood as a growing dependence of digital platforms to exercise work activities. In a previous text (GROHMANN, 2020b), we discussed the mechanisms of platformization that affect the world of labor. In a panoramic sense, there are contextual dimensions that involve the financialization and rentism – "the internet of landlords" (SADOWSKI, 2020), data extraction and datafication, and the neoliberal entrepreneurial rationality (DARDOT; LAVAL, 2016), as the backbone of this process. Thus, we reinforce that the platformization is the materialization or concretization of already existing previous processes, that are presented intensified, not purely as results of technologic processes (although also with them, but with other existing dimensions.

In this context, speaking of labor platformization is, on one hand, understanding labor activities mediated by digital platforms – that we could synthesize as labor in platforms or platformized labor – which means depending, in a bigger or smaller degree, of algorithmic mediations and modes of data circulation, that are surrounded in the productive and communicational processes of platforms. The materialities of platforms are the most visible (and friendly) interface for processes of data extraction and surveillance of consumers and workers of platforms. In this sense, the owners of platforms execute what Couldry and Mejias (2019) call "surveilled labor", from this rentist mechanisms of value extraction through platforms (SADOWSKI, 2020).

In this scenario, the most different labor activities – plumber, housekeeper, designer and coder – start depending more and more on digital infrastructures and their logics, in a way that platformization tends to generalize to all work activities, in remote work of in the streets of cities. However, that does not mean that the process happens the same way to all workers or all platforms. That is due, on one hand, to a multiplicity of platforms and, on the other, the diversity of profiles of workers, that have bigger or smaller dependence to digital infrastructures – and their mechanisms – with different forms of extraction of value through platforms. That is why we argue that the term labor platformization is a explanatory key that allows us to understand the different processes of value extraction and work situations surrounded in the relations of different workers with a multitude of platforms that do not work the same way.

Through discussions on types of labor platforms in Schmidt (2017) and Woodcock and Graham (2019), we consider three main types: a) platforms based on localization of workers and consumers, such as ride-hailing (Uber, 99, Cabify) or delivery sector such as iFood and Rappi), being the workers called, respectively drivers and delivery person; b) microwork platforms, also called crowd work, whose main role of workers is to train data for artificial intelligence, such as Amazon Mechanical Turk, Appen and Lionbridge; c) freelance platforms, from domestic labor to design and coding activities, such as GetNinjas, Helpie and 99Designs. The two last categories do not necessarily depend on the workers and clients location.

The workers from different platforms present divides of gender, race and fractions of social status (VAN DOORN, 2017), depending on the platforms and the location. Women, for instance, are more present in housekeeping platforms (HARTMANN et al., 2019). In São Paulo, 71% of the deliverymen are black (ALIANÇA BIKE, 2019). As we can see, labor platformization crosses different social subjects in multiple manners, without configuring as a homogenous process. They are distinct work situations and are intersected by these social markers of inequalities and differences, although the algorithmic control is put as something neutral, objective and above intersectionalities (BUCHER, 2017).

The territory is another central marker to locate labor activities in digital platforms. Cant (2019), for instance, shows how labor in platforms is also marked by the migrant labor. Workers of non-English speaking countries that know the English language have more probability to work in global platforms of micro labor (CASILLI, 2019).

Beyond that, there is a geopolitics of the digital labor (GRAHAM; ANWAR, 2019), with companies generally from the North hiring labor from all parts of the globe, including the Global South. The *Online Labour Index*, from Oxford University, shows the offer and demand of labor in freelance platform by country and occupation. On February 3<sup>rd</sup>, 2020, the index pointed that 61.2% of the workers are from the United States and most of the workers are from Asia<sup>5</sup>.

There are different characteristics of work market depending on the region. In the Global North, the so-called gig economy – term that we consider, at the very least, incorrect to explain our scenario<sup>6</sup> – is historically the exception, while in the South the informality and precariousness<sup>7</sup> are configured as rule and historic norm<sup>8</sup>, as something permanent for the countries workers, as attested by Abílio (2020) in Brazil and Soriano and Cabañes (2020) in the Philipines. To Abilio (2020),

- 5 Also according to the Online Labor Index, the three main activities of Brazilians on freelance platforms occur in the areas of multimedia and "creativity", software and technology development, translations and transcriptions.
- 6 The history of the Brazilian economy is a large gig economy, in the literal sense of the term, so that there is nothing new about the gig, but, in fact, in subordination to digital platforms and their mechanisms. In the beginning, we considered Brazil or Latin America an exception. After experiences in international projects on working on platforms, our position is that the gig economy is a specifically European-American term that seeks to become universal, while most countries in the world live a similar process to Brazil.
- 7 If, on the one hand, platforms are close to work in various parts of the world, on the other, there are issues that bring us closer to countries in Asia and Africa (WOOD; LEHDONVIRTA; GRAHAM, 2018).
- 8 This means, on the one hand, not to abandon terms such as precariousness and flexibility, but, on the other hand, not to take them in the same way as authors from the North, because the scenarios are different.

there is a monopolization and productive appropriation of the peripheral living on behalf of the companies of these platforms, through their own logics.

Thus, there is a spread of modes of living in the peripheral areas in all parts of the world, generating mechanisms of dependence and subordination. There are different forms of expropriation of value in digital platforms through gender, race, social status and territory. Therefore, labor platformization and labor in platform do not happen in a void or as something abstract, but through concrete material conditions

#### Platforms as means of communication and production

The contextual and social dynamics are the beginning to understand them as means – of production and communication, that engender labor and interaction logic from their designs, fueled with data production. As affirmed by Williams (2011, p. 69), the media "are not only forms, but means of production, since the communication and their material means are intrinsic to all distinctly human forms of labor and social organization"

The view of Williams (2011) reveals not only the imbrication of technology with productive processes (VIEIRA PINTO, 2005), but how communication itself is production. Therefore, the labor platformization means not only the dependence of digital infrastructures and their affordances, but also the growing role of communication as organizer of work processes.

We understand communication as an organizing and mobilizing arm of labor in digital platforms, as the center of disputes in the world of work, involving both the logics of control and management and the resistance and organization of workers. On one hand, the communication involves costs related to relational infrastructures and the own political organization (SCHRADIE, 2019). On the other, the communication helps organize social and political composition.

Fenton (2016) and Schradie (2019) remind how the organizational forms are political and how the organizational infrastructure has a prepondering role in digital activism. We remember that communication also mutually relates to the own organization of work – and, therefore, also have their own costs. Mobilizes and circulates certain productive processes, uses of platforms and meanings in detriment of others, also complying a role in the circulation of capital, accelerating the processes and decreasing the times of rotation<sup>9</sup> (GROHMANN, 2020a).

The discourses that companies mobilize for their production, in an intent of showing themselves as "innovative" and "disruptive", go through the role of communication as the organizer of neoliberal rationality in digital contexts. The dominant discourses of platforms are about that they promote economic development and give opportunities to workers. That also go through media strategies that make invisible the role of the worker or give the impression that they belong in a "global workforce". Some examples are the slogans of microwork platforms, such as Amazon Mechanical Turk ("artificial artificial intelligence") and ClickWorker ("your on-demand virtual labor. All around the world").

The platforms engender forms of control and management – including algorithms (MÖHLMANN; ZALMANSON, 2017) – through the role of communication in platforms. The mechanisms of surveillance, data collection and extraction, as the space and time control, happen through dynamics of platforms as means of communication and production (COULDRY; MEJIAS, 2019), effectuating in consumption itself (as a communication process) of platforms, either as "client" – name commonly used by platform companies – or "worker".

In other words, the platform consumption – as means of production and communication, is the realization of the process of labor platformization and their dynamics, which means that the platformization is, at the same time, datafication (COULDRY; MEJIAS, 2019) pf production and consumption. "Rappi collects so many data that makes investor's eyes glow" (UOL TILT, 16/02/2020). The tracking of urban

<sup>9</sup> In the case of platforms that involve transport, there is a combination of what Marx (2011) considered the apex of the circulation of capital - the intersection of means of transport and media.

spaces and consumption practices, with their algorithmic mediations, relate to the own work activities in platforms.

The interfaces of platforms are designed so that the workers talk with the consumers – and get evaluated by them, as shown by Antunes and Filgueiras (2020), Amorim and Moda (2020) and Englert, Woodcock and Cant (2020). Either in platforms that demand a specific location (such as Uber or iFood) or microwork (such as Mechanical Turk), the client/consumer is a person difficult to be contested by the worker. There is also the imaginary (BUCHER, 2017) of what would be the algorithm "boss", always inaccessible and invisible; "My boss is an app" (POIER, 2018).

The gamification (from above, as argued by Woodcock and Johnson 2018) is also a mechanism, at the same time, of control and management, of platforms as means of communication and production in the sense of an "imposition of systems of regulation, surveillance and standardization" (WOODCOCK; JOHNSON, 2018, p. 2) as work reinforcement, in other words, as "a governmentality" (DARDOT; LA-VAL, 2016). It is the crystallization of communication processes in work management, taking the game from the framework of entrepreneurial rationality – something that already happened within the own companies in a reality show logic that are updated with the platforms. Some examples are: "You have only three rides left to hit the goal" and "you are in baby level. There are five tasks to go to the next level".

The systems of ranking and classification – of clients and workers – as ranking can be described as the biggest example of crystallization of the logic of game as management and control of platforms and the evaluative technology (DARDOT; LAVAL, 2016) as a mechanism of worker surveillance. In the same sense, the means are also designed so that the workers do not talk to each other through the platform and cannot find each other in *crowd work*. That shows the values and norms inscribed in the platforms (VAN DIJCK; POELL; DE WAAL, 2018) and their own organizational political form.

## Communication in the organization of workers of platforms

Communication, as a space of dispute and circulation of meanings (GROHMANN, 2016), does not only work for the organization and circulation of capital, but it also enables gaps for circulation of common, without idealisms, in the boundaries of capital itself (HARVEY, 2018). Therefore, communicational processes also help in the organization of workers involved in digital platforms, either in collective formations, associations and unions or in organizations from the prism of self-management, such as cooperativism of platform (SCHOLZ, 2017).

Neilson (2018), Cohen and De Peuter (2018) and Woodcock (2020) point towards a new wave of unionization of workers of tech, games and journalism sectors, respectively. In a scenario where professionals from Google and Amazon are recognizing themselves as workers – facing the pressures related to work conditions – and seeking to unionize, Kickstarter, the biggest platform of collective financing, was the first big tech company to have an union. In addition of better work conditions, they demand diversity and inclusion policies and more voice and participation in the decision-making of the company.

Specifically in the area of communication, we highlight the following unions: Writers Guild of America East, in the United States, which gathers workers from VICE, Vox, the Intercept, MTV, HuffPost, Gizmodo and Fast Company and the union of workers from Buzzfeed in the United States (Buzzfeed News Union), in the context of the emergency of unions of workers of other initiatives in digital platforms, such as The Union and Pitchfork.

In the game area, the Game Workers Unite isn't exactly an union, but a movement and an international organization with the goal of unionizing the videogame industry. It is present in 12 countries and it is formed by people without any experience in the traditional unionization, which shows, according to Woodcock (2020), that: a) no worker is impossible to organize; b) the fact that workers are not yet organized does not mean saying that there is no resistance or potential for organization; c) there seems to emerge new forms of collective organization of workers, with other logics. According to Woodcock (2020, p. 6) "existing unions need to be prepared to learn from these worker's experiences, adapting their methods and organizational forms to find new possibilities".

Another example is the union of Youtubers, formed in Germany. It was affiliated to the biggest German union, IG Metall, and demands the platform, among other things, a bigger transparency in algorithms and in criteria for demonetization of videos. According to Jorg Sprave, in an interview with the researcher<sup>10</sup>, "digital' unions need to operate as a movement without obligations with the operators. We do not know where our members come from – if they decide not to tell us, we never will". Sprave considers that the biggest challenges for the organization of workers are legal and geopolitical – considering that a platform like Youtube is not present in only one country<sup>11</sup>.

Workers of transport platforms have also formed associations and unions around the world. In January 2020, there was the first international convention of organizations of app drivers, with the participation of 23 countries. From Latin America, participated Brazil, Argentina, Chile, Uruguay, Panama And Costa Rica. Through this meeting, they founded the International Alliance of App-Based Transport Workers (IAATW). In Brazil, there are organizations of these type in the states of Pernambuco, Rio de Janeiro, São Paulo, Bahia, Maranhão, Minas Gerais, Rio Grande do Sul and Brasilia, all of them with active Facebook pages. The strikes of deliverymen in July 2020 are also an example of these emerging solidarities, also filled with contradiction, as it is natural of the political struggle.

The collective organization of workers also go through the attempts of building cooperativist forms and self-management of digital platforms<sup>12</sup>, since the initiatives reproduce a certain "entrepreneurship activism"

<sup>10</sup> Interview conducted by email on October 29, 2019.

<sup>11</sup> It is not the purpose of this article to deepen the interviews that we have done with unions and cooperatives, which will be the subject of another text. This excerpt is a context for thinking about the role of communication in the organization of workers.

<sup>12</sup> Something that we have dealt previously (GROHMANN, 2018).

(SANDOVAL, 2019) until more "radical" possibilities (SANDOVAL, 2017; FENTON, 2016). The point is not trying to reproduce the mechanisms of management and organization of capitalist work platforms. The current directory of platform cooperativism presents 297 initiatives<sup>13</sup>, that can come from workers, consumers or multi-stakeholders. These experiences go through co-ops of cloud service (Collective Tools, from Sweden), audio and photographers streaming platforms. There is also a platform of audiovisual streaming with anti-capitalist content from a co-op of audiovisual producers, the Means TV, launched in February 2020. That means fighting the generalized dominant mode of platformization of labor with the search for a pre-figurative construction of platforms with other logics from the organization of work to the role of algorithms and data, seeking to establish new circuits of production and consumption, both in the point of view of commodities and meanings.

The experiences of organizations of workers in associations and coop have been attracting growing attention of researchers on digital labor (WOODCOCK; GRAHAM, 2019; CANT, 2019; CODAGNONE; KARATZOGIANNI; MATTHEWS, 2018; ENGLERT; WOOD-COCK; CANT, 2020). However, this literature has been approaching only punctually the role of communication in the organization of workers in platforms. Partly, for being original of areas other than communication, end up taking it as a tool or support, without all its complexity. We defend that there is the centrality of communication in the organization of workers. That happens due to the impossibility of working without communication (FIGARO, 2018) and, more specifically, in the sense that the own communication is a work of organization.

In addition to the institutionalization of the organization into associations or co-ops, there is a series of relations and processes of communication that are put as organizational arrangements, it being more informal, punctual or fortuitous. That can be both something face-toface, like the delivery workers that interact in meeting points, or in digital

<sup>13</sup> The full directory is available at: https://docs.google.com/spreadsheets/d/1RQTMhPJVVdmE7Yeop1iwYhvj46kgvVJQnn11EPGwzeY/edit#gid=674927682. Accessed on: 22 feb. 2020.

platforms, with Facebook and WhatsApp groups, that have been playing a central role in the organization of workers. According to Wood, Lehdonvirta and Graham (2018), 58% of workers in platforms that do not depend on location communicate at least once online with other workers. That is reinforced in one of the only moments in which Woodcock and Graham (2019, p. 107) talk about this issue: "Communication is an important step towards resistance and collective organization".

In this context, the aforementioned authors attest that digital communication is a crucial part of the work in platforms and point out the importance of forums and digital platforms to share tips and concerns among workers, even related to safety, – like the app rebU, which has even a "spy camera". That means they seek, somehow, to avoid the affordances of work platforms in relation to communication among workers, considering that most of them were designed for workers to talk with consumers, but not among themselves.

In the case of Facebook and WhatsApp groups, very frequent among drivers, deliverymen and even workers of Amazon Mechanical Turk in Brazil (MORESCHI; PEREIRA; COZMAN, 2020), one has to consider the affordances of these platforms, in the sense that they are not very neutral in relation to communication among workers. That is, if on one hand there is a convenience for a more horizontal communication between them, avoiding the limitations of labor platforms, on the other there is the dependence of other digital infrastructures and their logics as means of production and communication, which involves media, political and economic dimensions. That also means do not "romanticize" the role of digital platforms in relation to workers organization, in the sense of understanding the contradictions of a "horizontal communication" and the dependence of material resources and infrastructures, as shown by Schradie (2019) in relation to the costs of digital activism.

In addition to the use of digital platforms of Big Tech, there is the creation of forum of workers, such as *TurkerNation* and *Turkopticon*, for Amazon Mechanical Turk (MILLAND et al., 2015; IRANI; SIL-BERMAN, 2016). In *Turkopticon*'s case, Woodcock and Graham (2019)

consider that there is, in fact, a subversion of the platforms used in the labor process. In these forums, workers exchange information about clients of the platform – who can deny paying for tasks. On *TurkerNation*, there is a code of conduct both for workers and academics that may perform research on Amazon Mechanical Turk (as shown by MORESCHI; PEREIRA; COZMAN, 2020).

The codes of conduct, which also appear in the forum organized by Game Workers Unite, are the discursive concretization of an agreement of organization among workers. In the case of workers of the game industry, that involves explicating the purpose of the organization, behavior expectations in the platform, unacceptable behavior and their consequences and a space for reporting.

Game Workers Unite executes what Woodcock and Johnson (2018) call "gamification coming from below", which means subverting the gamified logics of neoliberal rationality from the reappropriation of a platform originally designed for the communication among videogame players to ends of worker organization: the platform Discord. Woodcock (2020) compares the importance of this platform for game workers to the centrality of WhatsApp for Uber drivers. In this platform, there are different forums and chats among workers, divided into sections: general, organization, news and articles, experiences and snaring, questions and doubts, and off-topic. There are also divisions by committee (translation, communication and organization) and by region, in addition to meeting rooms.

The platform Discord is also used for communication and organization of co-ops of platforms, such as The Co-op Mode, of game developers, and Means TV, of audiovisual producers. In these cases, there is a similar logic to the one employed by Game Workers Unite, with spaces for the construction of group projects (The Co-op Mode) and even meme creation (Means TV). A similar use was identified by Marques (2019) by journalists of alternative media in relation to Telegram for discussion and organization of the content to be published. However, not all of the worker groups of platforms are organized through gamified platforms, such as Discord, as affirmed by Jörg Sprave, of the union of *Youtubers*: "we had a server on Discord, but we stopped because we didn't use it much. We chose a Facebook page for our communication, which works fine" <sup>14</sup>. According to Sprave, the Facebook affordances enable a "clean house" – in his words. The main thing for him is that "a digital union needs a platform and cannot be operated without a digital home"<sup>15</sup>.

That means, somehow, the need of control, or, in Cant (2019)'s words, an expropriation of platforms as means of production and communication by workers. In the platform cooperactivism, there is the search for creating their own platforms with logics that favor the democracy in the work environment and the non-surveillance of workers (SCHOLZ, 2017). In other words, the design of platforms as means of production and communication is already built for the self-management of workers. At Stocksy, photographer's co-op, for instance, their own co-op meetings are inserted into a platform. One of the attributes is precisely due to the creation of their own platform that enables worker's autonomy.

From this context, one of the challenges in relation to an organization of workers of platforms is related to infrastructure. In an interview to the researcher, Charles Anderson, from the art co-op Other Fruit<sup>16</sup>, says that the future of the organization of workers in platforms go through the implantation of blockchain: "the practical implementation of this technology continues to be a continuous learning curve. We have a team of developers and programmers that constantly refine the structure. It is not an exaggeration to say that it took years to compose a functional architecture in this platform". To face the infrastructural issue along with other co-ops is something that is in progress. According to Anderson<sup>17</sup>, "we are developing infrastructures of cooperative platforms in the world of eSports so that participants, from players to editors, can control

15 Idem.

17 Idem.

<sup>14</sup> In an email interview to the researcher on October 29, 2019.

<sup>16</sup> Interview conducted by email on October 31, 2019.

their own contracts, terms of participation, collaboration, and of course, profits".

## Conclusions

This article highlights communication dimension of the digital labor, laying a base for a research agenda. Understood as means of production and communication, the platforms will always involve a communication face. However, they never act on their own, or autonomously, because they depend on other factors. Despite that, the research in communication must not forget these factors so-called "exogenous", and, finally, take on their place of articulation of knowledge.

From the theorization and some examples, we argue how communication is present both in control and management of labor on behalf of the platforms – involving algorithmic management, gamification and evaluation systems – and in the possibilities of organization of workers, either in associations, unions, co-ops or more informal interactions. The communication presents, thus, a role in organization and mobilization of work and workers in digital contexts. There is no platformization of labor without communication.

In every case, one has to think about the dependence and contradictions in relation to digital infrastructures, with their possibilities and boundaries, from interfaces to algorithmic and datafied mediations. For presenting a multitude of meanings and value extraction, we defend the notion of platformization of labor as the materialization of already existing processes and as an explanatory key for understanding the diversity of platforms with different work situations and different divides of gender, race, fractions of social status and territory, with a geopolitics of digital labor.

The platforms, according to Cant (2019), can be faced as a lab for class struggle. Among the dispute that involve management and control of work and the possibilities for organization of workers, there are gaps in the sense of pre-figurative policies (SANDOVAL, 2017), as attempts of getting a glimpse on other possible worlds beyond a capitalist realism

(FISHER, 2011). The communication, then, helps in the organization of experiences and labs of digital labor.

#### References

ABILIO, L. Plataformas digitais e uberização: a globalização de um Sul administrado? *Contracampo*, v. 39, n. 1, 2020.

ALIANÇA BIKE. *Entregadores ciclistas de aplicativos*. Relatório da Associação Brasileira do Setor de Bicicletas, 2019.

AMORIM, H.; MODA, F. Trabalho por aplicativo: gerenciamento algorítmico e condições de trabalho dos motoristas da Uber. *Fronteiras*, v. 22, n. 1, 2020.

ANTUNES, R.; FILGUEIRAS, V. Plataformas digitais, trabalho e (des)regulação no capitalismo contemporâneo. *Contracampo*, v. 39, n. 1, 2020.

BUCHER, T. The Algorithmic Imaginary: exploring the ordinary affects of Facebook algorithms. *Information, Communication & Society*, v. 20, n. 1, 2017.

CANT, C. Riding for Deliveroo. London: Polity, 2019.

CASILLI, A. En Attendant les Robots. Paris: Seuil, 2019.

CODAGNONE, C.; KARATZOGIANNI, A.; MATTHEWS, J. *Platform Economics*. London: Emerald, 2018.

COHEN, N.; DE PEUTER, G. "I work at Vice Canada and I need a union": organizing digital media. *Labour Under Attack*. Nova Escócia: Fernwood, 2018, p. 114-128.

COULDRY, N. Media: why it matters. London: Polity, 2019.

COULDRY, N.; MEJIAS, U. The Costs of Connection. Palo Alto: Stanford, 2019.

DARDOT, P.; LAVAL, C. A nova razão do mundo. São Paulo: Boitempo, 2016.

ENGLERT, S.; WOODCOCK, J.; CANT, C. Digital workerism: technology, platforms and the circulation of workers' struggles. *tripleC*, v. 18, n. 1, 2020.

FENTON, N. Digital, Political, Radical. London: Polity, 2016.

FIGARO, R. Comunicação e trabalho: implicações teórico-metodológicas. G*aláxia*, n. 39, 2018.

FISHER, M. Capitalist Realism. Winchester: Zero Books, 2011.

FUCHS, C. Digital Labour and Karl Marx. New York: Routledge, 2014.

GRAHAM, M.; ANWAR, M. The Global Gig Economy: towards a planetary labour market? *First Monday*, v. 24, n. 4, 2019.

GRAY, M.; SURI, S. Ghost Work. Boston: Houghton Mifflin Harcourt, 2019.

GROHMANN, R. *As classes sociais na comunicação*: sentidos teóricos do conceito. Tese (Doutorado) – Ciências da Comunicação. São Paulo: Universidade de São Paulo, 2016. GROHMANN, R. Cooperativismo de Plataforma e suas Contradições: análise de iniciativas da área de comunicação no Platform.Coop. Liinc em Revista, v. 14, n. 1, 2018.

GROHMANN, R. A comunicação na circulação do capital em contexto de plataformização. *Liinc em Revista*, v. 16, n. 1, 2020a.

GROHMANN, R. Plataformização do trabalho: entre dataficação, financeirização e racionalidade neoliberal. *Revista EPTIC*, v. 22, n. 1, 2020. HARTMANN, H. et al. Women, Automation and the Future of Work. London: IWPR, 2019.

HARVEY, D. A loucura da razão econômica. São Paulo: Boitempo, 2018.

HUWS, U. Labor in the Global Digital Economy. New York: Monthly Review Press, 2014.

IRANI, L.; SILBERMAN, S. Stories we tell about labor: Turkopticon and the trouble with "design". *Anais SIGCHI*, 2016.

MARQUES, A. A redação virtual e as rotinas produtivas nos novos arranjos econômicos alternativos às corporações de mídia. Mestrado (Ciências da Comunicação). São Paulo: ECA-USP, 2019.

MARX, K. Grundrisse. São Paulo: Boitempo, 2011.

MILLAND, K. et al. We are dynamo: overcoming stalling and friction in collective action for crowd workers. *Anais da 33<sup>rd</sup> ACM Conference on Human Factors in Computing Systems*. 2015.

MÖHLMANN, M.; ZALMANSON, L. Hand on the Wheel: navigating algorithmic management and Uber drivers' autonomy. *Anais da International Conference on Information Systems (ICIS 2017)*. Seul, 2017.

MORESCHI, B.; PEREIRA, G.; COZMAN, F. The Brazilian workers in Amazon Mechanical Turk: dreams and realities of ghost workers. *Contracampo*, v. 39, n. 1, 2020.

MOSCO, V. The Political Economy of Labor. In: WASCO, J. et al. (Org.). The Handbook of Political Economy of Communications. London: Wiley, 2011, p. 358-380.

MURDOCK, G. Media Materialties: for a moral economy of machines. *Journal of Communication*, v. 68, n. 2, 2018.

NEILSON, T. Unions in Digital Labour Studies: a review of information society and Marxist autonomist approaches. *tripleC*, v. 16, n. 2, 2018.

NOBLE, S. Algorithms of Opression. New York: NYU Press, 2018.

POIER, S. My Boss is An App: an auto-ethnography on app-based gig economy. Émulations, n. 28, 2018.

ROBERTS, S. Behind the Screen. New Haven: Yale University Press, 2019.

ROSENBLAT, A.; STARK, L. Algorithmic labor and information assymetries: a case study of Uber's drivers. *International Journal of Communication*, v. 10, 2016.

SADOWSKI, J. The internet of the landlords: digital platforms and new mechanisms of rentier capitalism. *Antipode*, v. 52, n. 2, 2020.

SANDOVAL, M. Enfrentando a precariedade com cooperação: cooperativas de trabalhadores no setor cultural. *Parágrafo*, v. 5, n. 1, 2017.

SANDOVAL, M. Entrepreneurial Activism? Platform Cooperativism Between Subversion and Co-optation. *Critical Sociology*, 2019.

SCHMIDT, F. Digital Labour Markets in The Platform Economy. Bonn: Fried-rich-Ebert-Stiftung, 2017.

SCHOLZ, T. (Org.). Digital Labor. London: Routledge, 2012.

SCHOLZ, T. Cooperativismo de plataforma. São Paulo: Rosa Luxemburgo, 2017.

SCHRADIE, J. The Revolution That Wasn't. Cambridge: HUP, 2019.

SODRÉ, M. A ciência do comum. Petrópolis: Vozes, 2014.

SORIANO, C.; CABAÑES, J. Between 'world class work' and 'proletarianised labor': Digital labor imaginaries in the Global South. In: POLSON, E.; CLARK, L. S.; GAJJA-LA, R. (Eds.). *Routledge Companion to Media and Class*. New York: Routledge, 2020. SRNICEK, N. *Platform Capitalism*. London: Polity, 2016.

UOL TILT. Rappi coleta tantos dados que faz olhos de investidores brilharem; entenda. 16 de fevereiro de 2020. Disponível em: https://www.uol.com.br/tilt/ noticias/redacao/2020/02/16/coleta-de-dados-e-arma-da-rappi-maior-aposta-do-softbankna-america-latina.htm. Acesso em: 17 fev. 2020.

VAN DIJCK, J.; POELL, T.; DE WAAL, M. The Platform Society. New York: Oxford, 2018.

VAN DOORN, N. Platform Labor: on the gendered and racialized exploitation of low-income service work in the 'on-demand' economy. *Information, Communication* & Society, 2017.

VIEIRA PINTO, A. O *conceito de tecnologia*. Rio de Janeiro: Contraponto, 2005. WILLIAMS, R. *Cultura e materialismo*. São Paulo: Ed. UNESP, 2011.

WOOD, A.; LEHDONVIRTA, V.; GRAHAM, M. Workers of the Internet unite? Online freelance organisation among remote gig economy workers in six Asian and African countries. *New Technology*, *Work and Employment*, v. 33, n. 2, 2018.

WOODCOCK, J. How to beat the boss: Game Workers Unite in Britain. Capital & Class, 2020.

WOODCOCK, J.; JOHNSON, M. Gamification: what it is, and how to fight it. *The Sociological Review*, v. 66, n. 3, 2018.

WOODCOCK, J.; GRAHAM, M. *The Gig Economy:* a critical introduction. London: Polity, 2019.

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