

The ambivalence of logistical connectivity:

a co-research with Foodora Riders

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ABSTRACT

This article explores the notion of *logistical connectivity* as a twofold and ambivalent lens. On one hand, connectivity can be seen as a pervasive logistical tool for labour exploitation and surveillance. On the other, it opens up opportunities to establish new kinds of social relations and forms of worker organisation. The analysis draws on empirical data gathered during 2016 in Turin, a city in northern Italy, during mobilisations by Foodora workers. The findings show that logistical connectivity constitutes an unprecedented form of pervasive control, but – under certain conditions – can be shaken and reversed by workers and become a mode of mobilisation and self-organising.

KEY WORDS

platform capitalism, gig economy, workers, subjectivity, digital connectivity, logistics, conflict, Foodora

Introduction

This article explores the notion of *logistical connectivity* as a twofold and ambivalent lens through which we can understand logistics and, more broadly, labour phenomena linked to the so-called gig economy. On one hand, connectivity can be seen as a pervasive logistical tool for labour exploitation, surveillance and an indirect mechanism that allows the internalisation of workers' dynamics of self-enactment (Scholz, 2016). On the other, connectivity opens up opportunities to the same workers to establish new kinds of social relations and self-organisation and, by strategically cutting across 'log in' and 'log out' dimensions, to enable them to make a political space of struggle out of logistical space (Neilson, 2012).

While both in lay and scholarly discourse logistics tends to be mostly considered as an asset in the sphere of production and circulation of commodities, we aim at *re-territorialising* (Deleuze & Guattari, 1987) and therefore politicising logistics, which we understand as the realm where the dimensions of space, movement and strategic thinking productively meet each other. We accomplish this by distancing ourselves from the typical capital-productive perspective and considering instead the resistant kind of logistics implemented by organised and 'connected' labour. More specifically, we will examine the subversive logistics of gig economy bike riders active in the food delivery business organised by Foodora, who navigate the structured space of the city in novel and resilient ways.

In this context, we aim to understand how subjects relate to their work on an everyday basis and how they manage to re-approach it through antagonism and practical re-signification of the logistical connective nexus. In fact, it is the inherent contradiction of the logistical connective dynamic that allows Foodora riders to push back against unfair working conditions. We substantiate this theoretical argument with an empirical analysis that draws on original data gathered during 2016 in Turin, a city in northern Italy, during mobilisations by Foodora workers. Our study is based on *co-research*, a form of inquiry that challenges the division between the subject-researcher and object-researched (Alquati, 1993; de Molina, 2004), which is specifically designed to acknowledge the workers' agency in antagonising capital. In fact, our study sheds light on the riders' remarkable capabilities for self-organisation and engaging in labour struggles (Leonardi, 2017) in the context of digital platforms and logistics, which are understood as an ambivalent bio-power¹ that makes possible a rethinking of the role of living labour and the production of subjectivity (Neilson, 2013).

Theoretical framework: platform capitalism, logistical connectivity and neoliberal subjectivities

Platform capitalism (Srnicsek, 2016; Armano, Murgia & Teli, 2017; Vecchi, 2017) is a term that brings together a number of different concepts. It reveals not only the post-Fordist character of logistics but also the convergence of a hyper-mobile labour force

1 Bio-power is a term originally coined by Michel Foucault. It is a power that no longer deals simply with legal subjects over whom the ultimate domination was death, but a mode of power exerted over living beings, and over life in general, through 'an explosion of numerous and diverse techniques for achieving the subjugation of bodies and the control of populations' (Foucault, 1979 [2008]:140).

with means of communication and means of transportation that are configured as a functional and dynamic networked space. Digital platforms can thus be seen as logistical 'intermediary digital infrastructures that efficiently coordinate "subjects" and "objects", by mediating customers, commodities, information, advertisers, service providers, producers and suppliers' (Srnicek, 2016:43–45), thereby *de facto*, bringing about a digitalisation of logistic principles.

Such a logistical colonisation of labour space through digital technology can perhaps be traced back to the 1980s (Castells, 1989), but, along with the digitalisation of cities, it has accelerated in the aftermath of the 2007–08 economic global crisis (Drahokoupil & Fabo, 2016; Scholz, 2016; Valencu & Vendramin, 2016; Drahokoupil & Jepsen, 2017). In fact, the recent economic downturn triggered a powerful wave of capitalist colonisation of urban space via mobile connectivity and 'spatial and locative technologies' (Kitchin, Lauriault & Wilson, 2017:ii).

The platform economy is essentially logistic-driven capitalism that finds its condition of possibility in the deployment of information and communication technologies by post-Fordist capital (Dyer-Witheford, 1994). It does this in order to flexibilise and mobilise work through its displacement from the environment of the factory to offices and homes, thus 'all of society lives as a function of the factory and the factory extends its exclusive domination over all of society' (Clever, 1992:137). In such a context, previous logistical practices that were tied to specific working environments such as factories, transport hubs and warehouses expand, colonise and capture new forms of labour.

There has always been an elective affinity between logistics and information and communication technologies in the same way as means of transportation most frequently overlap with means of communication. That is because the general goal of logistics is to connect and circulate productive assets such as subjects, objects and information effectively, thus overcoming spatio-temporal barriers (Neilson, 2013). Accordingly, logistics epitomises a mode of production based on commodity and supply chains (Galloway, 2006).

A concept that signals such a profound link between logistics and ICT is connectivity, which implies both a complex technological infrastructure for mobile and internet-connected multimedia communication and a contradictory relational modality. The concept of connectivity makes it possible to describe how the use of technology can both enable and deny communities and sociability. This concept is thus ambivalent in several respects, because connectivity is simultaneously both an 'objective' ICT structure and a 'subjective' modality for operating within such a structure.

While connectivity represents the content of this objective/subjective communicative/informative structure, logistics represents its 'form', constituting the rationale through which animate and inanimate commodities, living and dead labour, are appropriated by capitalism for the purposes of valorisation and capital accumulation. This is because ubiquitous connection means ubiquitous labour and the ceaseless circulation of commodities. As Neilson and Rossiter (2011) put it, 'logistics plays a role in controlling the movement of labour power as much as it applies to the passage of other commodities' (63). It is according to such a capitalist 'form' that

logistical connectivity deconstructs and reconstructs social digital spaces by reconfiguring traditional boundaries and parameters such as present/absent, member/stranger, near/far, included/excluded, interior/exterior, north/south and east/west.

We therefore claim that the connectivity–logistics nexus allows us to explore important transformations of current working modalities, by treating work as a category of valorisation taking place anywhere and everywhere (Dujarier, 2008) whose boundaries then become limitless (Loriol, 2017), incorporating, via its digital facets, important logistical components.

Platforms for managing work have existed since the early 2000s (e.g. eLance, Freelancer, oDesk) and have paved the way for the growth of on-demand/gig economy platforms and for substantial changes in work organisation (Huws, 2017). Nowadays, individuals can valorise their own condos (Airbnb), creative production (Etsy) or transportation means (Foodora) by circulating them inside a digital network. As a consequence, connectivity has further encouraged the pre-existing trends, by incentivising the logistically effective circulation of freelance work and therefore the whole gig economy mode.

Investigating the logistic–connective nexus here enables us to look deeply into the capability of digital platforms to valorise linguistic practices, affective links, cooperative relations, life-world and subsume them, through logistical rationales of circulation of commodities via ICT-powered networks. This leads us to conclude that logistics subsumption takes place when means of communications become almost completely interchangeable with means of commodity transportation as well as means of valorisation.

Moreover, at a meso level of abstraction, platform capitalism is characterised by its capability to increase the organisation of workers and markets logistically in order to enhance its flexibility. Illustrative of this is the process of ‘uberisation’ (Abdelnour & Friot, 2016; Cingolani, 2016), which signals the extreme mobilisation and flexibilisation of work by emphasising its freelance aspects via the intermediary agency of digital platforms.

In such a context of connective logistical highways, freelancing systematically moves most of the risk-taking onto the single worker, with the result that individuals enter into an unconventional environment combining on one hand the enabling perspective of being their own entrepreneurs (Foucault, 1979 [2008]) with, on the other hand, very high levels of precariousness (Beck, 1992; Armano, Bove & Murgia, 2017). In this article, we analyse how such tendencies are implemented through the specific forms of work arrangement, relational configurations and ICT technology provided by digital platforms, which thereby provide a condition for the shaping of neoliberal subjects (Boltanski & Chiapello, 1999; Bologna, 2018). However, as we will mention later on, while logistics try to shape workers as instrumentally flexible subjects that efficiently adapt to the imperatives required by the conditions of circulation, such a contradictory subjectivation process can generate antagonism and resistance and, with it, the potential to break the whole logistics chain (Cuppini, Frapporti & Pirone, 2015).

Among different types of digital platforms (De Groen, Maselli & Fabo, 2016; Schor, 2016), we focus here on one that could be categorised as a ‘lean platform’ (Srnicek, 2016:50). This category is characterised by a concentration on a specialised task food delivery and by the displacement of the business risk by outsourcing most

of its assets. By 'lean' Srnicek means that these kinds of businesses tend not to own the means of production (such as bikes, cars or outfits), relying on the worker's investment in these things, and don't enter into an employment relationship but 'partner' with self-employed workers.

Such a combination of self-employed work arrangements, ICT and logistic instrumentality allows work boundaries to become blurred, uncertain and therefore problematic because it is in this very opacity that 'free labour' hides (Terranova, 2010; Hesmondhalgh, 2010; Huws, 2014; Armano et al., 2017). In the context of this blurring of boundaries, we are particularly interested in how the neoliberal subject navigates a way through this contradictory logistical scenario. And it is in this liminal context that we will seek to make sense of the capability of the Foodora riders to re-appropriate the logistical connective nexus. As a realm of bio-political management² – which does not affect the formally autonomous character of freelancers – logistics can therefore be conceptualised both as a site of power and as a struggle (Neilson, 2012).

Fieldwork: co-research as method and transformative process

Consistent with our goal of exploring how subjects navigate the logistical–connective space, we aimed to develop a participatory form of knowledge production in order to analyse the concrete ways Foodora riders have been dealing with contradictions and everyday conflicts, in order to generate an understanding based on their lived experiences (Hamm, 2015).

Foodora is a German online food delivery company that delivers ready-prepared food to customers' homes from restaurants that otherwise would not offer the option to deliver. It started off in Munich in 2014, then relocated its headquarters to Berlin and has since expanded to more than ten countries, serving around 9,000 restaurants. Foodora customers can choose to access this service via the company's website or through a mobile app, enabling them to browse restaurants in the area, place their order and pay. Once the order is ready, it is picked up by one of Foodora's couriers and delivered to the customer 'in about 30 minutes'. The company relies on an online platform which coordinates the movement of the cyclist couriers through the delivery process. The so-called riders – who work for the company as self-employed workers – access their work by logging on to the platform via their cell phones. Once connected, orders are assigned automatically by the platform (De Stefano, 2015; Prassl & Risak, 2015).

In our fieldwork, we gathered empirical data through in-depth interviews and focus groups, embracing what Alquati (1993) defines as *co-research*, which is a collective process of production of knowledge and action realised through interaction and observation of everyday practices. Doing co-research means creating a collective space where experiences can foster critical consciousness about common-sensical praxis, therefore normatively aimed at re-gaining a sense of agency. We understand

2 Foucault (1976 [1979], 1979 [2008]) made a distinction between the two political technologies that compose biopower: discipline and biopolitics. Biopolitical techniques of managerial control operate through the government of the freedom of the subjects, whose autonomy is therefore not directly questioned.

Table 1: Socio-demographic characteristics of research participants

Riders' (fictitious) names	Age	Sex	Educational degree
Roberto	23	M	High school diploma
Giovanni	36	M	Bachelor's degree
Pietro	40	M	High school diploma
Luca	29	M	High school diploma
Paolo	25	M	High school diploma
Alessandro	20	M	High school diploma
Graziella	24	W	High school diploma
Giuliano	27	M	Bachelor's degree
Simone	29	M	Bachelor's degree
Luigi	23	M	High school diploma

narratives of experiences as a self-reflective resource of the workers, especially when the workers in question must deal with powerful neoliberal narratives. In this respect, the stories that emerge produce an alternative frame and with it a possibility of transformation.

We were able to access the field by attending various protest initiatives organised by Foodora workers, starting with their first picketing activity on 8 October 2016.³ During the following weeks we attended a number of meetings and assemblies organised by the workers. This gave us an opportunity to make contacts and craft the first reports. Initially, we arranged in-depth interviews and subsequently organised some focus groups. We selected ten workers who were particularly involved with the labour mobilisation, and examined their insights into the ambiguities of their working condition. We focused on the peculiarity of the relational aspects and on the conflicts that ensued, in order to interpret our empirical material in the broader context of the transformations of the labour market. Table 1 provides a brief summary of some of the characteristics of these riders.

Most of our interviewees represent the typical urban-based demographic of platform capitalism workers (European Commission, 2016; Smith, 2016): young college students.

3 The date most usually quoted as marking the beginning of the protest of the Foodora riders in Turin is 8 October 2016, the day the riders organised the first informational gathering in Piazza Vittorio Veneto, one of the meeting places for riders, at the beginning of their shifts. However, Foodora workers tend to identify the beginning of their fight some months earlier, when they created a WhatsApp group and started organising a petition.

However, due to the crisis and the consequent lack of job opportunities, among the riders interviewed, at the time of our field research, there were also some older adults who had to find alternative work following the loss of their previous jobs.

Those workers earned about €5 per hour (or, when paid piece rates, €3.60 per delivery), a very low income which they initially accepted peacefully, given the absence of real alternatives and the initial phase of adjustment of the company, which had just entered the Italian market. However, when the company moved beyond this adjustment phase, working conditions were not improved and levels of income were not increased. On the contrary, Foodora tried to worsen the working conditions, by switching to payment by piece rates, causing a general sense of frustration.

Findings

The logi(sti)cs of permanent connection

According to the theoretical framework we outlined in our introduction, the ambivalences of the logistics/connectivity context can be understood as outcomes of the tension between (infra-)structural elements and subjective practices. In the specifics of our case, such tension is first of all exemplified by the riders functioning logistically when permanently connected to the algorithmic (and human) management of the platform. Here, we can understand logistics/connectivity understood as an aspect of the technological infrastructure. However, when inquiring about the algorithm, the interviewees claimed that the assignment of shifts was actually made by a human being – the person in charge of the Turin area, although the allocation of tasks during those shifts was made by the algorithm assigning deliveries during the working shift, demonstrating that there was also a subjective aspect.

The friction between the purely technological and the human forms of management derives from the fact that the manager can exercise a certain discretion in the assignment of the shifts, but cannot intervene in their management in terms of task allocation. The mechanism can be illustrated by a borderline case in which a high-performing worker, consistently assigned the most distant deliveries, asked for an explanation and was told by the manager that he could not over-ride the computation made by the algorithm; he could only advise the worker in question to cycle at a slower pace in future in order to prevent the algorithm from assigning him increasingly demanding tasks:

One of our colleagues, who went very fast, was always assigned the most distant orders. At one point, he went to the office to complain to the fleet manager who told him 'Oh yes, it's true that the algorithm gives you the furthest deliveries . . . slow down!' (Roberto, 23 years old)

Unlike what happens with respect to the pace of work, the discretion of the managers plays an extremely important role as regards the mechanism of assignment of shifts. In fact, personal knowledge and relationships come into play, in a way that is not very different from what happens in work that is not mediated by platforms. In this case, the contradictions of logistics/connectivity display the overlap between connectivity understood as technology and connectivity understood as an inter-subjective relational dimension:

Foodora relies on an online platform called Shift-plan, which provides a weekly chart with the various shifts and you select the ones you want. At that point the manager of the shifts selects the riders [. . .] it really depends on how nice you are to those who assign the shifts. (Alessandro, 20 years old)

I was on good terms with the shift manager, he knew I was always available, when he was in trouble he called me and in return he tried to give me the shifts I wanted. Such treatment was not reserved for everyone and above all it was not reserved for those who did not have a personal relationship with that person . . . it is a matter of personal relationships. (Giuliano, 27 years old)

The assignment of shifts is managed through an online platform, which in this case is used, according to our interviewees, in a completely arbitrary manner by the managers. Thus, the 'objective'/subjective' overlap concretely turns into an aggravating combination of non-intelligibility of the algorithm with the opacity of the system of assignment of shifts used by the persons in charge. In this process, the riders experience a progressive reduction of agency and find themselves lacking any tool for collective negotiation of their working conditions. The experiences of the riders we interviewed thus highlight how digital logistical connectivity is instrumentally utilised as a labour control tool that reproduces asymmetric power relations between Foodora's management and the workers.

The working life of the interviewees was therefore quite far from the rhetoric used by the company to describe how to 'become a rider and enjoy the freedom'.⁴ Freedom and flexibility, in fact, are explicitly mentioned both in company publicity and by recruitment agents during the job interview. In both cases the activity carried out for Foodora is described as a job that takes place 'whenever one wants,' which perfectly matches the main motivation that pushed the interviewees to become a rider: the possibility of being paid for the passion of biking, together with the advantage of flexibility. In a Foucauldian perspective, the workers who are requested by the company are in this sense 'docile subjects' (Foucault, 1975 [1995]), shaped by power, coercion, but also by powerful narratives. In this case the key word is flexibility, which operates both at subjective and objective levels of logistical-connectivity: acting simultaneously both as a personal motivation and as a systemic imperative of logistical commodity circulation.

According to the interviewees, however, this notion of 'working when one wants' is challenged: it turns out that in practice they must be always available, constantly connected and not take their eyes off the screen of their smartphone. This results from competing with each other against a scarcity of shifts and abundance of workers. This dictates a form of work organisation for the riders in which the required levels of logistical functionality do not just dictate their constant availability but also their steady response in taking orders:

When you say you are available, you cannot really take on other commitments, so Foodora also takes the time when you gave the availability, because obviously you

4 See Foodora's website: <https://www.foodora.com/careers/riders>.

do not go to the cinema, you cannot carry out other jobs. Maybe if you work as a translator or proofreader at least you can work meanwhile on the computer, but generally if you declare yourself available, then that free time is held. (Paolo, 25 years old)

They send the order to you and then you have to accept it. Even if you are careful, the application may not work . . . If it notifies you five minutes later, then the order may get either re-assigned or the algorithm takes note that you took too long to accept the order. (Luca, 29 years old)

As already mentioned, limitless connection means limitless labour. In fact, the fact that workers must declare their availability, and have to constantly check their mobile phones, has the effect of occupying most of their days, even when there are no orders to be completed. Workers must always be available, otherwise they will be quickly replaced by anyone from the large reserve army of potential Foodora riders. A reservoir of labour is constantly reproduced because hiring does not cost anything, which means that Foodora can circulate labour (as a commodity) for free. In this way, the company can afford to hire people without making them work. In fact, Foodora is not even obliged to assign shifts or guarantee any minimum number of hours and/or a corresponding fee because riders are hired through self-employment contracts.⁵

The need for continuous availability is reinforced by the fact that the company only confirms shifts two or three days in advance, and this means that the riders are not able to organise their free time or other jobs to fit in with their work patterns. This means that the vaunted possibility of being able to freely choose one's working time becomes more a desire than a reality, displaying once again how subjective and objective levels of the logistics/connectivity nexus can sometimes overlap while sometimes being very distant. Even a simple shift change request becomes complicated in work mediated by platforms:

There was a whole period in which management demanded that we find substitutes for ourselves . . . Now this thing has waned because we are really so many who want to work that people are queued up waiting to take on any available tasks so there is no need to look for a substitute. As long as your substitute does not accept it, you stay on duty and if he/she do not show up, it's you who did not show up for the round. (Giuliano, 27 years old)

With the introduction of piece-rates (instead of hourly pay), it was a common experience for workers to spend hours of their work shift without receiving any order of delivery, and consequently without receiving any compensation. This took place while the rider was wearing an outfit that advertises the company's brand, which could be

⁵ In 1995 an Italian regulation introduced a hybrid status between employment and self-employment, the so-called 'coordinated and ongoing collaboration' contracts (*contratto di collaborazione coordinata e continuativa*, abbreviated as 'co.co.co'). 'Work is carried out on a continuous and coordinated basis with the contractor. Services are mainly personal in nature' (Article 409, paragraph 3 of the Italian Civil Procedure Code, and Article 2 of Legislative Decree 81/2015 (Jobs Act – Labour Contracts Code)) (Eurofound, 2016). More precisely, workers continue to be classified as self-employed workers but are supposedly given special status with regard to social protection.

regarded as work in all respects, albeit unpaid, since the worker is required to perform the function of 'living advertising' without recompense. For Foodora this system is unquestionably cheaper than buying advertising space: it is indeed actually free. Free labour is present in multiple forms, for example in relation to promotions aimed at customers. For instance, this happened when workers were required to go to the company headquarters during periods of special promotions, in which customers are offered free drinks at the time of order delivery, without any extra payment. Moreover, riders are expected to constantly read and respond to text messages, even when they are not working, because they are the main communication channel used by managers, as well as the Foodora app, to check the availability of new jobs:

To be honest, I must say that many of those beers ended up in improper hands . . . (laughter). (Alessandro, 20 years old)

The remark above suggests how several riders resisted the company's imposition of unpaid tasks – such as to carry the weight of promotional complimentary beverages – by appropriating the merchandise. Although we identified different forms of resistance to the requirement for constant availability at work – as we will illustrate in the next section – the margins of autonomy promised in the recruitment phase are very limited in the daily life of Foodora riders. In fact, if flexibility is one of the main incentives that initially motivates aspiring riders, workers soon discover that, beyond the proclamations of an informal and friendly atmosphere, there is in fact a significant asymmetry of power between riders and managers, mainly based on the requirements of being always available and permanently connected.

The algorithm as battleground and modality of resistance

Capitalist innovation affects the world of work by transforming its essential modalities, through a recombination between the means of production and the human agent (Alquati, 2001). The starting point for a critical analysis of this issue is a grasp of the ambivalences of innovation and the technology that accompanies it.

In our case study, connective technology acts as a logistical tool of control, exemplified by the algorithm that allocates orders and measures the riders' performance, indicated by the necessity to log in at the start of the shift and the constant geo-localisation. However, at the same time, workers can use these technologies in their own favour as a means of mobilisation for the improvement of their working conditions.

In this article, we have analysed the forms of control to which riders are subjected, but we are also interested in the riders' practices aimed at improving their working conditions. In order to obtain workers' rights, riders re-signify logistical mobilisation as political mobilisation: rather than behaving as independent units of production; rather than being in permanent connection with the company, they enter into a relationship with each other, discuss, reason together and collectively create strategies. This illustrates once again the importance of placing the accent on the relational dimension. In this context it is important to note that the riders we interviewed had met virtually (by joining a company chat group set up by the managers) before they actually met in person:

[We had] a WhatsApp group created by management where we were signed in at the time of recruitment, through which they coordinated shifts, and could deal with problems in real time during the shift. When the chat began to grow we also began to know each other virtually through that chat then we re-met on the street, we recognised each other by the outfits. (Paolo, 25 years old)

The fact of not knowing each other personally, but only through a WhatsApp's chat, did not prevent workers from building personal relationships and activating processes of aggregation and confrontation that have subsequently resulted in mobilisations. If logistics aims at reducing the risk of over-stocking and flawless circulation, the riders' initiatives exemplify how the constrictive boundaries of the logistical–connective nexus can be overcome by subjects operating within such structures:

Oh yes, it has created a strange sociality, which then consolidated. I think I can say that one of the merits of this little struggle is to have created a very strong community. (Luca, 29 years old)

As the riders established dialogue amongst themselves, they started taking advantage of being already included in the same chat: they exchanged telephone numbers and created another chat exclusively devoted to Foodora workers' discussion of working issues. In other words, they turned what Alquati would define as the technical composition of labour created by the logistics–connective infrastructure into a means of political engagement, thus revealing how logistics–connectivity can become a circuit of mobilisation of struggle rather than just the circulation of commodities:

We created a group that was called 'Foodora damage refund', which was meant to obtain reimbursement for the maintenance of the bikes. Everything started from there and since then has grown slowly and has reached these levels. Our strength in my opinion was that of having made a community that unites us through the will to make a change. And this is what in my opinion allowed us to go beyond virtual friendship [. . .]. There are several strategies that allow us to use to our advantage the same technological tools used by the company. In the absence of official media – managers did not use either email or paper letters – for example, we quickly learned to keep screenshots of conversations in order to protect ourselves: I made a nice collection of screenshots, I kept everything. (Paolo, 25 years old)

As we write this article, a group of workers has taken legal action against the company for breach of privacy, because they used to address individual workers by means of the publicly used chat. Furthermore, the riders have challenged the company's constant geo-location surveillance and the fact that they have to use their personal mobile phones for work (e.g. the requirement of downloading the application; providing their personal data to the restaurants associated with the service and to the customers who make the home delivery orders). The use of the 'corporate chat', in which texts are sent to all colleagues, regardless of whether or not they are directly concerned with the content of the message, meant that the WhatsApp group became a place where the workers could express their grievances, a sort of virtual tool for 'washing dirty laundry in public':

Unpleasant dynamics emerged from using the 'official chat'. Because there was not a physical company or a chance to meet physically, the chat turned into a grievances room. It became the only way one could express discontent and speak to anyone from the lowest ranked employee to the Manager of Foodora Italy. (Giuliano, 27 years old)

Once again, the centrality of the relational aspect implied by digital connectivity and logistical needs is crucial for understanding how the alliance between Foodora workers and power dynamics are configured in a technologically mediated working environment. The fact that the Foodora workers have created their own WhatsApp group alternative to the company's own chat room to coordinate their activities and be able to hold free discussions without fear of repercussions, shows the ambivalence of online platforms, as well as the opportunities for action that subjects can put in place to re-appropriate what, until recently, were effective corporate control tools.

The need arose from an extremely simple request: demanding the company to take over the maintenance of bicycles. This was an important issue for workers because the means of transportation, as well as mobile phones, were not provided by the company so they had to pay from their own pockets for this maintenance. From these requests, the workers told us, the first forms of mobilisation began: they met, after having known each other only virtually (a circumstance that is different from many other workplaces). They broke the isolation of their condition and started organising the first assemblies, refusing to talk individually to bosses in face-to-face meetings and demanding the presence of the union at these meetings.

The first Turin protest did not lead to immediately positive outcomes. Especially among those who participated in mobilisations, losing shifts assignment of work was rather frequent. At the time when the interviews and focus groups were conducted, for example, the most exposed riders reported not having been given any shifts for about two weeks. The non-assignment of shifts obviously follows a punitive logic, as these workers had also been eliminated from the chat created on WhatsApp by the company, which is the main channel of communication between managers and riders:

When we started complaining overtly, individual punishments came out, which ranged from temporary suspension, from the chat, and then being cut off from the only channel of communication with the whole company and colleagues, when cutting shifts for 1–2 days. [. . .] Every time we have been expelled from the chat then they are deprived of blocks of shifts. Therefore: 'You cannot talk anymore and you cannot even work anymore'. (Luca, 29 years old)

From the company's point of view the goal was to prevent workers from expressing their opinion if this was deemed inconvenient, as well as to bar them from participating further in the discussion, even as a listener, and finally, to prevent them from being assigned shifts. Furthermore, these punitive measures were enacted publicly, in order to set an example to other workers. Within Foodora, dismissal can be carried out effectively simply by a failure to assign shifts, without any obligation for formal communication. Workers are logged out or no longer have access to the application that regulates the operation of the delivery service. This is how a simple disconnection from

the logistic circuit of the profile from the company platform takes the place of a letter of dismissal, thereby circumventing the whole system of guarantees and protections typical of traditional employment relations.

Despite the negative consequences for the riders after the first mobilisations, their counter-use of the technology used by Foodora shows the dialectics of combining connective logics with logistical goals of online platforms and the possibility of opening spaces for collective action. In the following months, the Turin riders went to meet their colleagues in Milan to coordinate protest initiatives at a larger intra-regional scale and then aimed even further, escalating the struggle to the national and European levels. This process contributed significantly to raising their issue at the level of public national debate, thus expanding the protest to other Italian cities, such as Bologna, where riders set up a local trade union, the 'Riders Union Bologna'. While limited this initiative points to the accomplishments of this kind of mobilisation, which has already produced successful campaigns against companies such as Uber in the UK and Pony Express in the USA.

Logistical–connective ambivalence: some provisional conclusions

The findings of our analysis significantly support our initial theoretical considerations about logistical–connective ambivalence: while being instrumental to gig economy labour, the logistical–connective nexus can also become a productive terrain of antagonism as 'connected' workers employ the tech-savvy communication skills, for which they were hired, for assembling a language and a practice of insubordination through the disruption of logistical circuits. Thus, while logistical connectivity constitutes an unprecedented form of pervasive control, under certain conditions, it can be shaken and reversed by the workers and become a mode of mobilisation and self-organising.

Understanding the forms of resistance of riders and, in particular, the ways in which these forms can increase their agency is important for developing insights into their capacity for self-organisation, which albeit of a reactive nature (instead of proactive), was based on the workers' critical analyses of their own situation.

From a contractual point of view, it is clear that self-employed work arrangements do not allow these workers to enjoy labour rights and social protection, while at the same time denying them the much-vaunted flexibility, which remains in fact the prerogative of the company. The workers' narratives also unveiled how lean platforms use the rhetoric of self-improvement, suggesting that their workers operate in a world in which activities are freely chosen and each individual can decide his or her own lifestyle and work styles.

The subjects' experiences showed unambiguously how the very devices that should (according to the company) increase the degrees of freedom of the riders, prove in practice to be powerful means for activating new and unexpected forms of free work and self-exploitation, because uninterrupted connection means uninterrupted work. Free work is mainly hidden interstitially in all those 'shadow' activities, unpaid but necessary, placed upstream, downstream and alongside the paid work. So, behind a smart and captivating language, founded on the rhetoric of freedom of choice, lurk instead a series of imposed activities, which often make a self-employed job indistinguishable from a precarious one (Abdelnour, 2012).

In this context, technological innovation and the promise of flexibility and autonomy are harnessed to a progressive regression of workers' protection. Moreover, at least in the case of our study, we detected a growing power asymmetry between the workers and the company's top managers, as the latter increasingly displayed authoritarian attitudes and refused to attend meetings when the workers acted as a group.

On the other hand, our research has shown how connectivity can open up the possibility of transforming logistical territories into trenches of resistance by signifying connective technology and a system of workers' recomposition. During these years, in fact, the fragmentary relationships among workers have increasingly developed in an intermediate space between being face-to-face and being online, with the creation of self-organised tools for their own use. As we have seen, in 2016 'Foodora damage refunds' was born, the chat on WhatsApp for riders only, the first tool for reflection, sharing and organising. Shortly thereafter, a document proposing working improvements was prepared to be signed up to and presented to managers.

The riders managed to create a comprehensive campaign of protest and boycott, raising the public debate at the national level. They have thus been able to combine traditional organisational methods such as flyers, strikes, marches, local assemblies and contact with workers in other cities, with a variety of newer media-driven tools, for example participating in television broadcasts, interviews and creating a commotion on social media. The Turin Foodora riders have shared the story of their fight by these means and used their Facebook page, the Deliverance Project, to circulate their activities, develop new demands and expand their community, which is now composed of riders working for Foodora, but also for other companies, such as Deliveroo, JustEat and Ponyzero.

The escalation of this campaigning has made clear to the riders that the stakes are no longer just about negotiating a decent contract with the company, but questioning more generally the state of affairs in which a job market has developed that systematically creates precarity. Thinking of a broader community of struggle, they write that

In the struggle we have shared intelligence, practical skills, useful contacts, bonds and trust, we have known and recognised, we have become something more than mere colleagues, something different from atoms running in traffic to orders from a computer. (Deliverance Project, 2018)

This brings us back to the issue of lack of collective representation which continues to play an important role. As much research has shown in other contexts (Conaty, Bird & Ross, 2016), even in the case of these riders, the reaction to approaches by the trade unions has been one of substantial distrust and difficulty in understanding their own condition. In this sense, the case of Foodora confronts us with several important questions. In our view, the challenge that they pose is not mainly concerned with regulation but above all, with interpretation. Some of the new research questions opened up by this investigation include the general theme of the forms of subjectivation that matured within the mobilisation, the specific aspects that are linked to the subversion of logistical logics and the need to focus on the relational dimension, all of which would benefit from being explored in other broader contexts.

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