

Cycling as a food-delivery rider. Or the difficult negotiation among speed, safety and accuracy

Francesco Bonifacio
Università Cattolica del Sacro Cuore, Milano
francesco.bonifacio@unicatt.it
DOI: <https://doi.org/10.6093/2611-6693/9627>

Abstract

Platform-based food-delivery riders have been primarily analyzed in relation to organisational or regulatory issues, thus overlooking the actual practices that involve them materially, bodily and cognitively. In particular, less attention has been given to a central aspect of this occupation: cycling. By understanding food-delivery work as a social practice (Hui *et al.*, 2016), this paper aims to show that:

1) the organisational and material conditions in which food-delivery work takes place frame the emergence of a specific mode of urban cycling, which concerns the difficult negotiation of speed, safety and accuracy.

2) in order to meet the requirements of practice, riders draw on a set of norms and practical skills by which they define the correct way to accomplish this work.

The research draws on a seven-months Milan-based observant participation (Wacquant, 2015) – during which the author worked as a Glovo part-time rider – supplemented by 21 in-depth interviews with workers.

Keywords: riders; cycling; practice theories; platform work.

1. Introduction

“My brother and I used to joke about it... when we were riding slowly on our lunch breaks... we’d say: “can you imagine doing a delivery at this speed? [...] it's not that you have to go like crazy, then you'll crash... but you have to have a *certain rhythm*, otherwise... you won't make it. I don't speed, but I have a constant rhythm when delivering, which is *not the same rhythm as when I'm driving the bicycle for my own sake*”.

(Dolores, 33, F)

Although it has attracted only marginal interests from the many scholars who have studied food-delivery work, cycling is a crucial concern in this work. The literature on food-delivery riders is divided into three main strands of research. First, as a pivotal example of platform

labour, food-delivery work has been analyzed in relation to historical processes concerning the flexibilization of labour relations and the crisis of standard forms of employment. Labour law scholars have criticized the self-employed status of food-delivery workers, arguing for platforms accountability as employers (e.g. Aloisi, 2021; De Stefano, 2019). A second interpretative strand has addressed the implications of the organisational model of digital labour platforms on workers representation. A substantial amount of movement studies has witnessed the emergence of new forms of workers organisation (Borghi *et al.*, 2021; Cini *et al.*, 2021; Leonardi *et al.*, 2019; Marrone, 2021; Tassinari & Maccarone, 2020), emphasizing aspects of solidarity in response to the progressive individualisation of the workforce. A third area of research, mainly addressed by labour sociologists and organisation scholars, has explored new forms of labour process control enabled by the use of algorithmic technologies. Studies conducted in various national contexts (Barratt *et al.*, 2020; Griesbach *et al.*, 2019; Heiland, 2021; van Doorn, 2020; Veen *et al.*, 2020) have noted the existence of information asymmetries between platforms and workers, highlighting the opacity of the so-called algorithmic management, and the use of reputational systems geared to increase workers' productivity. By focusing primarily on the relationship between riders and platforms from an organisational or a regulatory perspective, the literature seems to have overlooked the actual practices that materially, bodily and cognitively involve food-delivery workers. Which is quite surprising, considering the attention reserved to other similar occupations, such as the urban bike messengers (e.g. Fincham, 2007; Kidder, 2011).

Only more recently researchers have turned their attention to “the prosaic labour of actually being a delivery worker” (Timko & van Melik, 2021, p. 498). For instance, by framing food-delivery work as a dirty labour, Gregory (2021) highlighted the risks associated with riding in urban traffic. Similarly, the ethnography by Timko and van Melik (2021) explored the daily experience of food-delivery riders, describing how they cope with the anticipation of risks and unexpected events while cycling.

Capturing the riders' point of view, these studies have accurately described the workers' experience, addressing hotly debated issues such as safety and precariousness from a subjective standpoint. This article aims to follow this perspective, addressing cycling as a crucial analytical dimension in order to observe the implications of the way food-delivery work is organised by digital labour platforms. Firstly, it shows how the way this work is algorithmically and spatially organised reflects on the daily experience of riders, setting requirements that are difficult to balance. Secondly, it shows that in order to meet these requirements, riders incorporate specific skills and practical norms, based on which they define the correct way of cycling as a food-delivery worker. To explore these issues, the paper aims to answer two main questions:

- 1) What are the organisational, technological, and material conditions that frame the emergence of a specific form of urban cycling?
- 2) What cognitive, tacit and bodily skills are mobilized by riders to mediate different work requirements? Or, in other words, how does one (learn to) cycle as a rider?

From a theoretical point of view, the article draws on the heterogeneous corpus of practice theories (Hui *et al.*, 2016) that have found room within the field of mobility studies and, more specifically, in the “sociology of vélomobility” (Cox, 2019). The next paragraph presents some

sensitizing concepts for the analysis of the empirical material, particularly drawing on Schatzki's theory and on practice scholars interested in the study of learning from a situated perspective. In section 3, we more clearly delimit the object of study, providing some methodological considerations. In sections 4 and 5, we address the first and the second research questions respectively. In the last section, we provide some conclusive considerations.

2. What we refer to when we talk about practices

Practice-based studies (Gherardi, 2019; Hui *et al.*, 2016) are a set of social theories as heterogeneous as the theoretical backgrounds from which they have originated. Beyond internal disagreements – e.g. between humanist and post-humanist theories – they share the purpose to resolve classical dualisms in sociological thinking: individual/structure; mind/body; subjectivism/objectivism¹ – by recognizing an ontological primacy to practical activities². Moreover, practice theorists agree in conceiving practices as double articulations, as the flexible arrangement of different elements and as situated performances (Shove *et al.*, 2012), while disagreeing in defining their constitutive ingredients – see, for instance, Shove *et al.* (2012) and Reckwitz (2002).

This article principally draws on Schatzki's theory, as it seems particularly suited to explore the endogenous emergence of a normative frame of an occupation without standards on neither a regulatory nor practical level. According to Schatzki (2005, p. 58), practices are primarily an open-ended set of actions orchestrated by virtue of three main organisational principles: “a pool of understanding, a set of rules, and a teleoaffective structure”. It is important to note that none of these elements refers to an individual or to a structural plane. “The understandings that link the actions composing a practice are better construed as abilities that pertain to those actions³” (Schatzki, 2005, p. 59). Rules involve “explicit formulations, principles, precepts, and instructions that enjoin, direct [...] people to perform specific actions” (Schatzki, 2010b, p. 79). Examples of rules that structure food-delivery work are the organisational procedures implemented by platforms to govern workers – the payment mechanism, the (opaque) reputation system underlying algorithmic management – but also indirectly, the traffic law that riders must deal with during delivering. Rules are associated with authority, but they “never *simpliciter* determine what people specifically do” (Schatzki, 2005, p. 60), as practices are also governed by a normative frame that Schatzki calls *teleoaffective structure*: a “range of acceptable or correct ends, acceptable or correct tasks to carry out for these ends, acceptable or correct beliefs (etc.) given which specific tasks are carried out for the sake of these ends”. The lemma *telos* indicates that all practices are goal-oriented, meaning that they entail a set of “ends that

¹ In this regard, many contemporary practice-theories have their roots in Giddens' structuration theory, and Bourdieu's theory of habitus – both usually labelled as first-generation practice scholars.

² As Nicolini (2011, p. 602) noted, practices “are not [...] just mere descriptions of what people do; they are meaning-making, identity forming, and order-producing activities”.

³ Relying on a sophisticated philosophical elaboration that is beyond the scope of this article, he distinguishes between practical and general understandings, defining the former as a distinct concept with respect to habitus or practical consciousness – see Schatzki (2002).

participants should or may pursue” – e.g. delivering food as quickly as possible. The second term indicates that actions are also affectively determined. “The specification of how someone will proceed for the sake of certain ends is tied to her beliefs, hopes, and expectation” (Schatzki, 2001, p. 60). A final crucial dimension concerns the material arrangement where practices take place. On this point, Schatzki distances himself from the principle of symmetry of post-humanist approaches – e.g. Gherardi (2016) – as well as from scholars who treat materiality as an integral element of social practices – e.g. Shove (2016). According to him, materiality is ontologically distinct from practices, but intimately connected to them according to four types of relations: causality, prefiguration, intelligibility, and constitutions. In Section 4, the concept of prefiguration will enable us to explain the role played by the city and its material arrangement in structuring food-delivery work.

Scholars have recently highlighted the implications of Schatzki’s theory for organisation studies, emphasizing its contribution to understanding the micro-foundations of work practices and organisations (Loscher *et al.*, 2019). Indeed, by elaborating the organisational principles that orchestrate practices, Schatzki’s theory allows to explain how different elements hold together, forming a socially recognizable entity – e.g. a distinct way of cycling. However, what it does not illustrate as effectively is how practices reproduce themselves over time. Firstly, because it remains mostly at a highly theoretical level. Secondly, because – as most practice scholars – Schatzki pays little attention to the role of social agents, neglecting how they become “able to meet the requirements of a practice” (Alkemeyer & Buschmann, 2016, p. 22), and what are the implications on the practice itself, in terms of reproducing or changing its normative standard. To explain how a practice is underpinned by “successive moments of performances” (Shove *et al.*, 2012, p. 7), we may turn our attention to studies on situated learning (e.g. Brown & Duguid, 1991; Lave & Wenger, 1991) that anticipated the practice turn in organisation studies years before the pivotal book of Schatzki and colleagues (Bruni, 2019). In accordance with Schatzki, this perspective admits that practices guide the actions and identity formation of social agents (Nicolini 2011), but it also emphasizes the active role they play within the network of relationships that emerge around any social practices (Lave & Wenger 1991). By participating, social agents construct their skills and capabilities in accordance with the practice requirements. This does not mean that they merely incorporate the practice requirements into their behaviours, as they also actively construct the norms to adhere to (Alkemeyer & Buschmann, 2016, p. 15). This aspect is particularly relevant in the case of this study, because in the absence of a formalized apprenticeship and training, riders learn most of their job by doing and by sharing their work experience with each other. Moreover, by means of participation practitioners construct their own identity as (more or less) *legitimate* or *competent* workers (Lave & Wenger 1991). Combining these two theoretical perspectives also makes it clear that a teleoaffective structure is never unique and stable, as differences between participants are likely “to imply conflict and the potential to fail” (Alkemeyer & Buschmann, 2016, p. 15).

3. Methodology

The empirical data in this article come from a larger research conducted in Milan between 2020 and 2021. The study followed a mixed-methods approach, built upon an observant participation carried on from January to July 2020, during which the author worked as a part-time rider for the platform Glovo. The inversion of the terms of the more common notion of “participant observation” was advocated by Wacquant to emphasise the active involvement of the researcher, who submits himself to the forces of the field under scrutiny, “so as to gain a visceral apprehension of that universe [...] for its analytic reconstruction” (Wacquant, 2015, p. 6). This (theoretical-)methodological approach enabled a double analytical operation. On the one hand, it lets us inductively grasp the requirements of this work-practice. On the other, it allowed the researcher to investigate his own learning as a specific object of study, by reflexively analysing the incorporation of dispositions and competencies needed in order to work as a rider. The ethnographic material was collected on a daily basis and analyzed following a grounded approach (Charmaz, 2006). Gradually, the analytical categories emerging from the field have been articulated in an interview guide that was used to conduct in-depth interviews with 21 riders. Finally, a last source of data – that will be very limitedly used in this paper – comes from a survey physically administered to a sample of 130 riders.

Before discussing the empirical results, it is necessary to delimit the focus of this article within the broader research from which it originates. This article refers only to bicycle couriers, although not every rider works by bicycle. This choice is based on the empirical material collected during the fieldwork. Working – and observing – by bicycle, the author himself has spent more time with bicycle couriers than with motorbike or car riders. In addition, the survey data indicate a clear prevalence of bicycles over other vehicles in the context of observation: only about 11% of the survey sample use motorbikes or cars. Similarly, within the sample of interviewees, only 2 riders out of 21 use a motorbike. As highlighted elsewhere (Bonifacio & Benedittis, 2022), differences also occur between those using muscle bikes and electric bikes, both in terms of income and self-perceived work career as a rider. In this article, we intend to bracket these differences as much as possible, emphasizing the common features of the specific mode of cycling stemming from this work – whether with muscular or electric bicycles.

4. Organisational and material conditions of work

In short, the work of a food-delivery rider has to do with delivering meals in an urban area. In this section, we outline some of its constituent traits, focusing on the organisational and material forces that define the conditions for the emergence of a specific mode of cycling.

4.1. Organisational rules

In terms of remuneration, riders are variably paid for each delivery made, the value of which is contingently calculated by the platform based on the distance to be covered or any

supplementary bonuses in the case of adverse weather conditions⁴. From an organisational point of view, riders' self-employed status reflects a (relative) possibility to manage how and when to work. Riders choose which vehicle to use and are personally responsible for its maintenance, also in case of any possible theft. They can (relatively) choose which orders to accept among those assigned by the platform, and what routes to take to complete a delivery. However, a number of empirical studies has demonstrated that riders' autonomy is constrained within the limits set by the platform, which directly influence their working conditions. These constraints are discursively sustained by ideals of meritocracy and self-entrepreneurship (Galière, 2020) and are configured in a technological infrastructure – the platform – relying on algorithms and on the massive use of crowd-sourced data. Among its many functions, the so-called *algorithmic management* (Stark & Pais, 2020) enables platforms to:

- Calculate the fee for each delivery.
- Monitor the delivery process for each order.
- Evaluate workers' performances by computing a constellation of different parameters, including customers and restaurants ratings.
- Sort riders into a ranking, based on their rating, which discriminate their access to the booking of working hours.

The riders' configuration in the technological infrastructure (Akrich, 1992) has serious implications on work. The flexible piecework system (van Doorn, 2020) requires riders to optimize their earnings during the hours they are registered to work, by selecting which deliveries to accept (Bonifacio, 2022) and, as Dolores observed in the opening interview excerpt, by cycling at a certain rhythm. As a consequence of the reputation system based on customers and restaurants evaluations, riders have to pay special attention to the service care in order to avoid negative ratings: from the way they interact with customers and restaurants, to how they cycle when delivering food. In this regard, riders need also to adjust their riding style by considering what they are carrying in their backpacks, hence avoiding potholes, or choosing routes with no cobblestones. Transporting food requires riders to be more precise than other bicycle couriers – for example, urban bike messengers who deliver files – and this is another structuring dimension of work practice. Precisely to avoid receiving a negative review, it is not uncommon for riders to decide not to deliver the order – e.g. if they find out that a drink has spilled during the delivery.

⁴ The inability to determine one's own remuneration independently has often been contested as an element of subordination of riders to the platform (van Doorn, 2020)

4.2. Urban material arrangement

The urban infrastructure is a highly influential material dimension of food-delivery work. As we mentioned before, the urban material arrangement (Schatzki, 2010a) is not simply constitutive of any mobility practice. It *prefigures* them, by favouring the existence of certain practices and hindering others. To give a trivial example, consider how easier it is to cycle in a flat city like Milan than in a steep city like Genoa or Naples. In addition to the morphology of the territory, urban design also establishes – or rather, expresses – a “hierarchy of use” (Cox & Van De Walle, 2007, p. 122) of different mobility technologies⁵. Prescriptive elements of urban design include the paving of streets. For instance, the poor conditions of the cobblestones in many areas of Milan is detrimental to the maintenance of one’s own vehicle, and a potential cause for accidents. Another prescriptive element of the urban design that is directly referred to v elomobility practices concerns the density of bicycle lanes. In that regard, one can easily imagine how much easier and safer it is to ride in cities such as Amsterdam or Copenhagen than in Milan, where despite the increasing presence of cycle lanes, the bicycle is still considered a secondary means of transportation.

Considering the relation between mobility practices and urban arrangement enables to capture contextual specificities (Horton *et al.*, 2007) and to take into account the relationship between the riders’ work and other practices with which it competes – and conflicts – for space and time⁶ (Shove *et al.*, 2012, p. 126). Traffic is the most obvious manifestation of this difficult coexistence. Using a practice-oriented lexicon, we can understand traffic as a “texture” (Gherardi, 2006) of different mobility practices and technologies – cars, motorbikes, public transportation, pedestrians – governed by a set of prescriptions that are objectified (in road signs) or institutionalized (in traffic laws). Every mobility practice, including that of the rider, is to be understood both as a *part of* the urban traffic and as a *viewpoint* on it. According to the second understanding, traffic constitutes a mix of obstacles, a set of logics external to the riders’ point of view⁷, in conflict with the way the work is organised. This clearly appears in the following field note, which recalls a main problematic aspect of this work: safety.

In the square⁸, riders are deriding the new initiative proposed by Glovo, which started distributing facemasks to couriers at some restaurants in the city. According to many riders, it is a cosmetic initiative, similar to others arranged

⁵As sociologist Ole Jensen observes, “mobilities do not ‘just happen’ or simply ‘take place’. Mobilities are carefully and meticulously designed, planned and ‘staged’ (from above)” (Jensen, 2013, p. 4)

⁶ As Tosoni (2015, p. 14) observes, “any kind of practice [...] opens at the same time new possibilities for other practices, force them to a coordination, or rule them out in a conflictive way”.

⁷As often happens when our taken-for-granted breaks up, many riders have remarkably realized the incidence of traffic during the first Covid-19 lockdown in 2020. During that time, in the words of one interviewee, ‘the city was all about cyclists. [...] You went by ear, without even looking at the traffic lights, only by listening if someone was coming the other way’.

⁸ The square evocated in the field note is one of the many places of the city where groups of riders meet before and after work. The author used to spend time with this group of workers during ethnography, learning the trade with them. Indeed, as well as being a place for socialising, the square and all the places where riders gather together represent informal learning contexts, where riders collectively construct and hold a work-related knowledge. Although we will evoke *the square* again later, a detailed reconstruction of collective learning processes exceeds the space of this article.

by the platform with regard to road safety: ‘safety...’, Andrea comments, ‘these people understand safety as *following the highway code, as if I were a normal cyclist...* they know very well that I can’t always follow traffic laws. Because if I lengthen each delivery by half a mile, out of 100 deliveries it becomes a lot of miles... and doing more miles means earning less. Here, safety is not about riding on the sidewalk or not. *You also have to know how to use the sidewalk.* I fell once, yes... But the Italian Cyclists’ Association can’t tell me: “Oh, don’t ride on the sidewalk, go slow, go easy, don’t ride the wrong way”. As if I am riding a bike on vacation. Fuck, *do you even know how this job actually works?*”

(Field note, 22/6/2020)

This field note highlights the risks associated with riding in urban traffic, revealing a tension between how the work is organised and remunerated and the need to comply with abstract safety rules and procedures. One cannot always follow traffic laws, as Andrea observed, because the algorithmic management and the piecework payment system – organisational rules – constantly induce riders to circumvent it. Similarly, as we have already mentioned, riders must also pay attention to what they carry inside their backpack, taking care that food doesn’t spoil or get cold, to avoid possible negative reviews. The combination of these organisational, technological and material conditions frames the specifics of food-delivery work, as a cycling practice that requires the difficult mediation of speed, safety, and accuracy.

It is important to note that in order to neglect their employer status, platforms do not require riders to have any specific expertise in terms of safety, nor they do provide riders with any training. Nonetheless, riders are observed to develop their own sense of safety at work, building on a set of competencies and practical principles – e.g. “*knowing how to use the sidewalk*” – that are anchored in the way the work is organised, and in the urban setting where it takes place. In the next section we will survey what competencies do riders mobilise in order to accomplish this difficult task, focusing respectively on cognitive, tacit and bodily skills.

5. Riding

5.1. “Most of all, you have to think”

“Yes, *you have to ride. But most of all you have to think.* The road you choose makes the difference... you think about where you have to go, what’s the fastest route, which is not *necessarily the safest* [...] you look at where you are, where is the customer’s destination, you imagine the road... I turn this way... the street there is no good, I am going to find cobblestones there, so I am going to go the other way, right? [...] *This work forces you to think about the route you are going to take...* that way there is men at work, that way there is a nice straight avenue... that way you can take the bicycle lane... so you imagine your route before you’ve taken it. More or less you arrive around the destination simply by heart,

without really knowing street names [...] Otherwise, you see riders using the voice navigator, that completely dissociate you from what you're doing: that way you don't learn shit about the city, and it also puts you in danger"

(Interview with Giovanni, 46, M)

A main practical understanding of this work concerns a peculiar geographical knowledge of the city. As this interview excerpt shows, "thinking about the route to take" rests on a practical understanding of the space, according to a twofold meaning. First, it is practical "in the sense of convenient, that is, easy to master and use" (Bourdieu, 1990, p. 86) as it obeys to a poor logic, which does not require a theorizing effort. While supported by a cognitive dimension, in fact, the mastery of space exhibited by riders is not based on a cartographic knowledge of the city. Rather, it is constructed through the elaboration of a "practice-referred mental map" (Bonifacio, 2022, p. 94) made of nodes and references – bicycle lanes, pedestrian zones, traffic directions, the presence of cobblestones, men at work – that achieve their own significance with respect to how the work is algorithmically organised. In this regard, we can also elaborate on the role played by Google Maps or by other mobility apps. In abstract terms, the possibility of consulting a digital map reduces the entry barriers of this work, by extending the recruitment of potential practitioners (Shove *et al.*, 2012) to people who lack the geographical knowledge that is needed to move around the city. However, if we situate the use of Google Maps within the actual experience of a food-delivery rider – as Giovanni does – it appears as a main source of danger and of time waste. The spatial knowledge embedded in Google Maps – which is only relatively customisable, based on different modes of transportation – is not consistent with a rider's practical understanding of the space. They rely on two different logics. While the former respects abstract traffic rules, the latter – and here we come to the second meaning of the adjective 'practical' – results from the incorporation of the practice requirements described in the previous paragraph. In fact, as Giovanni noted, the *safest* route may be inconvenient in terms of speed, and therefore inconsistent with the practice ends. By the same token, the fastest route could be highly detrimental in terms of safety:

"it's not that by going faster you gain more money, you just risk going more easily to the hospital... you can go 100 mph, I go 50 and I get there before you [...] *the roads you choose matter...the mischief... being cunning...* for example, in that corner there is a traffic light, no? But if you turn right at the street before, you go through there and you don't have to stop at this traffic light... or you don't have to go this way where the cops might annoy you [...] do you see how much time you save? You don't think about it, but 3 minutes here, 4 minutes there... in an hour I'll make one more order. If you make three orders, I will make five."

(Interview with Claudio, 43, M)

As we can see, a rider's mental map differs from that of a general cyclist because it processes the route that most closely balances the need to deliver quickly and safety concerns. Moreover,

for the reasons highlighted above, thinking about the route to take is also important in order to meet another important requirement of this work: accuracy. As Dolores points out:

“When you are carrying the meal inside the backpack, you *have to be* very careful to avoid potholes, cobblestones... otherwise you risk everything falling over [...] depending on what you have inside, *you have to ride one way or another...* if you are carrying only McDonald’s food, you can take the cobblestones, you can jump jump jump, you don’t care. If you have beverages inside, you have to be more careful because the drinks will spill. If you carry 5 Chinese soups, then you have to be even more careful. So, basically, you can’t ride the same if you take 5 soups or 5 McChicken...”

(Dolores, 33, F)

5.2. *Riding fast, practicing safety*

From the rider’s perspective, safety is not simply about obeying traffic laws. As a “cultural knowledge that takes the form of practice” (Gherardi & Nicolini, 2001, p. 236), safety constitutes something that is learned “as a style of being at work” (Gherardi & Nicolini, 2001, p. 237). As we already showed in relation to the ability to use the sidewalk, the construction of a safe style of cycling has to do with the strategic use of the urban arrangement.

I am shadowing Giovanni during a delivery session [...] We have turned onto Corso Sempione, just before the intersection with Via Procaccini. We are facing a bus and a car approaching the crossroads. The traffic light is already yellow. From the right side of the road, Giovanni moves to the left in a moment, crossing the space that has formed between the car that is slowing down and the bus that is already occupying the intersection. He flanks the tail of the bus on the left side, which protects him from oncoming cars from Via Procaccini, as he turns left. In five seconds he has already crossed Corso Sempione. [...] I am amazed by his agility in traffic. However, when I catch up to him on the other side of the street, Giovanni quite scientifically dismisses my astonishment, merely observing that: “first, you have to fill in the spaces; second, you have to know where the bus is going”.

(Field note, 27/6/2020)

This episode from my ethnographic diary is a good example of what it means, in practice, to combine speed and safety when delivering. Both pieces of advice that Giovanni gives me constitute what Gherardi and Nicolini (2001, p. 239) define as “teaching to see”. The first precept – filling the blanks – expresses all the ineffability of a knowledge that “can be practiced but cannot be taught” (Gherardi & Nicolini, 2001, p. 236). It has to do with the ability to anticipate the future development of one’s performance by mastering time and space while cycling. In order to fill spaces, it is not enough to see them in advance. A rider has to know how

to occupy the space at the right time, or when to use the brake: tacit skills (Strati, 2003) that concern the rider's relationship with the bicycle and, more generally, with the urban material arrangement. The second precept concerns the ability to mobilize the "border resources" (Brown & Duguid, 1994) of the city: aspects of the urban material arrangement that a particular community of practitioners attach with specific meanings. Similar to the use of pedestrians as shields observed by Kidder (2009) in the work of urban bike messengers, Giovanni operates a re-signification of the bus, which becomes a resource to protect himself while riding fast in traffic. More generally, the ability to "label the dangerous" (Gherardi & Nicolini, 2001) while cycling requires a particular sensitivity to the material stimuli of the city: the arrow of a bus that is turning right, the flashing light indicating a gate that is about to open, the presence of a door on the sidewalk from which someone could exit any moment. Of course, the competence to recognize what is dangerous is not entirely achieved *ex novo*, as it rests on knowledge and dispositions incorporated by social agents along their social trajectories (Bourdieu, 1990). However, it takes a specific form as a result of incorporating the teleoaffective structure of this work practice, defining the "professional vision" of a food-delivery rider (Goodwin, 1994).

5.3. *Managing the body (and the bicycle)*

Cycling fast in the urban traffic is not only riskier than elsewhere, but also more strenuous. As Giovanni notes, this work "is an exhausting ongoing process of stopping and starting", punctuated by waits while standing outside restaurants and stairwells upon stairwells to reach the customers' homes. Of course, managing with physical fatigue has to do with the care of one's body – e.g. many riders stress the importance of eating and the need of getting plenty of rest after work. But it is also about learning how to ride a bicycle efficiently. Antonio, a 50-year-old rider, reported his strategies to optimize muscular efforts by activating the upper part of his body, which intuitively is less associated with riding a bike.

"Putting the handlebar a little lower changes the movement of the upper body. [...] They say: you pedal with your legs. It's not only that. If you pedal only with your legs, after two hours your legs feel like two pieces of wood. [...] If you are not prepared, at 50 years old, the day after you do 80 km you don't even get out of bed... So, after a while doing this work, you say: "Shit, I'm tired". Then, you start thinking about how to reduce the effort... how to get on the saddle properly, or how to place the handlebar..."

(Antonio, 50, M)

Antonio highlights the fatigue of cycling dozens of kilometres, day after day, emphasizing the need to optimize his effort. Interestingly, he does not work directly on his own body. He focuses on the bicycle, which he understands as a precondition for adjusting his body movements and, consequently, the effort required to accomplish them. The bicycle management calls into question a series of tasks and skills collateral to cycling in the strict sense. From routine maintenance – "Your brakes and tires must always be in perfect

conditions!” – to the ability to change an inner tube in case of a flat during work. This way, the bicycle itself represents a sign of recognition within the professional community, based on which riders formulate judgments about the correct way to work. As with the other sources of knowledge mentioned above, riders interpret the condition of their bicycle as a badge of (greater or lesser) professionalism, contributing to the construction of the normative standard of this work. In the following field note, Antonio clearly explains how the bicycle of a food-delivery rider should look like, labelling me as a novice by simply inspecting my bicycle cluttered with unnecessary weights:

Antonio: [...] that bicycle is yours? Well, *then you're not a rider...*

Me: What do you mean?

Antonio: Look, I don't know...you can tell... come on...so, for example, *your bike has the crank set...* look at the riders' bikes, do you see any crank set?

Me: Mmmh, actually I don't know what a crank set is...

Antonio: It is the chain guard... you don't need it... why do you think no one has a crank set?

Me: Why?

Antonio: *That's why you're not a real rider!* Because it's heavy...more importantly, because if you drop the chain, you lose more time putting it back with the crank set...that's why! Thus, *I look at your bike and I understand that you're not in that mechanism...* look at us, nobody uses the crank set!

(Field note, 15/5/2020)

6. Conclusions

So far, scholars have mainly portrayed food-delivery work as a poorly regulated occupation on a regulatory level, underestimating its scarce standardisation on a practical and normative level. This article has attempted to fill this gap, showing the endogenous emergence of a normative frame – what Schatzki calls “teleoaffective structure” – that organises the way of cycling related to this work as the difficult negotiation of speed, safety and accuracy. For this purpose, we first identified the organisational and material elements that frame this work practice within a set of constraints and possibilities. Then we described the set of cognitive, tacit, and bodily skills that enable riders to meet the work requirements, constructing its normative standard. Now we would like to conclude with two final remarks.

First, by focusing on cycling as a central aspect of this work, we showed that riders build on practical understandings and skills that are *consistent with* the way their work is organised, constructing a normative standard to adhere to in terms of how they should cycle while delivering. However, by stressing the organisational and material conditions within which food-delivery work take place, we argue for emphasizing the responsibility of food-delivery platforms. Of course, the risk associated with cycling in urban traffic is somehow irreducible. However, as Gregory (2021) noted, the organisational conditions set by platforms create other risky dimensions – e.g. the financial risk associated with the piecework payment system – that

have substantial implications on the riding. Basically, this also suggests that changes in the interplay of the organisational and material elements might affect the very nature of this work. This was quite clear when we mentioned the influence of the urban material arrangement, noting how easier is to cycle in a flat city as Milan than in other urban contexts. It is even more perceivable when it comes to certain organisational rules. For example, we can easily assume that the adoption of an hourly payment system, as introduced by Just Eat, may reduce the need to speed up the ride, enhancing workers sensitivity to safety issues. In this regard, interesting insights may arise by comparing different organisational arrangements.

Second, in this article we decided to bracket the heterogeneity of the workforce, focusing on what defines the distinctiveness of an emerging mode of cycling associated with food-delivery work. Nonetheless, the riders' heterogeneity emerged in several points during the discussion. For instance, in section 5 we observed that the competence of labelling "the dangerous" is built on a set of pre-existing skills and dispositions achieved by social agents along their social trajectories. Thus, we implicitly assumed that workers with different social backgrounds may incorporate a different practical logic rather than the one described in this paper. For example, the episode of Antonio indicating the importance of another requisite of this work practice concerning energy and fatigue management, highlighted that age difference holds important implications on the riders' performances. This suggests that prescriptive elements of work descend not only from an organisational dimension, but also depend on the conditions of social agents themselves – e.g. on their bodily capital (Wacquant, 2002). Therefore, shedding light on the heterogeneity of the riders' daily experience opens new ways to exploring the social stratification internal to this occupational community and platform workers overall – as labour scholars argued (Cansoy *et al.*, 2020).

References

- Akrich, M. (1992). The De-description of Technical Objects. In W. Bijker & J. Law (eds.), *Shaping Technology/Building Society. Studies in Sociotechnical Change* (pp. 205–224). Cambridge: MIT Press.
- Alkemeyer, T., & Buschmann, N. (2016). Learning in and across practices: Enablement as subjectivation. In S. Hui, E. Shove & T.R. Schatzki (eds.), *The Nexus of Practices: Connections, Constellations, Practitioners* (pp. 8–23). London: Routledge.
- Aloisi, A. (2021). Demystifying Flexibility, Exposing the Algorithmic Boss: A Note on the First Italian Case Classifying a (Food-Delivery) Platform Worker as an Employee. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3785196>.
- Barratt, T., Goods, C., & Veen, A. (2020). 'I'm my own boss...': Active intermediation and 'entrepreneurial' worker agency in the Australian gig-economy. *Environment and Planning A: Economy and Space*, 52(8), 1643–1661. <https://doi.org/10.1177/0308518X20914346>.

- Bonifacio, F. (2022). Encountering algorithms in the urban space: A matter of knowledge. An enactive ethnography of riders' work. *Mediální studia / Media Studies*, 15(2), 85-103.
- Bonifacio, F., & de Benedittis, M. (2022). Riding different. Una topologia sociale dei rider del food delivery. *Sociologia del Lavoro*. <https://doi.org/10.3280/SL2022-163008>.
- Borghini, P., Murgia, A., Mondon-Navazo, M., & Mezihorak, P. (2021). Mind the gap between discourses and practices: Platform workers' representation in France and Italy. *European Journal of Industrial Relations*, 09596801211004268. <https://doi.org/10.1177/09596801211004268>.
- Bourdieu, P. (1990). *The Logic of Practice* Cambridge: Polity.
- Brown, J.S., & Duguid, P. (1991). Organizational Learning and Communities-of-Practice: Toward a Unified View of Working, Learning, and Innovation. *Organization Science*, 2(1), 40–57.
- Brown, J. S., & Duguid, P. (1994). Borderline issues: Social and material aspects of design. *Human-Computer Interaction*, 9(1), 3–36.
- Bruni, A. (2019). Practice Reloaded: A Statement, an Acknowledgment and a Comment. *Sociologica*, 13(3), 179-183.
- Cansoy, M., Eddy, S., Ladegaard, I., & Schor, J.B. (2020). Homines Diversi: Heterogeneous Earner Behaviors in the Platform Economy. *Sociologica*, 14(3), 143-165.
- Cini, L., Maccarrone, V., & Tassinari, A. (2021). With or without U(nions)? Understanding the diversity of gig workers' organizing practices in Italy and the UK. *European Journal of Industrial Relations*, 28(3). <https://doi.org/10.1177/09596801211052531>.
- Cox, P. (2019). *Cycling: A Sociology of Velomobility* London-New York: Routledge.
- Cox, P., & Van De Walle, F. (2007). Bicycles Don't Evolve: Velomobiles and the Modelling of Transport Technologies. In D. Horton, P. Rosen & P. Cox (eds.), *Cycling and Society* (pp. 113-131). Aldershot: Ashgate.
- De Stefano, V. (2019). "Negotiating the Algorithm": Automation, Artificial Intelligence, and Labor Protection. *Comparative Labor Law & Policy Journal*, 41(1), 1-32. <http://dx.doi.org/10.2139/ssrn.3178233>.
- Fincham, B. (2007). Bicycle Messengers: Image, Identity and Community. In D. Horton, P. Rosen & P. Cox (eds.), *Cycling and Society* (pp. 179-198). Aldershot: Ashgate.

- Galière, S. (2020). When food-delivery platform workers consent to algorithmic management: A Foucauldian perspective. *New Technology, Work and Employment*, 35(3), 357–370. <https://doi.org/10.1111/ntwe.12177>.
- Gherardi, S. (2006). *Organizational Knowledge: The Texture of Workplace Learning* Oxford: Blackwell.
- Gherardi, S. (2016). Sociomateriality in posthuman practice theory. In A. Hui, T.R. Schatzki & E. Shove (eds.), *The Nexus of Practices*(pp. 50–63). London: Routledge.
- Gherardi, S. (2019). *How to Conduct a Practice-based Study*. Cheltenham: Edward Elgar.
- Gherardi, S., & Nicolini, D. (2001). Il pensiero pratico. Un’etnografia dell’apprendimento. *Rassegna Italiana di Sociologia*, 2, 231–256.
- Goodwin, C. (1994). Professional Vision. *American Anthropologist*, 96(3), 606–633. <https://doi.org/10.1525/aa.1994.96.3.02a00100>.
- Gregory, K. (2021). ‘My Life Is More Valuable Than This’: Understanding Risk among On-Demand Food Couriers in Edinburgh. *Work, Employment and Society*, 35(2), 316–331. <https://doi.org/10.1177/0950017020969593>.
- Griesbach, K., Reich, A., Elliott-Negri, L., & Milkman, R. (2019). Algorithmic Control in Platform Food Delivery Work. *Socius*, 5. <https://doi.org/10.1177/2378023119870041>.
- Heiland, H. (2021). Controlling space, controlling labour? Contested space in food delivery gig work. *New Technology, Work and Employment*, 36(1), 1–16. <https://doi.org/10.1111/ntwe.12183>.
- Horton, D., Rosen, P., & Cox, P. (eds.) (2007). *Cycling and Society*. Aldershot: Ashgate.
- Hui, A., Schatzki, T., & Shove, E. (eds.) (2016). *The Nexus of Practices: Connections, constellations, practitioners*. London: Routledge.
- Kidder, J.L. (2009). Appropriating the city: Space, theory, and bike messengers. *Theory and Society*, 38(3), 307–328. <https://doi.org/10.1007/s11186-008-9079-8>.
- Kidder, J.L. (2011). *Urban Flow: Bike Messengers and the City*. Ithaca: Cornell University Press.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

- Leonardi, D., Murgia, A., Briziarelli, M., & Armano, E. (2019). The ambivalence of logistical connectivity: A co-research with Foodora Riders. *Work Organisation, Labour & Globalisation*, 13(1), 155-171. <https://doi.org/10.13169/workorgalaboglob.13.1.0155>.
- Loscher, G., Splitter, V., & Seidl, D. (2019). Theodore Schatzki's practice theory and its implications for organization studies. In S. Clegg & M. Pina e Cunha (eds.), *Management, Organizations and Contemporary Social Theory* (pp. 115-134). London: Routledge.
- Marrone, M. (2021). *Rights against the machines! Il lavoro digitale e le lotte dei rider*. Milano: Mimesis.
- Nicolini, D. (2011). Practice as the Site of Knowing: Insights from the Field of Telemedicine. *Organization Science*, 22, 602-620. <https://doi.org/10.1287/orsc.1100.0556>.
- Reckwitz, A. (2002). Toward a Theory of Social Practices. A Development in Culturalist Theorizing. *European Journal of Social Theory* 5(2), 243-263.
- Schatzki, T.R. (2002). *The site of the social: A philosophical account of the constitution of social life and change*. University Park: The Pennsylvania State University Press.
- Schatzki, T.R. (2005). Practice Mind-Ed Orders. In T.R. Schatzki, K. Knorr-Cetina & E. von Savigny (eds.), *The Practice Turn in Contemporary Theory. 2nd Edition* (pp. 50-63). London: Routledge.
- Schatzki, T.R. (2010a). Materiality and Social Life. *Nature and Culture*, 5(2), 123-149. <https://doi.org/10.3167/nc.2010.050202>.
- Schatzki, T.R. (2010b). *The Timespace of Human Activity: On Performance, Society, and History as Indeterminate Teleological Events*. Lanham: Lexington Books.
- Schatzki, T.R., Knorr-Cetina, K., & von Savigny, E. (eds.) (2001). *The Practice Turn in Contemporary Theory*. London: Routledge.
- Shove, E., Pantzar, M., & Watson, M. (2012). *The Dynamics of Social Practice: Everyday Life and How it Changes*. London: Sage.
- Stark, D., & Pais, I. (2020). Algorithmic Management in the Platform Economy. *Sociologica*, 14(3), 47-72. <https://doi.org/10.6092/issn.1971-8853/12221>.
- Strati, A. (2003). Knowing in practice: Aesthetic understanding and tacit knowledge. In D. Nicolini, S. Gherardi & Y. Dvora (eds.), *Knowing in Organizations: A Practice-based Approach* (pp. 53-75). Armonk: M.E. Sharpe.

Tassinari, A., & Maccarone, V. (2020). Riders on the Storm: Workplace Solidarity among Gig Economy Couriers in Italy and the UK. *Work, Employment and Society*, 34(1), 35-54.

Timko, P., & van Melik, R. (2021). Being a Deliveroo Rider: Practices of Platform Labor in Nijmegen and Berlin. *Journal of Contemporary Ethnography*, 50(4), 497–523. <https://doi.org/10.1177/0891241621994670>.

Tosoni, S. (2015). Addressing “Captive Audience Positions” in Urban Space. From a Phenomenological to a Relational Conceptualization of Space in Urban Media Studies. *Sociologica*, 3/2015, 1-28. <https://doi.org/10.2383/82480>.

van Doorn, N. (2020). At what price? Labour politics and calculative power struggles in on-demand food delivery. *Work Organisation, Labour & Globalisation*, 14(1), 136-149. <https://doi.org/10.13169/workorgalaboglob.14.1.0136>.

Veen, A., Barratt, T., & Goods, C. (2020). Platform-Capital’s ‘App-etite’ for Control: A Labour Process Analysis of Food-Delivery Work in Australia. *Work, Employment and Society*, 34(3), 388-406. <https://doi.org/10.1177/0950017019836911>.

Wacquant, L. (2002). *Anima e corpo. La fabbrica dei pugili nel ghetto nero americano*. Roma: DeriveApprodi.

Wacquant, L. (2015). For a Sociology of Flesh and Blood. *Qualitative Sociology*, 38(1), 1-11. <https://doi.org/10.1007/s11133-014-9291-y>.