



Crossing the algorithmic 'Red Sea': Brazilian ubertubers' ways of knowing surge pricing

Abel Guerra & Carlos d'Andréa

To cite this article: Abel Guerra & Carlos d'Andréa (2022): Crossing the algorithmic 'Red Sea': Brazilian ubertubers' ways of knowing surge pricing, Information, Communication & Society, DOI: [10.1080/1369118X.2022.2109979](https://doi.org/10.1080/1369118X.2022.2109979)

To link to this article: <https://doi.org/10.1080/1369118X.2022.2109979>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 13 Aug 2022.



Submit your article to this journal [↗](#)



Article views: 42



View related articles [↗](#)



View Crossmark data [↗](#)

Crossing the algorithmic 'Red Sea': Brazilian ubertubers' ways of knowing surge pricing

Abel Guerra ^a and Carlos d'Andréa ^b

^aMedia and Communications, The London School of Economics and Political Sciences, London, United Kingdom; ^bCommunication Studies, Federal University of Minas Gerais, Belo Horizonte, Brazil

ABSTRACT

This article discusses how Brazilian ubertubers – Uber drivers that manage YouTube channels focused on their riding experience – systematise and make public different ways of knowing surge pricing (SP), an algorithmic-oriented system that uses price adjustments to redistribute drivers across urban space. Taken by the Uber as an instrument to measure and regulate market conditions, SP mediates drivers' pragmatic and affective daily practices, materialising a asymmetrical power relation embedded into a neoliberal governmentality. The study explores 25 videos produced and shared by five consolidated Brazilian ubertubers, focusing on how this specific kind of digital influencer systematises and perform collective knowledge on how to increase earnings with surge pricing. The metaphors, hypotheses, and theories, the ubertuber's tactics to deal with SP's instability and with the risks of working on peripheral areas, and the efforts to investigate the logics of a 'new surge' are the main issues approached in the case study. In the conclusions, we discuss how ubertubers' ambivalent relations with surge pricing reveal their wider attempts to navigate neoliberal governmentality and precarious conditions.

ARTICLE HISTORY

Received 22 October 2021
Accepted 15 July 2022

KEYWORDS

Algorithms; knowledge-making; surge pricing; Uber; YouTube; digital influencers

For Uber drivers, seeing warm colours on a smartphone screen bears a particular significance. When red and orange shades pop up over the city map in the Uber Driver app, drivers are being informed that the demand for rides is peaking in certain areas and more profitable rides may be just a few blocks away. The heatmap is the graphic representation of surge pricing (SP), an algorithmic-oriented system that uses price adjustments as financial incentives to redistribute the workforce in a territory. As some of the videos shared by Brazilian uber drivers in their YouTube channels and analysed in this study show, sometimes drivers come up with visual metaphors such as 'the screen on fire' (Fernando Uber Floripa, 2019b) and 'the bleeding screen' (Falando de Uber, 2018a) to describe the way SP appears in their phones' screens.¹

In a video published in 2017, the channel 'O Motorista Oficial' suggests a more performative metaphor. Bearing in mind that the mere sight of the reddish shades does not

CONTACT Abel Guerra  a.goncalves-guerra@lse.ac.uk  Fawcett House, Houghton St, London WC2A 2AE, UK

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

necessarily mean more profitable rides, the driver emphasises the dynamicity – or the instability – of SP by calling it ‘the Moses surge’ (O Motorista Oficial, 2018b). The expression is inspired by a biblical episode – Crossing of the Red Sea – and suggests that, just like the sea supposedly parted while Moses and the Israelists crossed it, the heat-map seems to ‘open up’ in the screen as the driver moves across a surge zone. In his own words: ‘the entire world is surging around you, except where you are driving’.

These examples reveal the mixed feelings SP triggers on Uber drivers and, more broadly, illustrate the permanent negotiations and disputes that characterise the so-called ‘partnership’ between them and the ride-hailing platform. As we discuss in this article, understanding their city specificities, mapping peak demand patterns, and planning a work schedule that makes space for some rest periods are some of the driver’s daily individual knowledge-making efforts to deal with an asymmetrical power relation.

Multiple practices and ways of knowing the platform’s data-driven and algorithm-oriented systems are articulated by drivers who dedicate part of their time to produce and publish YouTube videos. Aiming to teach their audience to navigate their daily experiences with the opacity and dynamicity of surge pricing (and other features of Uber Driver, the mobile application used by drivers), these drivers continuously systematise their own experience and forms of collective knowledge assembled by/with other drivers, including their channel’s subscribers.

Additionally, while performing evidence-based theories, hypotheses, speculations and other ways of knowing on YouTube, a driver is also invested in understanding the techno-economic logics of a major audio-visual platform and, thus, becoming a type of digital influencer. As Chan (2019) argues in a similar study focused on the US, these drivers/bloggers are involved in a continuous performance of expertise that cannot simply be claimed based on their accumulated ‘score’ on Uber but must also be carved to enact a ‘interplay between themselves, their networked audiences, and the socio-technical infrastructure surrounding them’ (Chan, 2019, p. 6).

We call the drivers responsible for these YouTube channels ‘ubertubers’ to emphasise a sense of double self-entrepreneurship based on which they articulate the technographics, business models and other dimensions of two (or more) platforms. Thus, ubertubers are drivers who are engaged in increasing their online presence and earnings taking as a starting point their identity and experiences as Uber drivers.²

This article explores videos produced and shared by five Brazilian ubertubers (with at least 64,000 subscribers each), focusing on how theirs and others’ algorithm-oriented experiences as successful Uber drivers are performed. Our study is guided by the following research questions: How do Brazilian ubertubers systematise and make public different ways of knowing Uber’s surge pricing? What do ubertubers performances reveal about Uber drivers’ pragmatic and affective experiences with algorithms, graphic interfaces and other materialities?

Empirically, we tackle these questions by analysing 25 videos that discuss Uber’s SP. While SP is presented by the ride-hailing platform under a neoliberal perspective that positions it as a system capable of measuring, translating, and regulating market conditions, roughly summarised as drivers’ supply and riders’ demand, this article aims to investigate, how SP is turned into an object of knowledge to be unpacked, scrutinised, and anticipated by Uber drivers themselves. Furthermore, our study investigates how SP affects these drivers, enacting different feelings and imaginaries.

Our study also considers some specificities of the context in which these videos are produced. In Brazil, where over one million app workers are registered to Uber's platform³, the platform-based on-demand economy – the so-called 'gig-economy' (Calo & Rosenblat, 2017) – meets particular socio-historical settings. Labour precarisation, informalisation and flexibilisation have always been the rule for a significant part of Brazilian workers, long before the current precarisation wave synthesised in the concept of 'uberisation' (Abílio et al., 2021). In that sense, many of those who become Uber drivers do not necessarily face the precarity and risk of this experience as a novelty. Rather, driving for Uber – and dealing with the pragmatic and emotional ways of knowing the platform – may be 'simply' the new stage of a permanent process of survival management.

The remainder of this article is divided into four sections. First, we discuss how Uber's SP operationalises a neoliberal governmentality based on the supposed capacity of an algorithmic-based system to regulate the market and, by extension, drivers' everyday choices. Grounded in a practice-based perspective on knowledge-making, we argue that SP mediates a process of negotiation between driver's practices and feelings and the algorithmic system's own scripts. In this process, interpreting and producing inscriptions and evidences (such as screenshots) play a fundamental role.

Next, the methodology section outlines how we conceptually and empirically explore Brazilian ubertubers' ways of systematising and performing knowledge about SP. We argue that YouTube channels are a rich site for studying how drivers' everyday experiences are appropriated by some of them, who also aim to succeed as digital influencers. In dialogue with YouTube's technoeconomic logics, the methodological procedures details how the five studied ubertubers channels and their videos about SP were selected for the study.

The following section elaborates the empirical analysis. In three subsections, excerpts of ubertubers' videos are articulated to put into light (1) how SP is explained through metaphors, hypotheses and theories; (2) how SP's logics and instabilities can be tactically explored in each city and its peripheral areas; and (3) how the gradual launch of the 'new surge', in 2019, renewed the collective – and competitive – ways of investigating how incomes can be increased.

Finally, in the conclusion we analyse our findings emphasising ubertubers' ambivalent relationship with SP as they both actively contest and appropriate the scripts inscribed in the algorithm-oriented system and incorporate traits of neoliberal governmentality. Ubertubers' ways of navigating precarity in multiple platforms, we suggest, speak of particular conditions that constitute the unstable visions of future they and their audience weave together.

Surge pricing and knowledge-making with algorithms

While dynamic pricing, i.e., continuous price adjustments based on demand variation, has been adopted since the 1970s in airlines, retail, and other sectors (Deksnyte & Lydeka, 2012), Uber's SP was launched in 2011, three years prior to the platform's debut in Brazil. According to the descriptions on Uber's websites, this feature was introduced as an instrument 'to balance supply and demand', as it 'encourages riders to wait a bit before requesting a ride and encourages drivers to travel to areas of high demand' (Uber, n.d.a).

This institutional perspective positions SP's algorithms as entities capable of measuring, translating, and responding in real-time to market variations.

Thus, when describing SP for general audiences, Uber puts forward the idea that its algorithms operate in alignment with a self-regulating market. Algorithms' reliability and efficacy is rhetorically built upon an ideal of neutrality and objectivity. As Gillespie (2014, p. 179) explains, platforms often leverage algorithms as 'stabilisers of trust'. To certify the fairness of its pricing mechanism, Uber (n.d.b) argues that, as an algorithm-oriented system governed by the variations of a self-regulating market, SP would be immune to human interests and interference, be it in favour of drivers or Uber itself.

Besides associating SP to an ideal self-regulated market, Uber also positions it as a technology to govern driver's free choices presenting it as a resource that enables drivers to make an informed decision about how and when to work (Uber, n.d.a). This reveals both a pedagogical and prescriptive dimension of SP and evinces the projection of an 'ideal' worker/partner as someone who should always be ready to adjust or recalibrate (Sharma, 2011) her/his routine based on an ever-changing temporality of market variations supposedly measured and translated by algorithms.

These claims around SP seem to align with certain forms of subjectivity engendered by the neoliberal governmentality (Dardot & Laval, 2014; Foucault et al., 2010). The neoliberal subject, according to Dardot and Laval (2014), is constantly seeking to individually value him/herself and to make the best – more profitable – choices. To succeed, the subjects should be self-educated, self-disciplined, and self-governed. Uber's pricing system performs a fundamental role in the drivers' subjectivities by orienting where to and when they should *choose* to work to achieve their main goal: making more money. Thus, SP operationalises neoliberal rationality by enacting an arrangement of algorithmic governmentality in which algorithms 'operate as technologies of calculation and regulation deployed to enact and regulate their subjects' (Introna, 2016, p. 18).

In contrast to Uber's institutional rhetoric, our approach problematises the notion that data-driven and algorithm-oriented systems are consolidated entities capable of vertically regulating the market, drivers' labour and, by extension, part of urban mobility dynamics. In dialogue with Science and Technologies Studies perspective (and, more specifically, with Critical Algorithmic Studies), we argue that algorithms (and other platform-based materialities) should be seen as ontogenic actors (Kitchin, 2017) constituted in a continuous process of negotiation between their planned, or scripted (Akrich, 1992), functions and the situated practices of their users. While algorithm-oriented systems shape users' field of action, 'people learn what they need to know in order to engage meaningfully with and find their way around an algorithmically mediated world' (Bucher, 2018, p. 98). This unfolds within relations that are both of mutual shaping and unescapable power asymmetries.

Following Knorr-Cetina (1999), we assume the acts of making knowledge with the Uber Driver app – and with YouTube, in the case of ubertubers – are foregrounded by practice. While this author investigates the 'technical, social, symbolic dimensions' of the knowledge machineries of contemporary sciences' (p. 3), our study takes drivers everyday engagement with SP as a site of knowledge production that, departing from driver's fragmented individual experiences and framed within YouTube's particular grammatcs, re-emerges in shared audiovisual productions performed by ubertubers.

Our approach also suggests that these forms of practice-based knowledge should be considered beyond its pragmatic problem-solving function, but also taken in its capacity of inciting broader subjectivities, sensations and affects. Driver's everyday experiences with SP are saturated with mixed feelings that can quickly range from excitement to frustration when, for instance, drivers see SP but are unable to benefit from the higher fares. In dialogue with Jasanoff and Kim's (2015) concept of 'sociotechnical imaginaries' and, more specifically, with what Bucher (2018) calls 'algorithmic imaginaries', we argue that drivers' learning efforts are permeated by their 'affective encounters' (Bucher, 2018, p. 113) with SP and 'visions of desirable futures' (Jasanoff & Kim, 2015, p. 19) they corroborate with.

Drivers' practice-based knowledge is highly interconnected with the app's materialities and the signs embedded on them. For drivers, SP is made visible in heatmaps, as presented in the opening paragraphs of the article. The increase in driver's earnings resulting from the surge in demand may also be measured in the value by which ride price will be multiplied (1, 7x, 1, 9x etc.) or as the extra value to be added after a trip is completed (\$1.50, \$5). Besides playing a central role in Uber's governmentality, the colourful heatmaps and the numerical multipliers displayed on the app are graphical texts, or 'inscriptions' (Latour, 1999) that materialise a network of actors/actions and orient the driver's decision making.

These app-based inscriptions are frequently saved and reproduced by drivers as screenshots, as a way of documenting different everyday situations involving SP. When shared on social media and later inserted in YouTube videos, these self-generated inscriptions circulate and acquire a collective dimension. During the Covid-19 pandemic, for example, a SP inscription emerged as an indication that 'things might be going back to normal', as suggested in a celebrative Facebook post reproduced by a driver on his Instagram page (Figure 1).

This post illustrates how a collective evaluation of a specific occurrence is initially derived from a driver's individual perception and documentation based on a data visualisation provided by Uber. Additionally, the comment 'Let's pray that it comes back and even better' (our translation) reveals how SP participates in ways of imagining possible aftermath of an uncertain period. As discussed in the analytical section, when appropriated by ubertubers these inscriptions are reorganised to understand, explain and criticise SP and its unstable or even unreliable performance.

Methodology: knowing surge pricing with ubertubers

This study sought to approach surge pricing as an algorithmic system by focusing on how uber drivers make sense of it, and how knowledge-making processes orient their everyday practices and feelings regarding SP. More specifically, our investigation was guided by the understanding that, more than being nudged into moving to certain areas in search for higher fares, drivers actively engage in knowing SP. This orientation is significantly informed by what Bucher (2018) describes as phenomenological approach to algorithms, which focuses on people's perceptions of algorithms and on 'the productive force of personal forms of knowledge (...) gained through experience and practical engagement with one's lived-in environments' (Bucher, 2018, p. 62).



Figure 1. Screenshot of Instagram post by Fernando Uber Floripa (n.d.). The original post reads 'Fortaleza (a city in the Northeast Region) going back to how it was before'.

Previous studies (Chan, 2019; Woodside *et al.*, 2021) pointed out that thematic YouTube channels are a particularly rich site of observation for this kind of investigation. Videos produced by ubertubers about SP can function as a proficuous point of access

to driver's knowledge-making processes and to SP as an object of knowledge itself. For our article, two specific discussions on how the Google-owned audiovisual platform is connected with drivers' everyday life should be put into light.

First, it is worth noticing some broader characteristics of how YouTube is appropriated in Brazil. While studying 'how (YouTube's) the channel landscape (is) structured', Rieder et al. (2020) provide some important clues to the understanding of how this landscape works in different countries. Based on a large-scale data-oriented analysis and focusing on channels with more than 100,000 subscribers, the authors note that Brazil presents the third highest number of these 'elite' channels. The intense and concentrated use of YouTube in Brazil is also illustrated by two other findings: the country has the 'highest reaction intensity' (engagement measured through likes, comments, views etc.) and the 'highest indegree homophily' (which means that Brazilian channels recommend each other = more than other nationalities).

Secondly, becoming a ubertuber requires new layers of platform-related practices, abilities, and knowledge. To succeed on YouTube, these drivers aggregate performative skills commonly associated with digital influencers or micro celebrities such as 'a sense of intimacy, accessibility, and relatability' with the audience (Cotter, 2018, p. 897), as well as 'accessibility, availability, presence, and connectedness' (Raun, 2018, p. 99). Additionally, as argued by Cotter (2018), an influencer should also play the algorithms' game to govern their visibility on this social media platform. Doing 'research', reading documents, learning with peers and 'gathering and assessing empirical evidence' to deal with algorithm-oriented policies and business models are some abilities that intertwine ubertubers' in a multi-platform knowledge-building process.

Taking into account YouTube's visibility logics, to compose the corpus of the study we first made a qualitative analysis of channels retrieved by YouTube's internal search engine in October 2020, with the keywords 'Uber', 'driver', and 'motorista' (driver, in Portuguese). The year of the oldest entry (from 2015 to 2018), total of videos published (more than 500) and, more importantly, the number of subscribers (at least 50,000)⁴ were the platform-oriented criteria used to identify the most consolidated ubertubers' channels. Among the eight channels owned by ubertubers that fitted this criteria, five channels were selected for an in-depth analysis in this article. All of them are owned by men who live in the South or Southeast of Brazil.

In alphabetical order, the selected five channels are:⁵

- (1) Escola Para Uber (n.d.) (in English, School for Uber) is a channel owned by a former taxi-driver from Porto Alegre city (capital of Rio Grande do Sul state) since 2015. The channel counted over 302,000 subscribers and had published 840 videos until October 2020. He addresses his subscribers as 'students' and takes pride in not being a 'politically correct' channel. While his 'authenticity' (Chan, 2019) is partially based on an aggressive tone, he also cultivates a 'sense of intimacy' by sharing details about his working day and personal life.
- (2) Falando de Uber (n.d.) (in English, Talking about Uber) drives in Sorocaba, in São Paulo state. Between 2018 and 2020, this 66.600 subscribers' channel had 1025 published videos with basic concepts for working as an Uber driver. In one of the videos analysed in this study, Falando de Uber (2019b) recommends that drivers should

'seek knowledge' before 'driving around' and positions the channel as a source for such knowledge.

- (3) Fernando Uber Floripa (n.d.)'s channel name is reference to Florianopolis city, another Southern capital in Brazil. At the time of collection, the channel had around 284,000 subscribers and had published 735 videos. His first video was recorded at the end of his first day as an Uber driver, in 2016 – he did the same for his second, third, fifth and sixth days in his, at the time, new job. In his bio, Fernando Uber Floripa invites one to 'learn to make money, improve ratings and be a successful driver'.
- (4) O Motorista Oficial (n.d.) ('The Driver'), works in São Paulo city, capital of São Paulo state and the largest city in Brazil. With over 63,500 subscribers and 547 videos at the time of collection, his oldest available video was published in 2017. In videos, he claims to tell the audience 'what really happens' on the streets, which would make his channel 'a reality channel', rather than a 'motivational' one (O Motorista, 2018b).
- (5) Uber do Marcelo (n.d.) is also a driver from Porto Alegre and has been posting videos since 2016. With nearly 94,000 thousand subscribers and 568 published videos, Marcelo calls himself 'O Uber Fora da Curva' – in English, 'The Uber ahead of the curve'. He claims to have developed his own strategies based on what he learns 'in practice', i.e., on the evidence-based 'research' he performs while working.

Within these five channels, we searched for videos that directly approached surge pricing based on the Portuguese keywords 'preço dinâmico', 'tarifa dinâmica', 'dinâmico', 'dinâmica'. Videos which presented the visual representation of SP (the heatmap) in the thumbnail were also considered. The videos were manually collected and, subsequently, transcribed.

Case study: surge pricing through the lenses of ubertubers

In this section, we articulate excerpts of 25 videos published between 2017 and 2020 by the five channels in which SP was identified as the main topic. Most of the excerpts were selected for containing arguments that reappeared across the videos, and some reveal singular ways of interpreting or imagining. Our analysis is organised in three subsections, each corresponding to what we understand as ways of making knowledge based on practices and materialities.

In search of a theory of surge pricing

To explain SP, ubertubers sometimes recur to the supply and demand imagery that orient Uber's institutional argument. However, while Uber describes SP mainly as a stabilising agent that can restore the balance between supply and demand, ubertuber's accounts point to the opposite direction. Sometimes described as an 'automated' or 'robotized' resource, the algorithm-oriented system is mostly presented as an unstable and unreliable mediator that should be studied and mastered.

Most of the five ubertubers do not take SP as an unquestionable opportunity to increase earnings. The exception to this is Escola para-Uber (n.d.), whose main advice for his 'students' in his only video about this topic is quite direct: 'lose an arm, but

don't miss the surge' (Escola para-Uber, 2017). In his perspective, SP is a shortcut to a more balanced work routine: 'work with the surge and you'll be able to rest, because you'll earn double in half the time'. If knowing how to explore SP seems to be, for Escola para-Uber (n.d.), a way of 'winning the lottery' (Rosenblat & Stark, 2016), other Brazilian ubertubers have more ambiguous feelings.

Falando de Uber (2018a), for example, states that SP is 'more of an illusion than a reality'. In face of the short-lived excitement of drivers unable to benefit from the higher fares, O Motorista (2018c) uses the aforementioned 'tMoses surge' expression, while Fernando Uber Floripa (2017) appeals to another metaphor to illustrate the sociotechnical imaginaries triggered by SP. For him, the heatmap is like a 'carrot on a stick': Just as a horse or a donkey would chase the carrot, drivers are expected to chase SP. Still connecting the colour-based inscription that specialises the SP occurrence with a carrot, he adds: 'maybe this is why it is kind of orange'.

Although it often seems unattainable, SP is constantly on sight and keeps drives online and alert. The fluctuations of the heatmap are also presented as a feature that causes anxiety. Contrasting with Escola Para Uber, Fernando Uber Floripa (2017) argues that the constant changes in the heatmap 'disrupts your routine, your rest', acting as a bait that lures drivers into working: 'paint the map red or orange and drivers go online'.

Some ubertubers respond to the SP's uncertain performance by developing their own hypotheses or theories based on systematised experiences. Knowing how the 'supply and demand' are managed by SP is an effort explicitly made by both Falando de Uber (n.d) and Fernando Uber Floripa (n.d). In different videos, they present the same explanation: SP demand seems to be calculated based on the ride requests that are 'simulated', but not necessarily completed by riders. Both ubertubers claim that this hypothesis is based on experiences shared with other drivers: 'I cannot guarantee it works like this, but based on our conversations, it seems to be' (Fernando Uber Floripa, 2017).⁶ Falando de Uber (2018b; 2019a; 2019c) backs this argument with a variety of self-made inscriptions: screenshots, recordings, hand-drawn diagrams using paper and a whiteboard are pedagogically used in his explanations (Figure 2).

Among the five ubertubers, Uber do Marcelo (n.d.) is the most engaged in systematising knowledge about how SP works and how drivers' routines could be adapted to better take advantage of it. Based on self-observed patterns of mobility in his city and on his



Figure 2. In two videos, Falando de Uber (n.d.) explains the surge pricing with self-generated 'inscriptions'.

archive of screenshots, the ubertuber developed his own classification system, in which he identified 'three types of surges' (Uber do Marcelo, 2019a). The first one is the surge 'with a scheduled time', which occurs in the morning when riders are on their way to work and flows from residential areas to city centres. The opposite happens at the end of business hours. The second type seems to 'come out of nowhere' for misinformed drivers, but are usually associated with big, planned events. The third type occurs on special occasions such as Christmas. As riders are more willing to pay extra fees, this is the 'the best surge' and 'the one that lasts longer'.

Uber do Marcelo (2020) states that what differentiates the drivers who 'know' how to work is not only 'mastering' the app, but also having familiarity with their city's mobility dynamics and with riders' habits and routines. This broader engagement would allow his subscribers to 'anticipate surge' and be 'faster than Uber'. The ubertuber also stresses that, as he organises his day and his week around SP variations, his own body is subjected to a messy temporality: 'my biological clock is very messy, but I'm always aiming at optimising my earnings' (Uber do Marcelo, 2020).

Mastering the app and the city: tactics and risk management

Besides seeking to understand and explain SP's principles, ubertubers are often invested in understanding how to work with the Uber Driver app, i.e., how to use it tactically and minimise its instabilities. To increase or even to stabilise earnings, it is necessary to go beyond the app's default features and explore other resources.

Once again, the self-production of inscriptions is a fundamental component of knowledge-making practises. More than a shareable material that collaborates for a collective understanding of the SP, screenshots and screen recordings also work as a preventive measure to ensure that drivers are fairly compensated for their rides. In some cases, this is a protection against the app itself since, according to some ubertubers, eventual bugs in the app may prevent drivers from being properly paid by Uber.

Screenshots are also visual proofs against a combination of malicious riders and Uber's tendency to favour the rider's case rather. If a rider complains about the costs of a trip, Uber will likely reimburse them by taking that value from the driver's earnings. Moreover, in cash-paid trips, some riders allege they have not been notified about the surge and only have enough cash for the regular fare. As O Motorista (2018a) puts it: 'Uber's app, simply due to automation, does not consider both sides, and as we know, ends up punishing drivers'.

Ubertubers' general advice for drivers is to track their earnings after each ride and always screenshot surge rides: 'if surge pops up, take a screenshot', states O Motorista (2018a). Falando de Uber (2018c) recommendation goes even further: 'whatever you are doing, take a screenshot (...) you will need it' (Falando de Uber, 2018c).

Bugs are not the only cause of potential losses for drivers. Even when it is operating properly, SP exhibits some shady features that may harm drivers' earnings. Fernando Uber Floripa (2019a) explains that the app's own settings lead drivers to work 'in the dark': when a ride request is accepted, the heatmap 'disappears' from the interface, and only reappears after completion. Thus, the app deprives the driver of information deemed essential for their decision-making processes in case they, as usual, receive a request during a ride. 'You can't rely on luck', suggests Fernando Uber Floripa (2019a), who recommends

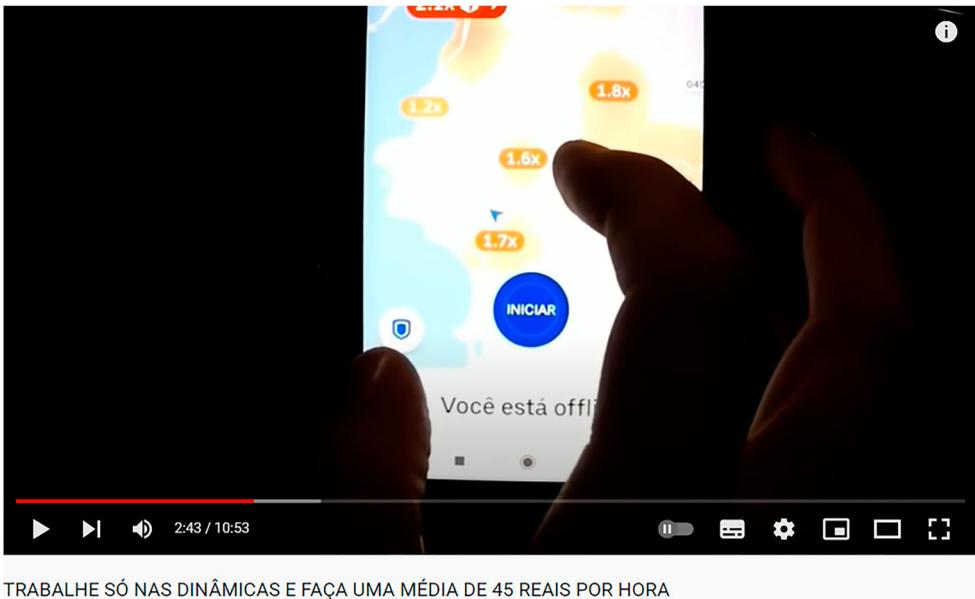


Figure 3. Uber do Marcelo (n.d.) uses his second phone to check the heatmap in a video called ‘Work only during surge and earn around 45 reais in an hour’.

that drivers go offline as soon as a new ride is initiated. This tactic allows them to check if the next request is ‘coherent’ with the area’s pricing conditions, that is, if the area is surging and the ride is priced accordingly. Uber do Marcelo (2019b), on his turn, deals with the SP ‘disappearance game’ by using two phones: one for rides, and one for monitoring, always keeping an eye on both of them (Figure 3). In that way, he is able to keep track of SP the entire time, including during rides.

In another video, Fernando Uber Floripa (2020a) presents going offline as a way to decrease the total number of drivers available and, as a consequence, to contribute to SP’s occurrences by lowering the count of available drivers: ‘it may contribute to it, if more drivers work like this, there are higher chances of a surge appearing’.

Although dominating the app is central to ‘mastering’ SP, drivers also need to beware of where in the city surges tend to occur. While displaying a series of screenshots in Porto Alegre (Figure 4), Uber do Marcelo (2020) points out the occurrence of SP in the city’s poor and peripheral areas, arguing that the main users of ride-hailing apps are located in these regions: ‘the ones who pay the highest surge pricing the most often are part of the poorer population’. Uber do Marcelo (2020) associates this trend with the precarious coverage of public transportation infrastructures in Brazilian cities: ‘the periphery people don’t want anything to do with buses anymore’. Because of this, he recommends, drivers should ‘learn to work in the peripheries’.

Learning to work in the peripheries often means knowing how to manage risks that threaten drivers’ physical integrity. Violence, as well as fear and anticipation of violence, are a common concern among drivers, since news about their peers being robbed, attacked or even murdered repeatedly make the headlines (see, for example, Philipps, 2019). Fernando Uber Floripa outlines some safety advice regarding the evaluation of

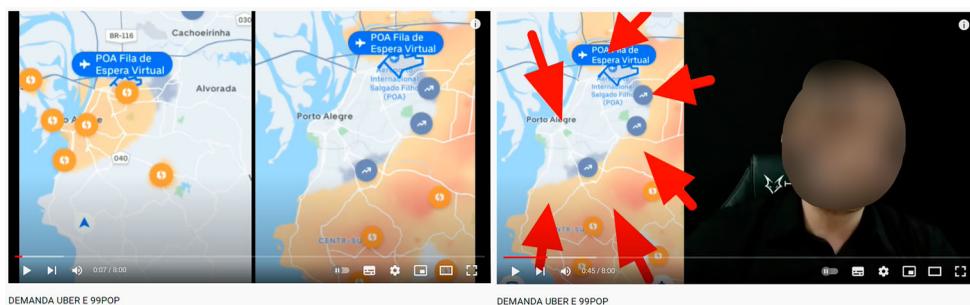


Figure 4. Uber do Marcelo explains the demand patterns by signaling relevant areas in Porto Alegre.

risky rides. A crucial indicator for safeness, for example, is the rider's rating. A high rate in the reputation system does not equal safety/quality. According to Fernando Uber Floripa (2020b), a 5 stars rating should be interpreted as a risk sign, since it usually means that the profile was created recently and may be used to facilitate robberies. Following this experience-based thesis, the rider's rating is taken as a 'safety tool' (Fernando Uber Floripa, 2020b).

Investigating the new surge

Uber's SP is interpreted by Brazilian ubertubers not only as an unstable and/or unreliable system, but also as a resource that is undergoing continuous changes. The frequent updates and various active versions of SP found in different drivers' apps are some of the issues that makes SP's performance a permanent matter of concern and a recurrent topic for ubertubers.

This malleability became especially evident in 2018, when Uber announced the 'new surge'. Presented as an additive model that would be 'easier to understand' in comparison to the multiplier-based model (Ross, 2019), the novelty started to be gradually implemented in Brazil in 2019. The sparse information provided for Brazilian drivers resulted in an intense sense making process based on the aggregation of isolated reports and first-impressions evaluations on the ubertuber's side. This process was also marked by the contestation of the information shared by ubertubers, followed by a certain assertion of authority.

Fernando Uber Floripa (n.d) was the protagonist of this particular contest. He started sharing information about the 'new surge' as soon as it was launched in the US (October 2018). On that occasion, an US-based Brazilian driver made a guest appearance in the channel (Fernando Uber Floripa, 2018) and commented on the advantages and downsides of the new model. Values and percentages are presented in the video (Figure 5) to illustrate how the new model would be more lucrative for short trips but would decrease the surge earnings for longer trips.

Nearly one year later, in September 2019, the channel reported that some drivers noted the multiplier digits were missing. This would be the first sign of the new surge implementation in Brazil – 'the end of surge as we know it', stated Fernando Uber Floripa (2019c), while explaining that Uber was already running tests in some Brazilian cities.



Figure 5. 'Uber changed surging' in a thumb image of Fernando Uber Floripa (2018).

According to Fernando Uber Floripa (2019e), his first-hand news were dismissed by drivers and other ubertubers. To reinforce your authority on the subject, he proudly announced that he was one of the drivers selected by Uber to test the new system (Fernando Uber Floripa, 2019e), which was proved by an official email sent by the platform to him and other selected drivers in some Brazilian cities. This allowed him to lead the collective knowledge-making process around the new surge, which includes a concern: 'Uber will manipulate SP to take drivers to where it wants it to be', attracting drivers to areas that shouldn't be undersupplied. Fernando Uber Floripa's email screenshots were later reproduced and discussed by other ubertubers.

After the official new surge announcement in Brazil, other more discrete and sparse changes were spotted by drivers and reported by ubertubers. Based on a subscriber's observation, Falando de Uber (2019d) pointed out a 'new trial' regarding the calculation of SP: the boarding fare, i.e., the value to which the driver's earnings based on time and distance are added was no longer included in the amount multiplied by the surge multiplier. Arithmetic operations are exhibited to explain how this would result in a decrease in surge earnings (Figure 6). According to him, the city where his subscriber lived (Natal, in the Northeast of Brazil) had been chosen as a test city for a new surge model. Falando de Uber (2019d) emphasises that 'once again, Uber didn't even warn you. (...) you now know, thanks to our channel'.

Later, in 2020, drivers noticed that the multiplier was no longer being displayed in the app's interface, leaving the heatmap colours the sole decision-making resource regarding SP. For Fernando Uber Floripa (2020a, 2020b), this update was an interference in drivers' 'freedom of choice'. For Uber do Marcelo (2020), this meant drivers would have to 'work according to their instincts'. He took the change as an opportunity to reinforce the

Distância	R\$ 5,08
Tempo	R\$ 1,98
Preço Dinâmico (1.5x)	R\$ 3,53
Total	R\$ 12,50

$5,08 + 1,98 = 7,06$
 $7,06 \times 50\% = 3,53$

Preço dinâmico **NÃO** incidu sobre o Valor de embarque 

Figure 6. Calculation reproduced by Falando de Uber (2019d): ‘surge pricing was NOT not applied on base fare’.

importance of drivers investing in getting to know the app: ‘Those who study the app and know how it works will make money’, he stated.

Conclusions

In different ways, the five Brazilian ubertubers studied in this article engage in a significant effort of elaborating and systematising knowledge about how Uber’s SP works – or supposedly works. Based both on their own experience and research, and on information shared by other drivers, their videos make public singular ways of understanding SP through both verbal narrative and visual resources such as screenshots and hand-drawings. Much of this effort is associated with the feelings triggered by SP, be it the exciting prospects of making more money, or the frustrating realisation that the red shade disappeared before a driver could benefit from it.

By bringing together the experiences, identities and skills associated with both Uber and YouTube, ubertubers’ channels and videos provide a varied sample of the negotiations and knowledge-making processes that emerge from drivers’ continuous engagements with surge pricing. To make sense of SP and outline their own perceptions and strategies, ubertubers frequently associate evidence-based arguments, such as classifications (‘three types of surges’) and theories (riders simulations are considered for calculating the demand) with feelings (anxiety), and imaginaries that take shape through visual metaphors and other stylistic devices.

To increase earning, different strategies and tactics are present by the studied ubertubers: while Uber do Marcelo (n.d.) adjusts his biological clock based on profitability prospects and uses two phones to be able to monitor SP, Fernando Uber Floripa (n.d.) goes offline between rides to make sure he is receiving fairly priced requests. Brazilian ubertubers seem to share an ambivalent relationship with Uber’s algorithm-oriented system and, more broadly, with the conditions of possibilities it materialises. The continuous learning of how to (more lucratively) plan – or govern – themselves are inserted into

an asymmetrical power relation with a platform that reinforces the neoliberal governmentality based on a 'self-everything' logic. In this sense, the studied videos reveal how SP enacts specific regimes of practices and subjectivities.

As the 'Crossing of the (algorithmic) Red Sea' metaphor suggests, the knowledge-making processes led by ubertubers are also triggered by the uncertainty and the instability that characterises the Uber Driver app. As the ride-hailing platform manages cities, drivers, and other elements within laboratorial dynamics, the rules of the games are – or may be – always changing and are definitely never clear. While the platform keeps 'changing the tire in a moving car' (Fernando Uber Floripa, 2020a, 2020b), drivers keep adapting their ways of knowing and dealing with rumours and fears caused by a long-standing possibility facing the 'end of the surge as we know it' (Fernando Uber Floripa, 2019d). In this process, screenshots materialise experiences and operate as organising inscriptions: they serve as proof for a claim, as a way to communicate an information, and as the material based on which patterns can be traced and strategies can be formulated.

The individual practical and emotional experiences of each driver are inextricably entangled with the efforts to collectively share and interpret them by using multiple social media platforms. While messaging and social media services facilitate the circulation of multiple experiences and conversations, YouTube allows a driver to dedicate him or herself to an audience that, ideally, will also be engaged in providing information and discussing new practices, thus enacting a continuous and productive process of knowledge-making.

The success of this enterprise depends, among other factors, on one's capacity in playing the major audiovisual platform 'visibility game' as well as in incorporating, in his own way, the typical performative skills of a digital influencer. This process is inevitably marked by certain disputes on who has the authority on what is and what is not true, as illustrated by the controversies around the new surge. By ceasing to be 'just' another anonymous driver, a ubertuber could be seen as a specific kind of micro-celebrity known for embodying a sort of self-generated male entrepreneur who knows the hardships of the 'real life' as an on-demand driver in a country like Brazil.

In this sense, ubertubers may be taken not only as actors who intersperses the use of two of the most popular platforms nowadays, but also, in a broader sense, as a subject that combines the precarious condition of the gig economy with the audience-oriented performativity of social media platforms and, thus, combines multiple imaginaries and ways of knowing. As part of an unstable and flexible 'vision of future', these multiplatform workers are ready to rebrand themselves and to invest in initiatives that are more lucrative than being an Uber driver.

A few months after the conclusion of our data collection, two of the studied channels – 'O Motorista Oficial' and 'Escola para Uber' – were renamed with the owners full name, deleted and/or made private part of their videos (including some of those studied here) and presented a significant shift in their focus. The former is now sharing tips on digital marketing, cryptocurrency, and other ways of 'making money online', and the latter directed his pedagogical vocation to sharing investing and day trading strategies and to sell courses and mentorships about, among other topics, how to 'become a millionaire youtuber'.

The abandonment of the gig economy activity that supposedly inspired the creation of the channel reveals that an ubertuber may be more connected with the wider

uberisation process than with solely Uber itself (or with a ride-hailing platform). In its turn, being a Youtuber emphasises the importance of increasing subscribers and monetisation opportunities. More than that, however, it points to renewed ways of knowing an infrastructural platform and the practices, theories, and imaginaries it may enact. In a broader sense, as ubertubers move across multiple platforms and money-making activities they weave together variable ways of knowing and expectations for possible futures.

Notes

1. These and all the following excerpts cited in this article were freely translated from Portuguese by the authors.
2. Like many ride-hailing drivers in Brazil, ubertubers also work with other platforms such as 99 and InDriver. Our study focuses solely in what ubertubers say about Uber's features.
3. Brazil is Uber's largest market outside the United States (Rochabrun, 2019).
4. Among the five selected channels, the one with the lowest subscriber counts ('O Motorista Oficial') had nearly 64,000 subscribers – approximately the same amount as the most subscribed channel identified by Chan (2019).
5. Since the time of collection, three channels' titles were changed; 'Escola para Uber' became 'Thomas de Castro'; O Motorista Oficial was renamed to 'O Tiago Lima' and 'Fernando Uber Floripa', to 'Fernando Floripa Motorista Uber'. This 'rebranding' is partially discussed in the final section of the article.
6. This hypothesis was later confirmed by the authors in an article published by Uber researchers (Yan et al., 2020).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq/Brasil) - BolsaProdutividade 313032/2021-1; A CNPq/Brasil Masters Studentship; and a London Arts and Humanities Partnership (LAHP/AHRC/UK) Doctoral Studentship.

Notes on contributors

Abel Guerra is a Media and Communications PhD Student at the London School of Economics and Political Science and a member of the research group R-EST (estudos redes sociotécnicas). He holds a master's degree in Media and Communication from the Federal University of Minas Gerais (UFMG), Brazil, where he defended his master's thesis entitled 'Infrastructures, narratives and algorithmic imaginaries: technographing Uber's surge pricing'. Current research interests include platforms, datafication, infrastructures and knowledge production [email: a.goncalves-guerra@lse.ac.uk].

Carlos d'Andréa is a professor at Graduate Programme in Communication Studies at the Federal University of Minas Gerais (UFMG), in Brazil, and coordinator of the research group R-EST (estudos redes sociotécnicas). Researcher of CNPq ('Bolsa Produtividade' grant). In 2017/2018, worked as a visiting scholar at the Media Studies department at the University of Amsterdam (UvA). Platforms, social media, algorithms, science, and controversies are some of his research topics. His current research project is named 'Measuring uncertainties, sharing

controversies: contemporary dynamics of the platformisation of science' (2020-2023) [email: carlosdandrea@ufmg.br].

ORCID

Abel Guerra  <http://orcid.org/0000-0003-4647-1898>

Carlos d'Andréa  <http://orcid.org/0000-0001-7328-6714>

References

- Abílio, L., Amorim, H., & Grohmann, R. (2021). Uberização e plataformação do trabalho no Brasil: Conceitos, processos e formas. *Sociologias*, 23(57), 26–56. <https://doi.org/10.1590/15174522-116484>
- Akrich, M. (1992). The de-scription of technical objects. In W. E. Bijker, & J. Law (Eds.), *Shaping technology, building society: Studies in sociotechnical change* (pp. 205–224). MIT Press.
- Bucher, T. (2018). *If... then: Algorithmic power and politics*. Oxford University Press.
- Calo, R., & Rosenblat, A. (2017). The taking economy: Uber, information, and power. *Columbia Law Review*, 117, 1623–1690. <https://doi.org/10.2139/ssrn.2929643>
- Chan, N. K. (2019). “Becoming an expert in driving for Uber”: Uber driver/bloggers’ performance of expertise and self-presentation on YouTube. *New Media & Society*, 21(9), 2048–2067. <https://doi.org/10.1177/1461444819837736>
- Cotter, K. (2018). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, 21(4), 895–913. <https://doi.org/10.1177/1461444818815684>
- Dardot, P., & Laval, C. (2014). *The new way of the world: On neoliberal society*. Verso.
- Deksnyté, I., & Lydeka, Z. (2012). Dynamic pricing and its forming factors. *International Journal of Business and Social Science*, 3(23), 213–220. <https://doi.org/10.30845/ijbss>
- Escola para Uber. (2017, November 17). *Perca Um Braço Mas Não Perca a Dinâmica!!!* [Video]. YouTube. <https://youtu.be/pfxjJZj9lic>
- Falando de Uber. (2018a, March 24). *Uber | O que fazer quando o preço está dinâmico | Não se iluda* [Video]. YouTube. <https://youtu.be/LWF2hJ9y4Is>
- Falando de Uber. (2018b, April 29). *Uber | Como funciona O Dinâmico | Vlog 80* [Video]. YouTube. <https://youtu.be/0jTSU4teLBQ>
- Falando de Uber. (2018c, September 5). *Urgente | Bug do Dinâmico | Como receber o valor do dinâmico da Uber* [Video] YouTube. <https://youtu.be/m8QFWnxosMo>
- Falando de Uber. (2019a, March 29). *Dinâmico na Uber | Entenda e não passe raiva* [Video]. YouTube. <https://youtu.be/y5Wx8MCFGQA>
- Falando de Uber. (2019b, August 4). *Como saber se está dinâmico com preços mais altos na Uber* [Video]. YouTube. <https://youtu.be/ldz0IZtNuoI>
- Falando de Uber. (2019c, August 19). *Como funciona o dinâmico na Uber* [Video]. YouTube. <https://youtu.be/mtd7htSSTM>
- Falando de Uber. (2019d, December 5). *Uber mudou o cálculo do dinâmico em novo teste | veja como ficou* [Video]. YouTube. <https://youtu.be/QEE-ngU6CYI>
- Fernando Uber Floripa. (2017, January 27). *Uber: A real sobre a Tarifa dinâmica* [Video]. YouTube. <https://youtu.be/ceQdV2g4KzI>
- Fernando Uber Floripa. (2018, October 30). *Extra extra: Uber Mudou a Tarifa Dinâmica!* [Video]. YouTube. <https://youtu.be/Wynz8SEoZaY>
- Fernando Uber Floripa. (2019a, January 2). *Como Turbinar Os seus ganhos na Tarifa Dinâmica Uber 99 Pop Cabify* [Video]. YouTube. <https://youtu.be/D50tQuF6yBs>
- Fernando Uber Floripa. (2019b, March 26). *Porque NÃO TOCA dentro da dinâmica Uber 99 Pop Cabify* [Video]. <https://youtu.be/y5Wx8MCFGQA>
- Fernando Uber Floripa. (2019c, September 16). *Uber tira Multiplicador dos Motoristas: fim do dinâmico* [Video]. YouTube. https://youtu.be/P4VSVRd_XtU

- Fernando Uber Floripa. (2019d, September 29). *Uber acabou com a tarifa dinâmica como a Conhecemos* [Video]. YouTube. <https://youtu.be/NITU-Eu6Lpg>
- Fernando Uber Floripa. (2019e, October 8). *Acabou O Multiplicador do Preço dinâmico da Uber* [Video]. https://youtu.be/P4VSVRd_XtU
- Fernando Uber Floripa. (2020a, January 29). *Como Forçar o preço dinâmico na Uber e 99* [Video]. YouTube. <https://youtu.be/s7xP00VHaAA>
- Fernando Uber Floripa. (2020b, October 15). *Uber muda App E tira preço dinâmico dos chamados* [Video]. YouTube. <https://youtu.be/a2m22eCIMRo>
- Foucault, M., Senellart, M., & Foucault, M. (2010). *The birth of biopolitics: Lectures at the Collège de France, 1978–79* (1st pbk ed., [Repr.]). Picador.
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. Boczkowski, & K. Foot (Eds.), *Media technologies: Essays on communication, materiality, and society* (pp. 167–194). MIT Press.
- Introna, L. D. (2016). Algorithms, governance, and governmentality: On governing academic writing. *Science, Technology, & Human Values*, 41(1), 17–49. <https://doi.org/10.1177/0162243915587360>
- Jasanoff, S., & Kim, S.-H. (Eds.). (2015). *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*. The University of Chicago Press.
- Kitchin, R. (2017). Thinking critically about and researching algorithms. *Information, Communication & Society*, 20(1), 14–29. <https://doi.org/10.1080/1369118X.2016.1154087>
- Knorr-Cetina, K. (1999). *Epistemic cultures: How the sciences make knowledge*. Harvard University Press.
- Latour, B. (1999). *Pandora's hope: Essays on the reality of science studies*. Harvard University Press.
- O Motorista Oficial. (2018a, January 20). *Como se proteger do novo golpe do dinâmico da Uber* [Video] YouTube. <https://youtu.be/qNkXyTC4n10>
- O Motorista Oficial. (2018b, July 3). *Saiba porque o dinâmico não aparece no seu aplicativo* [Video]. YouTube. <https://youtu.be/ZpwKn7iUyzw>
- O Motorista Oficial. (2018c, July 27). *Mudança na Uber vai acabar com o dinâmico?* [Video]. YouTube. <https://youtu.be/ZpwKn7iUyzw>
- Philipps, D. (2019, December 19). Murder of Uber drivers may be Brazil gang leader's 'revenge' for cancelled ride. *The Guardian*. <https://www.theguardian.com/world/2019/dec/19/brazil-uber-drivers-murder-gang-leader-cancelled-ride>
- Raun, T. (2018). Capitalizing intimacy: New subcultural forms of micro-celebrity strategies and affective labour on YouTube. *Convergence*, 24(1), 99–113. <https://doi.org/10.1177/1354856517736983>
- Rieder, B., Coromina, O., & Matamoros-Fernandez, A. (2020). Mapping YouTube: A quantitative exploration of a platformed media system. *First Monday*, 25(8). <https://doi.org/10.5210/fm.v25i8.10667>
- Rochabrun, M. (2019, December 11). How Uber drains carmaker profits in Latin America's biggest market. *Reuters*. <https://www.reuters.com/article/us-uber-autos-insight-idUSKBN1YF12I>
- Rosenblat, Alex, & Stark, Luke. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal Of Communication*, 10(27), 3758–3784. <http://dx.doi.org/10.2139/ssrn.2686227>
- Ross, S. (2019). What moves us: Shedding more light on new driver surge. *Uber Under The Hood*. <https://medium.com/uber-under-the-hood/what-moves-us-shedding-more-light-onnew-driver-surge-d580488a6761>
- Sharma, S. (2011). The biopolitical economy of time. *Journal of Communication Inquiry*, 35(4), 439–444. <https://doi.org/10.1177/0196859911417999>
- Uber. (n.d.a). Marketplace. *Uber* <https://www.uber.com/us/en/marketplace/>
- Uber. (n.d.b). What's happening when prices surge. *Uber*. <https://www.uber.com/us/en/marketplace/pricing/surge-pricing/>
- Uber do Marcelo, o Uber fora da Curva. (2019a, November 2). *Trabalhe só nas dinâmicas e faça uma média de 45 reais por hora?* [Video]. Youtube. <https://youtu.be/bf-pYektFJw>
- Uber do Marcelo, o Uber fora da Curva. (2019b, November 12). *VC sabe quais são os 3 tipos de dinâmica?* [Video]. Youtube. <https://youtu.be/9haB7WJNAvM>

- Uber do Marcelo, o Uber fora da Curva. (2020, October 16). *Demanda Uber E 99POP* [Video]. YouTube. <https://youtu.be/zjJxjwrDBas>
- Woodside, J., Vinodrai, T., & Moos, M. (2021). Bottom-up strategies, platform worker power and local action: Learning from ridehailing drivers. *Local Economy*, 36(4), 325–343. <https://doi.org/10.1177/02690942211040170>
- Yan, C., Zhu, H., Korolko, N., & Woodard, D. (2020). Dynamic pricing and matching in ride-hailing platforms. *Naval Research Logistics (NRL)*, 67(8), 705–724. <https://doi.org/10.1002/nav.21872>