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Rationalising platform mobility in food delivery

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Abstract

In the case of food-delivery platforms and other last-mile logistics operations, courier work is mobility transformed into labour-power. As such, mobility is subject to processes of rationalization. With examples from courier and dispatching work, this entry explores how rationalizing platform mobilities is a primary motivation in collecting and processing courier data.

Theme

Mobile Work

Keywords

platform mobilities, delivery service, labour process, data

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Fleatz is an app-based food delivery company based in Berlin and operating throughout the DACH region.[2] It is a platform business: a digital infrastructure that connects customers (hungry urbanites) with service providers (couriers and restaurants). One of the most valuable aspects of Fleatz's food delivery service is its mobility. Fleatz couriers, with the help of an app that assigns orders and provides directions to restaurants and customers, sell their mobility so that others have the privilege of remaining immobile. When it comes to the business of food delivery and other last-mile logistics, mobility is thus transformed into the commodity called labour-power.[3] As such, courier mobilities are subject to rationalization, i.e., reorganization according to the managerial principles of productivity and efficiency. In this entry, I draw on twenty-one months of fieldwork—including interviews with managers, observations of dispatchers, and six months working as a Fleatz courier—to show how rider mobilities are rationalized and how this process is a primary motivation in collecting and processing rider data.

Delivery bag, 2022, photo by the author.

Industrial rationalization

[2] Fleatz is a composite research subject, representing my insights gathered from three different European food delivery apps. Names of companies, products, and participants, as well as identifiable characteristics, have been changed to maintain confidentiality.

[3] Xiang, Biao. 2021. The Emerging 'Mobility Business.' MoLab Inventory of Mobilities and Socioeconomic Changes. Halle/Saale: Anthropology of Economic Experimentation, Max Planck Institute for Social Anthropology. Available online at: https://www.eth.mpg.de/molab-inventory/mobility-business/emerging-mobility-business.

Rationalization involves rendering human work activity calculable and reorganizing it according to principles of efficiency. Scholars such as Max Weber[4], E.P. Thompson[5], and Michel Foucault[6] have all focused on the factory as an exemplary locus of rationalized labour, and Frederick Winslow Taylor's method of "scientific management" in the early twentieth century was one of the most hyperbolic manifestations thereof. In Taylor's conception, production would never reach peak efficiency until management first classified, tabulated, and reduced all worker knowledge of the labour process "to rules, laws, and formulae," then used this knowledge to plan out "the work of every workman … describing in detail the task which he is to accomplish, as well as the means to be used in doing the work," specifying "not only what is to be done, but how it is to be done and the exact time allowed for doing it".[7] Taylor's compulsion to micromanage was based on his experience as a machinist-turned-foreman and his matter-of-fact acceptance of the irreconcilable tension between the interests of workers and employers, wherein the former aim for increased pay and quality of working conditions, and the latter, to reduce labour costs.[8] Separating the conception of work from its execution, or "deskilling," gives management significantly more control over the labour process.[9] This redistribution of control was the raison d'être of Taylorism. Although Taylorism eventually fell out of public favour for the degree to which it dehumanized and alienated workers, the rationalization of work for the purposes of efficiency and worker control persists.[10]

To what extent are these processes of rationalization realized at Fleatz? The company is not an analytically classic twentieth-century shop floor. Still, digital platforms grant the logic of industrial capitalism a new mobility in finding new forms and spaces.[11] At Fleatz, rider work is broken down into easily replicable parts with easy-to-follow instructions over whose formal process the rider has little say. This was evident from my very first shift as a courier. As I was cycling around Berlin-Mitte, I got a notification, accompanied by a little chime, that I had received my first order. I opened the rider management app, and I had no way of interacting further with it until I tapped OK, upon which the app launched a Google Maps API that showed me first-person, turn-by-turn directions to a restaurant: a vegan fast food joint. When I arrived, a panel popped up at the bottom of the map. I was directed: "*Jetzt abholen*" (pick up now). The app displayed an order number, the customer's last name and address, and a button labelled *FERTIG* (done). I asked the restaurant staff if they had an order for Fleatz. A server asked for the delivery address and, ten minutes after my arrival, handed me the order. I tapped the FERTIG button. Now I was shown the route to the customer's building with the instruction to deliver the food now ("*Jetzt ausliefern*"). I found the customer's last name on the directory by the door and rang their bell. The *Zusatzinformationen* (additional information) in the panel at the bottom of my screen directed me to the first floor above the ground floor (1. OG). I handed over the food to the customer and tapped FERTIG. I immediately got another order from the vegan fast food place. After I delivered that one, I had two pickups in a row: a burrito place and then

[4] Weber, Max. 1930. *The Protestant Ethic and the Spirit of Capitalism*. London: Routledge.
[5] Thompson, E.P. 1967. Time, Work-Discipline, and Industrial Capitalism. *Past & Present*, no. 38: 56–97.
[6] Foucault, Michel. 1978. *The History of Sexuality, Volume I: An Introduction*. Translated by Robert Hurley. New York: Pantheon Books.
[7] Taylor, Frederick Winslow. 1911. *The Principles of Scientific Management*. New York: Harper & Brothers.
[8] Ibid.
[9] Braverman, Harry. 1974. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.
[10] The employer's fundamental interest in controlling the labour process has never been so explicitly articulated since Taylor. Instead, managerial actors have since preferred to write off worker interests as "irrational" and "noneconomic" (Braverman 1974, 69)
[11] Altenried, Moritz. 2022. *The Digital Factory: The Human Labor of Automation*. Chicago: University of Chicago Press.

a Vietnamese restaurant. I delivered those. Then an order from a different Vietnamese restaurant. Then Subway. And so on, until my shift ended three hours later. From this example, we can see how Fleatz delivery operations, like those of a factory, are decomposed, quantified, and standardized, and how real-time tracking across urban space organizes restaurants and rider mobilities into production lines.

Delivered Bibimbap, 2022, photo by the author.

Furthermore, the informational asymmetries for which platform work is notorious are nothing new in rationalized labour processes.[12] As established, the separation of the worker from their understanding of their labour process was the whole point of Taylorism. As a rider, I didn't know what orders were waiting invisibly in some digital pipeline. But years ago, some riders had been able to figure it out. The app worked differently then. Riders could see upcoming orders, but these were listed only as alphanumeric codes. Riders who stayed in the job long enough figured out that these were unique restaurant identifiers. They built a spreadsheet of restaurant names and their codes and shared it with each other. Although they couldn't refuse orders from restaurants that were far away or known for preparing food too slowly, riders discovered that if they waited long enough, an upcoming order from such an undesirable restaurant would disappear from their queue. Maybe management caught on, maybe not, but eventually the list of upcoming orders disappeared from the rider app. Here, another informational inequality: if riders don't know why management makes decisions, like hiding the queue of upcoming orders, they can't be sure what levers of power they have in influencing their working conditions.

Data and the rationalization of courier mobilities

F.W. Taylor was obsessed with time and motion studies, first developed by Lillian and Frank Gilbreth, which catalogued "the various movements of the body as standard data" along with the

[12] Rosenblat, Alex, and Luke Stark. 2016. Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers. *International Journal of Communication* 10: 3758–84.

time required to complete work activities, thereby rendering the labour process as "primarily a statistical problem"[13]. In many ways, the collection and processing of rider data is a direct continuation and expansion upon this endeavour, as exemplified by rider mobility metrics.

The most important metric in managing Fleatz rider mobilities is called "the efficiency": the average orders delivered per courier per hour. "Can you actually have an efficiency of 2.0, or only an efficiency of 1.2, or of 2.8?" asked René, the Chief Logistics Officer, rhetorically. "This is *millions* [of euros]. […] It's really because you have four, five thousand drivers [in Berlin alone]." The revenue gained from incremental efficiency increases in individual rider mobilities "scales up massively. [...] Optimizing this, it's every single bit of your overall processes." Noah, a former operations executive, went into more detail:

> "Having all these riders, it's like, the biggest cost of the company by far. […] If you can make sure that you optimize the routes, so the shorter driving distances, it's great. If you have quicker pickups, so that, y'know, the rider doesn't have to stay at the restaurant for so long because the food is right there, ready, just on time. […] All that data that comes out of how fast all of these steps in the process are then coming out. And then there's this team in the office working a lot on: How can we optimize this? How can we improve this? How can we make sure that, y'know, instead of taking seven minutes to pick up food, do we go into five minutes because that is a big gain if you do that over like millions of orders over a certain period of time. […] That's really what a lot focus and attention is going into."

The processing of huge amounts of rider data to rationalize (or, in contemporary jargon, "optimize") rider mobilities in real time could be observed in the dispatching office, which was located in Berlin but oversaw operations in the entire DACH region. Of the many categories of data, or metrics, that dispatch agents had to constantly monitor, delays and waiting times were among the most important. On the right of her two monitors, an agent named Elizabeth showed me her list of all the deliveries, or "jobs," in the three cities she was currently responsible for: Vienna, Klagenfurt, and Zurich. Each job had two coloured dots beside it in red, yellow, or green. One dot represented the restaurant's status, and the other, the rider's. A yellow dot indicated a delay of two to four minutes. Red indicated a delay of five minutes or more. Riders might be delayed arriving at the restaurant or delivering the order. Restaurants might be delayed in preparing the food. If the dots were green, that meant things were happening on time.

There was also a job list column labelled "We called" with check boxes for the restaurant and the rider. If a rider was late getting to the restaurant, the dispatcher had to call the restaurant so that they knew to wait to prepare the order. Then Elizabeth noticed that, in the job list, one of the orders had the word ACCEPTED in red font beside it. The order had been assigned four minutes ago, and the red colour meant that rider hadn't seen it in their app. She opened a chat tool and typed to the rider that he had a new *Auftrag* (job, order) and should look at it. If he still didn't see it, she would have to call him. But within seconds, he saw the message and the new order, and ACCEPTED turned black.

Elizabeth took me to see Kalem, the dispatcher who was overseeing Berlin. He was checking a metric called "waiting time," which measured how long each rider had been waiting in a restaurant

[13] Braverman, Harry. 1974. Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press; Whyte, William Foote. 1955. *Money and Motivation: An Analysis of Incentives in Industry*. New York: Harper & Row.

for their order. If a rider was waiting for over fifteen minutes, Kalem had to create a ticket for customer service, and they would immediately close the restaurant, i.e., remove it from the customer user interface, for thirty minutes. That way, subsequent orders wouldn't be delayed and riders could be used more efficiently.

Conclusion

In these brief examples, we can see how mobility as labour-power is fragmented and rationalized, and how rider data is used to realize this. Of course, courier mobilities have contemporary forms of value beyond their labour-power, such as the speculative value of their data.[14] And today's digital technologies allow for a kind of real-time time and motion tracking and instant feedback that F.W. Taylor could only have dreamed of. At the same time, much of the logic for collecting and processing rider data can be traced back to the labour processes of industrial capitalism.

In this entry, human labour is central to the operations of what, at first glance, seems like just another "tech company." Humans are not only crucial to delivering food; dispatching is also a deeply hybrid process of human and technological interaction. This is not the case with all platforms: Uber and many others automatically nudge mobility workers through their apps rather than relying on humans sending messages and making phone calls, for example. But despite the promises and fears of full automation, humans persist in courier and dispatching work. In part, this is because of how mobile and mobilizable we are. We are more flexible than a barely controlled chaos of interdependent software tools, and we are cheaper and more replaceable than today's delivery drones. Despite the gloss of the "digital economy," the forms of human labour explored in this entry are still "optimized" by making them as mechanical as possible, as was the case on the factory floor.

[14] Doorn, Niels van, and Adam Badger. 2020. Platform Capitalism's Hidden Abode: Producing Data Assets in the Gig Economy. *Antipode* 52 (5): 1475–95. https://doi.org/10.1111/anti.12641.