

The devices of intermediation in platform labour markets

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Luca PERRIG

University of Geneva

In this research, I wish to bring a new light to the understanding of labour markets. Through the study of online food-delivery platforms, I will show what it takes to create a labour market from top to bottom. From the data I gathered during a prolonged ethnography among couriers and managers of food-delivery platforms (Seaver, 2017), I will show the power of intermediation devices in shaping the market for delivery services (Bessy & Chauvin, 2013).

The gig economy offers a most adequate case for the study of labour markets, since the platform is the sole actor in charge of organising the whole market, from top to bottom. Because it employs freelance couriers, it cannot rely on traditional authority and must use digital devices to put its contractors to work. In this process of enrolling its workforce, the platform faces a number of delicate situations in which the courier may withdraw from the transaction. I distinguish four such situations, inspired by what Çalışkan and Callon (2010) call *market framings*.

- Recruitment: To enrol a worker in its project, the platform must start by recruiting this person. To do so, internet is the favoured device, using social media, employment platforms, and promoting its offers through referencing. Platforms, search engines, and users thus select the population that will constitute the workforce (Marchal, Mellet, & Rieucan, 2007). Once ready, the worker then has to log into the app at the right time and the right place. Dynamic pricing is often used for this purpose. A mix of algorithms and user beliefs end up shaping the behaviour of the workers (Rosenblat, 2018).
- Matching: An algorithm is used to attribute the orders to the couriers who is best suited. This algorithm should meet two criteria. First, it should bring efficiency by reducing searching costs (Kuhn & Skuterud, 2004). Second, it should be perceived as fair by the couriers. This is essential to obtain worker assent. Indeed, considerations of justice intervene in the configuration of algorithms, which have to be taken into consideration to avoid the defection of couriers (Lee, 2018). For this reason, both the design of the algorithm and the beliefs of the couriers are essential for understanding the functioning of the matching algorithm.
- Equipment: For couriers to provide their service, the platforms must equip them appropriately. This implies material equipment such as a backpack, but cognitive equipment will also prove essential (Hutchins, 1995). Designing the proper user

interface will allow the platform to help couriers in their deliveries using socio-cognitive prostheses (Cochoy, 2008) such as a map, checklists and performance measures. Ratings can serve as benchmarks to enhance efficiency and build trust (Diekmann, Jann, Przepiorka, & Wehrli, 2014). However, ratings also have unexpected performative effects (Scott & Orlikowski, 2012) and rely on reviewers that have a broad range of motivations (Pinch & Kesler, 2011). As Wood, Graham, Lehdonvirta, and Hjorth (2018) convincingly showed, ratings do have an effect on the way work is accomplished. This demonstration prompted me to establish the goal of discussing the potential effects of those devices more generally on the small-scale labour market that the platform is organising.

- **Valuation:** The ultimate situation for the platform in this enrolment process is acceptance. To convince the courier to accept an order, the platform must reach him or her with a sufficiently attractive offer. To do so, the task must first be defined and a price must be assigned. Typically, an order is defined as two addresses, a distance, a delivery time and items to be delivered. The price is a formula including the distance between the pick-up place and the drop-off place. How are these choices made? What are the criteria that couriers value? These considerations will lead me to adopt a pragmatist approach to the value of this service that departs from traditional objective/subjective value, but emerges from a process of valuation in which moral and material considerations are involved (Karpik, 2010; Muniesa, 2011).

To summarise, my interest resides in the management devices that platforms use in order to put a freelance workforce to work. These devices will be studied through their conception and use, by the managers as well as the workers (Eslami et al., 2016; Oudshoorn & Pinch, 2003).

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