8

BEYOND FORMALITY

The informalisation and tertiarisation of labour in the gig economy

Domenica Farinella and Davide Arcidiacono

1. Introduction

The debate on the platform gig economy is often focused on its disruptive characteristics within the new cognitive capitalism, disintermediating labour relations and challenging labour regulation and protection. On the contrary, in this chapter, we adopt a long-term perspective, based on historical capitalism, defined as a concrete time-space system of production activities oriented to endless accumulation (Wallerstein 1983: 18). According to Braudel (1982), the true essence of capitalism is 'the anti-market', characterised by international trade chains strongly hierarchical and monopolistic, with scarce transparency, absence of product specialisation, 'unlimited flexibility' and 'capacity for change and adaptation' (p. 433). In this sense, platform capitalism is developing in continuity with the anti-market layer of capitalism with its characteristic trend to monopolisation, opacity, and cultures of systematic regulatory evasion (Peck and Philips, 2020). Informalisation is an ambivalent and structural component of historical capitalism, that from time to time allows for labour costs reduction, market expansion, and the provision of alternative household incomes. We argue that the platform economy represents the latest backlash of 'informality' within capitalism, in the continuity between old and new forms of labour.

Since the 1970s, the link between informality and tertiarisation laid the ground for the dematerialisation of the economy as a means of accumulation, following the crisis of profitability in Fordist capitalism (Lash and Urry 1987; Harvey 1990; Mingione 1991). On the one hand, the shift to a labour-intensive and low productivity economy based on 'relations of service' and intangible goods amplified the spaces for commodification (with a constant invention of new needs and the proliferation of segmented markets); on the other hand, it trapped the economy in the so-called 'costs disease' issue (Esping-Andersen 1999). We argue that the rise of the platform economy can be seen as a response to the need to maintain profitability and to contain costs, through Onlife service work – as a way to devaluate and disappearing labour through commodification of our intimate space, relations and emotions, and algorithmic forms of labour control, giving space to regulatory loopholes and new forms of capital accumulation and value extraction.

In the next section, we will analyse the role of informality within the historical capitalism, showing the link between informalisation and housewifization. In Section 3, we will focus on the implications of the turn to a service economy from the 1970s onwards. Then in Section 4, we will show how these long-term dynamics are translating into the platform economy. Finally, we will try to provide some conclusive remarks.

 DOI: 10.4324/9781003161875-10

2. Informality and housewifization

Informalisation can be described as a process of elimination of forms of control, standardisation, regulations of economic activities, companies, and work. The formal and informal represent a continuum, within which workers and/or firms experience multiple and different degrees of informalisation (or formalisation) that vary according to their position in the global production/distribution chain.

In a seminal article, Hart (1973: 63) pointed out that 'the distinction between formal and informal income [is] based essentially on that between wage-earning and self-employment. The key variable is the degree of rationalization of work. . . . The remainder – that is, those who escape enumeration – are variously classified urban as "the low-productivity urban sector", "the reserve army of underemployed and unemployed", "the urban traditional sector", and so on'.

This definition recognised an autonomy and specificity of informality, despite trapping it in a dualistic approach, where the informal economy was defined by subtraction from the formal one, and it became synonym for poverty and marginality. Here, informality represents a pre-modern and residual phenomenon of the backward and developing regions, or typical in peripheral sectors of the labour market, bound to disappear though the modernisation process (Chen 2006). However, this prediction proved to be wrong: informality has grown over the years, showing a great complementarity between the formal and informal economy (Pahl and Wallace 1985; Portes et al. 1989; Guha-Khasnobis et al. 2006). Many informal activities are produced by the formal economy as unintended consequences of increased regulation and bureaucracy or as a way to escape control (Lomnitz 1988). In addition, informality plays a subsidiary role in the complex economic network, where formal segments are linked to the informal ones. In this case, it functions as a 'safety valve' to increase flexibility, contain costs, improve profitability, or expand markets, as already demonstrated in the 1980s by studies on industrial districts (Capecchi 1989) or by the analysis of value chains in urban contexts (Portes and Sassen-Koob 1987).

Breman and van der Linden (2014: 928) suggest that even if levels of informality remained diverse and heterogeneous in time and space since the mid-1970s, we can now witness a restructuring of capitalism in a 'new labour regime of informality/precarity'. This new regime characterised by flexible and decentralised networks of production – spread in unstable and endless chains of subcontracting and outsourcing, with multiple intermediaries and no control – includes different forms of unstructured and fragmented work. The processes of flexibilisation of labour (both of contract, schedules, tasks, and workloads); casualisation up to the replacement of waged work with self-employment and home work; and segmentation across age, gender, and ethnic boundaries had the main effect of dropping labour costs and individualising social risks (Castells and Portes 1989: 31).

However, informalisation is neither a specificity nor an anomaly or an accidental outcome of contemporary capitalism. It needs to be rethought as a process embedded in the *longue durée* of historical capitalism (Tabak and Crichlow 2000). According to Tabak (2000: 4–5) 'the casualization of labour again functions as a countervailing force of full-lifetime proletarianization'. The dilution of proletarianisation within the dynamics of informalisation through 'an ocean of nonwage and casual labour' (ibid.) has at the same time hidden but also mitigated a growing vulnerability of the marginal and lower social classes. Informality is both a space of survival and a resistance strategy and a possibility of social mobility through individual entrepreneurship (de Soto 1989).

Informalisation strategies and informality play a double role in historical capitalism: constant (permanent) and cyclical (Broad 2000; Tabak 2000; Peterson 2010). Its constant role has

enabled processes of capitalist accumulation thanks to the possibility to unload the costs of 'reproduction' of the labour force outside of the productive circuit. These costs are then internalised by family and/or community networks through reciprocity. If we shift the focus from the individual worker to the household and how it procures its livelihood, it emerges that 'the location of wage-workers in semi-proletarian households has been the statistical norm' and 'the production and reproduction of labour power have always been based on a mix of wage-labour with non-valorized domestic, rural and artisanal labour' (Broad 2000: 31).

The cyclical role of informalisation is linked to recurrent falls of profitability and 'bottlenecks of accumulation' of historical capitalism. These criticalities are overcome both by cost-compression strategies through informalisation and by further commodification processes in space and time that create new opportunities for value extraction (Wallerstein 1983). Consequently, in the new regime of flexible accumulation started in the seventies (Harvey, 1990), the growing competition in the global market pushes labour cost further down and jeopardises Fordist work.

The housewifization concept, as raised by the feminist debate, highlights a process to achieve the goal of cost reduction by masking labour within the home, with the result of devaluating it. This concept helps to raise awareness of the implications of home-based work about the central role of (mainly or exclusively female) reproductive activities (as unpaid domestic and care work, but also self-provisioning and do-it-yourself activities) in subsidising (male) waged work and capitalism (Dalla Costa and James 1972; Mies 2012). Picking up on these authors, Mezzadri (2020) notes how the naturalisation of reproduction as a 'non-value' has ended up hiding labour, reducing women to 'housewives' and depreciating the cost of women's labour. This is evident, for example, in the global garments supply chains, a 'sweatshop regime' connecting the Global South and the Global North, in which the surplus is extracted through mechanisms of casualisation of factory work, the costs of which are passed on to semi-proletarian households, through both rural-urban mobilities of precarious and seasonal workers (who return to their communities during periods of non-work) and the subcontracting chains incorporating the underpaid home-based work.

In the imaginary of the 'house', the boundaries between production and reproduction become blurred and overlapping, and the cost of labour goes down, to the point that a series of labour activities become free and unpaid; they are not recognised as producing value but are rather relegated to everyday life. But this is not just a women's issue. As Mies (2014:16) provocatively points out, contrary to Marx's predictions, it is not proletarianisation but housewifization that expands, representing a 'prototype for the optimal exploitation of the labour force everywhere', including males: 'workers in the informal sector, like housewives, have no lobby and are atomized'.

The spread of housewifization is possible only in a 'semiproletarian extended household, benefitting from income earned or goods produced (subsistence production, petty commodity production, rent) by other members of the household or by the wageworkers at other times' (Wallerstein 1983: 21).

3. Informalisation and tertiarisation

Since the 1970s, the growing phenomenon of informalisation has intertwined with the process of tertiarisation. While the latter is often described as a shift from goods to services production, in this article it refers to a discovery and enhancement of intangibility or immateriality that affects all goods to a greater or lesser extent, which become increasingly inseparable from 'relations of service' (Lazzarato 1996; 1997), as we will explain throughout this section.

The shift to intangible and service relationships presents some problems clearly highlighted by marketing, interested in the practical aspects of how to sell an intangible asset. According to Levitt (1981:2 and following), what is sold now are promises of satisfaction 'tangibilising' the good in its presentation (impersonal and personal) or packaging or other marketing efforts 'that become surrogates for the tangibility that cannot be provided or experienced in advance'. At the basis of the possibility of making the intangible tangible (Reddy et al. 1993), there is the relationship: on the one hand, the intangible goods are necessarily highly people-intensive; on the other, a relationship always contains an irreducible dimension of unpredictability.

The key to tertiarisation is that the product (good or service) and the relation that brings it into being are produced simultaneously and become inseparable (during production, promotion, sale, and fruition). This shift on service relations produces new spaces of commodification. The dematerialisation of goods multiplies them potentially to infinite levels: everything can be commodified, including the person and its networks, and the production of subjectivity and social relations become means of capitalist accumulation. Nevertheless, tertiarisation gives rise to a series of paradoxical issues that plague contemporary capitalism:

- The question of service relations
- The paradox of productivity
- The problem of controlling

The following issues will be explored in the next paragraphs.

3.1 Relations of service: life at work

Tertiarisation expresses the rise of relations of service rather than a simple growth of services as a sector. It means 'putting life to work', commodifying the immaterial and cognitive spheres and moving 'from the capital-labour to the capital-life relationship' (Lazzarato 2004: 204).

Work becomes an activity that relies more on skills and capabilities, especially focused on processing information, shaping and sharing knowledge through technological and communicational tools. These skills and knowledge would develop less and less within codified training courses but through the accumulation and selling of *biographical capital* (Delory Momberger 2010), based on the engagement in productive relationships, developing coherent human and professional projects, activating processes of personal branding of subjective resources.

Putting life to work also means breaking the boundaries between work and non-work, creating redundancies in which private and work life as well as production and consumption intertwine, exchange, and overlap. This point is very important: in a relation of service, producer and consumer are expected to co-produce together, cooperating. The distinction between producer and consumer becomes more blurred, to the point that one can be both simultaneously, creating a paradox. Distinguishing what is work and how much work there is becomes more and more difficult, to the extent of making it impossible to measure productivity. The result is the possibility of devaluing work altogether to the point of the paradox of free work.

In the service economy, a large proportion of activities are masked as 'non-work' and carried out 'for free' by the worker, without even realising it: these are 'part' of his/her daily activities, in which work time and life time coexist. This surplus value reappropriated by the capitalistic accumulation is extracted without the worker noticing from 'his/her' daily time.

These aspects find full fulfilment in home-based work, where boundaries between work time and life time disappear. The process of housewifization is therefore intimately connected to that of tertiarisation.

3.2 The paradox of productivity

In 1967, Baumol observed the so-called paradox of unbalanced productivity growth: the gap of productivity in services production causes the so-called cost disease – that is, 'the prices of services (as compared to the prices of material products) grow continuously' – and this rise 'leads to a decline in the demand for and consequently to a decline in their production' (Palócz 1988: 174).

Baumol distinguished between progressive and unprogressive sectors based on the flexibility of their productivity levels: in progressive sectors productivity increased rapidly due to capital investment and organisational and technological innovations; in non-productive sectors, productivity remains constant or grows very slowly because in these activities, 'the labour is an end in itself, where quality is judged directly in terms of amount of labour' (Baumol 1967: 416). The high dependence on manual labour (which is nothing more than living labour) does not allow for increased productivity, except at the expense of a decline in quality. Baumol provides a number of practical examples from a wide variety of industries as education, live performance, or retail sales, where many innovations (self-service, self-provisioning, pre-wrapping, etc.) 'have all increased the productivity per man. . . . But ultimately, the activity involved is in the nature of a service and it does not allow for constant and cumulative increases in productivity through capital accumulation, innovation, or economies of large-scale operation' (ibid.: 420).

Esping Andersen (1999: 103) identified three dilemmas in the new service economy:

> the first derives from a rarely recognized, inherent characteristic of services themselves: the more we expand the tertiary labor market, the larger is the share of low-skilled services. The second comes from the well-known 'Baumol cost-disease' problem in services. . . . And the third derives from households' economic choices and, in particular, from women's choice to work for pay.

These dilemmas are connected: on the one hand, one can notice the growing participation of women in the labour market, stimulated by the increasing precariousness of work and the pluralisation and de-standardisation of life cycles (Mingione 1991) and de-familiarising those care services that were previously self-produced within the family and were traced back to the 'reproductive' (unpaid) work of women. On the other hand, all service activities suffer from the cost disease but the low-skill activities (the most common) pay the worst consequences. In highly deregulated economies, such as in the United States (where there was high employment growth in services), the 'Baumol cost-decease' is contained through the market: the variable labour costs adjust to productivity differentials; however, this leads to 'growing pay inequality, declining real wages, and a swelling army of the working poor' (Esping Andersen 1999: 95). The paradoxical outcomes of the cost disease, already pointed out by Baumol, could be the disappearance of more stagnant productivity markets, 'simply because no one would be willing to perform them at earnings that correspond to relative productivity' (ibid.: 111).

However, before arriving at this paradox, productivity gaps are basically addressed by containing labour costs through informalisation and displacement of work (e.g. by relocating to other countries or drawing from the reserve army those who are willing to accept lower wages). Castells and Portes (1989: 30) already noted the contradictory effect of informalisation process on productivity: in fact, labour productivity decreases because informal activities are predominantly service and labour-intensive activities, with less use of technology; however, capital productivity increases due to the reduction in the weight of the 'bureaucratic structure of large-scale organizations'. There is an ironic circularity between tertiarisation and informalisation: the more activities become tertiarised, the more they are likely to become informalised.

In this scenario, the recent push towards the platform economy represents a further means to contrast the problems of the cost disease and stagnant productivity in a tertiarised economy.

3.3 The problem of controlling

The shift to service economy characterised by high intensity of living labour implies the loss of standardisation, controlling, and predictability, typical of Fordism. Therefore, how to contain the uncertainty and discretion related to the relations of service and living labour becomes an issue. Although the Fordist factory was a bureaucratic and expensive large-scale organisation, the problem of controlling was solved by three complementary paths: Taylorism (the division of labour into simple tasks and specialisation), assembly lines which allowed for the scheduling of working time, and the replacement of workers with technology and machinery whenever feasible. Even though the Fordist factory model was partly abandoned in favour of a more flexible production model – increasingly based on informal and casual work – these three paths continue to be useful, even to standardise service relationships.

Levitt (1981) suggested some strategies to minimise 'the impact of human factor' through different degrees of industrialisation of service, introducing hard, soft, or hybrid technologies capable of replacing manual-intensive activities or at least stiffening them in new forms of Taylorism and assembly line. There are several examples that show how manual work was replaced by machinery to different degrees: (1) devices such as self-supermarket checkout or the automatic telephone reply; (2) the rigid framing of manual or intellectual work within an assembly line, in which tasks, duties, and timings are marked by equipment or technology, such as in the case of a fast-food worker preparing cheeseburgers and portioned French fries or the instance of a call centre worker conducting a telephone interview; (3) the meticulous description of the sales techniques used to train clerks of the large retail chains, which codifies how the sale (and its relations) must take place with a high taskification of service work.

In a nutshell, formalising the informality becomes a strategy to contain the problem of controlling. This is an interesting passage: the informalised and deconstructed service work needs to be rescheduled within a sort of digital Taylorism (Rideut 2008), in which tasks, duties, and activities are identified and whose execution is strictly monitored. The algorithmic management and the absence of a boss are part of how control is changing. At first glance, it may seem contradictory that service workers are asked both to put themselves to work, using biographical capital, autonomy, transferable skills, and to perform a series of tasks trackable, according to a more or less obligatory order and time. In fact, this paradox consents to weld the devaluation of labour resulting from the process of informalisation with the standardisation and routinisation characterising the old Fordist work, as it will continue to be also in the platform economy.

4. From informalisation to platform gigs

As we have explained throughout Section 2, tertiarisation is pushing for a stronger valorisation of informality. Digitisation pushes forward the tertiarisation process through dematerialisation of physical goods that are increasingly replaced by applications or digital assets (encyclopaedias, CDs, DVDs, etc.). Furthermore, the concept of physical appropriation is replaced by that of accessibility: a product is no longer sold for private ownership but for the possibility of using it for specific ends. In fact, with digitisation the distinction between manufacturing and services appears to be largely overcome by a new paradigm defined as product-as-a-service (PaaS) (Kowalkowski et al. 2017), in which product and service represent an integrated system in which the materiality of the first assume an ancillary connotation. Furthermore, whole ecosystems of

services can be developed around a product enhancing the tertiarisation process and the service relations. Therefore, platforms should not be seen as a simple technical infrastructure but as a new organisational model within the PaaS paradigm, where the boundaries between material and immaterial and between virtual and real become more blurred. Platform designs new paths for informality and tertiarisation, stressing the long-rooted trends towards housewifization of the service relation.

Such paradigm shift is shaped by the platform revolution (Parker et al. 2016) as a transition from the networked-firm typical of the flexible production to the Möbius firm (Stark and Watkins 2018). In Möbius firms, production is based on a co-optation of resources and actors without any formal or informal alliance, following a broader logic of outsourcing that goes beyond a limited and consolidated network of suppliers and specialised subcontractors. Therefore, we speak of crowdsourcing or crowd-based production (Howe 2009). Platform economy represents only the final stage of a process of deconstruction of work because it is characterised by the ability to continuously generate new links and spillovers between the formal and informal networks of co-producers without distinction between productive work and reproductive work. Platforms contribute to generate a multitudes of job opportunities which can be carried out simultaneously, but with unclear boundaries between what is work and what is not and between what is formal and what is informal.

Consumers are no longer just buyers, as in the Fordist model, nor do customers just listen to and care for, as in the Toyota model, but a real pro-sumers (Ritzer 2018), productive resources that participate and contribute to the process of creation, as well as destruction, receiving contributions, incentives, and resources for their job. Consumer integration into the value chain way represents a double strategy: a new form of governance to cope with the increasing volatility and uncertainty of global markets to continuously adapt the product/service to demand segmentation and fluctuation; a response to the productivity stagnation and cost disease issues.

In this scenario, labour is continuously devalued or downloaded on consumers through gig taskification. At the same time, platforms reiterate the relevance of the control designed new way to make it more invisible and opaque, calling it algorithmic management (Stark and Pais 2020).

Figure 8.1 shows briefly how the crucial issues raised by tertiarisation and informalisation (service relation; productivity stagnation and controlling issues) are specifically declined in the platform economy. In the next paragraphs we will delve into how these three dimensions unfold specifically in the digital service economy.

4.1 Service relations: looking at housewifization in an Onlife perspective

Digital capitalism got involving stronger workers' cognitive and relational skills even more and extracting value from them, putting the foundations for the establishment of the so-called cybertariat (Huws 2014), as a specific type of 'knowledge worker' who is always virtually at work due to the way digitisation blurs the lines between the workplace and home. Digital service relations are structured within a constant interrelation between online and offline interaction and in these interactions, it is not always easy to establish a clear distinction between productive actions and reproductive actions. With the digitisation phase, Casilli (2017) points out how 'social fragmentation and capitalist accumulation result from the capture of collective value via the enclosure of digital commons and the commodification of lifestyles and creativity generated by the multitudes' (3937). Platforms act also as a work-extending technology collapsing any distinction between private/public space. It is the Onlife paradigm (Floridi 2015),

Figure 8.1 Informalisation in platform gig work.

Source: Our elaboration.

as an hyperconnected and fluid reality between online and offline, that exposes our everyday experience to commodification.

The boundaries between private and working life have become so blurred that Cingolani (2019) even talks about the colonisation of workers' free time. New information and communication technologies (NICTs) are key in that because they allow a pervasive and constant commodification of our personal intimacy, leisure, and social relations. The platform transforms everybody into micro-entrepreneurs of his everyday life. In this sense, digital tech acts more as a tool for dispossession rather than a tool of alienation. Platforms constitute a 'set of relations that constantly needs to be performed' (Van Dijck 2013: 26). The commodification of their reproductive work is hidden by the rhetoric of collaboration or reciprocity (Belk 2014): exchanging on a digital time bank (e.g. TimeRepublik), giving a ride on the way home from work (e.g. BlaBlaCar), and offering your sofa to a tourist (e.g. Couchsurfing) are not presented as real jobs but as the enhancement of an underutilised asset and as a way to further develop social relationships. This creates the basis to scale up the housewifization process and increase the commodification of our domestic intimacy: for example, the Airbnb host who rents a room of his/her apartment does not simply sell hospitality but the authenticity that tourists cannot find in a traditional hotel.

In doing so, platforms often evoke the image of the community or of peer-to-peer relations. This type of rhetoric or justification regime (Boltanski e Thévenot 2006) further strengthens the performative dimension of the service relationship, already made explicit by the concept

of Hochschild (2012) 'emotional labour'. Rosenblat's (2018) analysis of Uber drivers highlights how the platform encourages a warm relationship with users in order to receive the best ratings and feedback that will be essential for receiving new job offers. This warm relationality is also indirectly pushed by Airbnb (Bruni and Esposito 2019) or BlaBlaCar (Arcidiacono and Pais 2021) through a series of nudges that direct prosumers to maintain some form of intimate and high-quality service relationship. The hybridisation between working times and lifetimes in an Onlife perspective generates 'grey' interstices for multiple-job commitment and designing also new strategies of work-life balance. The ambiguity of the boundaries between work and non-work, combined with the spatio-temporal flexibility makes it possible to present these tasks as autonomous, without any constraint of dependency. According to the rhetoric underpinning the platform economy, the individual has the digital freedom to choose how much to work and how to do it and even to decide if this could be a job or not (Lehdonvirta 2018). Cingolani (2019) defines this peculiar condition as 'voluntary servitude' (171). This also explains the difficulty in placing the digital worker within the traditional normative dichotomy self-employed or employee (De Stefano and Aloisi 2018). Although working from home, in any time, allows greater autonomy and flexibility, the risk of overworking or burnout is simply removed or underestimated by the workers themselves because they scarcely recognise the difference among their multiple platform tasks.

4.2 The productivity problem: disappearing labour as a cost disease fixer

Platforms use a system devaluation of labour to fix productivity stagnation and to cope with the cost disease issue through the disavowal of the individual productive contribution. Therefore, the real paradox of the digital transformation is that work continues to be increasingly fundamental for value creation, but it is constantly undervalued and depreciated, to the point of almost 'disappearing', as in the 'myth' of a jobless society.

Frey and Osborne (2013) estimated a 43% risk of job loss in the United States as a result of the digitisation of labour process. For a long time, the debate has mostly emphasised the role of technology as a competitor with humans in the market. Academic and public debate has remained for long stuck on the ambiguous balance between jobs 'created' and 'destroyed' by new technologies (Brynjolfsson and McAfee 2012; Acemoglu and Rastrepo 2017).

This debate somehow underestimates how the major and more worrying effects of digital tech are not numerical, but they are much more related to the quality of the work, its fairness, and its decency. Such narrow view arises primarily from the difficulty of accurately estimating the number of gig workers of the platform economy. As a matter of fact, the gig economy manifests itself in a plurality of forms; therefore, understanding the size of the gig workers market is methodologically very challenging and the real situation is still opaque (Pais, 2019). Some studies estimate just over 600,000 workers in the United States (Harris and Krueger, 2015); according to another American study (Current Population Survey Staff 2018), platform workers represent only 1% of the US workforce; according to the OECD (2019) they are between 0.5 and 2% of the workforce in the world.

However, how much can we trust this data? Gig work is a form of labour that can take different forms, and it could imply tasks not always recognisable as work by the workers themselves. The gig economy does not only generate visible performances (think about food delivery riders or ride-hailing driving), but there are many more occult forms of working that are more likely to be underestimated and under-recognised. Therefore, in jobs like riders or drivers, the devaluation process takes place above all because it develops in grey regulatory areas, also restoring

unfair forms of remuneration, such as piecework, or not guaranteeing adequate standards of labour protection and safety. Their recognition as workers is much easier as they possess identification marks (such as uniforms or company logos exposed) and common meeting spaces. As it already happened in the industrial age, this has allowed easier aggregation of a constituency that can exercise a collective voice and can be activated on a series of demands (Tassinari and Maccarone 2020).

Unfortunately, it is not as simple for the rest of digital gig workers, especially in the case of what Casilli (2017) calls online social work, where consumers of online services involuntarily participate in the training processes of artificial intelligence or provide the necessary data for business strategies, using their own account on social networks or apps. These digital activities, linked to the growing importance of datafication processes in the construction of value, often take the form of 'consumer-work' (Glucksmann 2016), which is not subject to any form of remuneration or even legitimation as a working activity. Through the creation of imaginaries that promote self-actualisation and conviviality, individuals are encouraged to participate in this datafication process. Despite low recognition, their controversial nature has started to emerge by the judicial point of view: from the Cambridge Analytica case to the requested qualification of Google's reCAPTCHA as a transcription business built upon users' free labour.

In the case of online microwork, operated through platforms such as Amazon Mechanical Turk or Crowdville, workers are hired to do very simple tasks, such as entering small amounts of data, clicking or participating in short surveys. Their remuneration could be very low (for this reason they are called also penny tasks), with an estimated average hourly rate of $ 1.38 (Horton and Chilton 2010). Microwork platforms do not present it as a real job in any case: on Crowdville we read about 'earning while having fun', about 'trying your favourite products before others . . . comfortably seated on your sofa at home'. As an example of a typical worker, the platform presents the case of Luca, a university student who, thanks to the platform, can earn extra money 'to buy everything he wants'.

Most studies confirm how such digital gigs are low-paid jobs, with an often uncertain and insecure contractual status, without rights and outside adequate protection schemes (Berg 2016; Fredman et al. 2020). In a platform like Toluna, income is often organised through the cashback system, paying in vouchers that can be used in affiliated shops. Cashback is not convertible into cash and it does not even have a fixed amount, as it depends on the commercial agreement with the lender companies (such as Amazon). Moreover, in the case of Toluna vouchers can be disbursed only if certain thresholds are reached, encouraging subjects to be productive within a given time, as the expired credits are no longer due. Furthermore, the gamification processes that characterise this type of tasks contribute even more to conceal the performative dimension of work, and to transform remuneration into a 'reward'. On Toluna for example, upon completion of each survey, points are awarded and, once a set threshold has been reached, a 'bonus' can be redeemed.

For more complex or qualified tasks, the platform economy is characterised by its ease accessibility, breaking down some entry barriers and encouraging informal workers with non-formalised credentials run into play, creating the figure of the PROam or professional amateur (Leadbeater and Miller, 2014). For this reason, life skills seem to have more relevance than technical skills in the platform economy, relying rather on the ability to self-organise or to develop multitasking attitudes. Such flexibility and ease of access/exit of the platform attracts mainly workers in transit (such as university students) or individuals who still have a first job.

For example, young and unexperienced freelancers, who through these systems have been able to expand their professional network and capitalise their reputation, adding their traditional forms of apprenticeship, often characterised by informality and poorly paid, with digital

gig tasks to gain more experience or enrich their resume; or for home restaurant or ridesharing workers, who were able to provide a service operating in a 'close market' without having licenses or public authorisations. Some scholars have highlighted that the level of education of platform workers is medium-high, even for carrying out activities that require medium-low skills. This would generate a crowding-out effect, which disfavours those low-skilled manual workers who traditionally performed these same tasks as moonlighters (Schor 2020). Therefore, giggers often develop multiple-jobs paths also as a response to the increase of precariousness or to cope with the insufficiency of their wages. According to the ILO survey (2019) on crowdworkers, they are often engaged in other paid jobs (52%) and about a third (32%) are employed as waged employees, while others have atypical employment, including part-time or casual work (33%), or even work as freelance (25%) or as owner or business partner (10%). Pesole et al. (2018) show that on average 10% of the adult population has used platforms, but less than 8% do this type of work with some frequency and less than 6% spend a significant amount of time on it (at least ten hours a week) or to earn a significant proportion of their income (at least 25% of the total). Schor (2020) concludes that platforms as a complementary option is an evidence of their acting as free riders over standard employers that must provide adequate income, safety and security for workers, so platform work become more desirable or acceptable.

4.3 The problem of controlling: visible taskification and invisible algorithmic boss

As already argued, the shift to service economy involves finding a new balance between the intensity of living labour and capitalist need for standardisation and predictability. In platform economy, gig work, on-demand work, microwork, and crowdwork are all expressions of a growing fragmentation of labour within the neo-Taylorist paradigm of production that further fragments tasks, objectives, information, and repertoires of action. This increasing taskification is also the sign of a process of what we have already defined as the formalisation of the informal. The digital domain can enhance all those activities that were informally invisible by making them visible. At the same time, the more these activities become visible, the more the forms of control and hierarchies become invisible.

Platforms employ pervasive technological control mechanisms that make it possible to combine forms of surveillance and commitment, typical of a dependent job, with mechanisms of flexibility and autonomy, typical of self-employed or informal work. For example, piecework is used as a payment tool and result orientation, but some lock-in mechanism is used to create a form of dependency (and control) on workers: first through low wages, which can be improved only by intensifying the productive effort, or in some platforms, it is forbidden to provide direct personal contacts to users in order to avoid the disintermediation of the platform itself, developing autonomous matching with the job demand.

Behind the rhetoric of flexibility and freedom, individual contributions are increasingly 'displaced' into long global chains where control and power became pervasive but invisible. Heterodirection takes over within the reticular and headless structure of these transnational digital enterprises, mediated thanks to digital reputation tools and algorithmic management (Stark and Pais 2020). Reputation is already known as the new coin within the platform economy. It is formalised through the construction of proprietary algorithms, giving it a tangible consistency (likes, stars, ratings, comments, and other labels used precisely to certify user-worker reliability). However, the algorithmic management represents a sort of invisible boss (Jarrahi and Sutherland 2019), capable of carrying out continuous tracking of workers, constantly evaluating their performance, collecting data that automatically implement strategic decisions that have important

results on their working life defining shifts or workloads, assigning tasks, giving awards and rewards, or even dismissing workers (for example, in the case of Uber).

Such mechanism presents evident risks. First, it calls for stimulating a superstar effect: in order to increase the rating, workers are willing to accept as many tasks as possible, generating a general pressure towards performativity and overworking. There is a sort of 'user-driven servilism', as one's rating depends on the intensity and complete subordination to users' requests. In addition, there is the possibility that the platform, which owns the algorithm, can unilaterally change the online reputation system, concretely changing the working conditions of these workers at any time without them knowing it or being able to exercise any kind of voice. For example, this happened when Elance platform change management, with the merge with oDesk, giving life to the new Upwork platform. In this instance, by modifying the algorithm, they also unilaterally modified the reputational scores of the subscribers, thereby modifying their earning opportunities.

The poor transparency of the algorithm can also conceal discriminatory choices on workers, as demonstrated by the recent court judgement on Deliveroo. At the same time, gig workers try to develop resistance strategies to escape algorithmic control or 'hacking' its operating mechanisms: this is the case of Lyft and Uber that coordinated manipulating the ride app in order to control the surge pricing mechanisms, and it is also the case of Amazon delivery drivers who are putting smartphones on trees close to the station where deliveries originate in order to get a jump on rivals seeking orders. It is clear how algorithmic management could exacerbate a 'race to the bottom', increasing competition among workers. But this can also extend the risk of capitalist surveillance (Zuboff 2018) with high margins of uncertainty on legal responsibility for wrong or harmful choices. Standardisation and control also feed a systematic process of datafication and data extraction albeit within a process of apparent randomisation and fragmentation of work in gig tasks. This phenomenon is defined as data colonialism (Couldry and Mejias 2019), 'normalizing the exploitation of human beings through data, just as historic colonialism appropriated territory and resources and ruled subjects for profit' (336). In this sense, the accumulation and extraction of value from consumer/worker data is also assumed to be a strategic asset for the platform and people are asked, both implicitly and explicitly, to feed continuously its wealth.

In order to prevent such risks, it is not surprising why the largest Italian trade union, CGIL, claim to make algorithms more transparent and fully subject to collective bargaining, as requested by many other gig workers.

5. Conclusive remarks

The analysis proposed so far has aimed to avoid an exceptionalist approach to the gig economy, emphasising the aspects of breaking with respect to capitalism. The aim is to overcome the dichotomy that has characterised the debate on the transformation of work and the impact of digital technology. On the one hand, the prevailing optimistic thesis considers digital technology as a tool for the emancipation and empowerment of workers, favouring disintermediation, speeding the transition, mobility, and job quality within the market, in order to increase more satisfactory careers and biographical paths. On the other hand, the pessimistic and critical thesis argues that technology can be used as a tool that deprives people of work, marginalises their productive contribution, favours regressive paths in terms of rights' protection and regulation, and even polarises the labour market between protected traditional jobs and precarious digital gigs.

Our analysis highlights the complexity, the heterogeneity, and the complementarity of the different forms of gig work. Firstly, the transformation led by the platform transition is not a

concrete disruption, but it is part of a long and historically rooted process of transformation of capitalist accumulation. Capitalist dilemmas continue to be the same regarding the issues of value creation and cost containment. At the same time, the relationship between formal and informal and the boundary between productive and reproductive work are a variable geometry perimeter with which the capitalist organisation recursively confronts along history, even in the platform age.

However, this does not deny agency spaces and the possibilities for actors to build balancing and coping strategies, both individually and collectively. It is precisely the combination of structural factors and individual actions that help to explain (and solve) the outcomes of gig work in the platform economy. The outcomes of the new platform paradigm depend precisely on how the regulators and the workers are able to recognise and draw new boundaries between formality and informality, overcoming dichotomies that now appear largely outdated, such as that between product and service, between autonomy and dependence, or between online and offline.

References

D. Acemoglu., P. Restrepo, 'Robots and jobs: Evidence form us labor markets,' national bureau of economic research, working paper 23285, 2017, www.nber.org/papers/w23285

D. Arcidiacono, I. Pais, 'Re-framing community in the platform age: Analyzing organization and power in blablacar', *Studi Organizzativi*, 1, 2021, 79–104. 10.3280/SO2021-001004

W. I. Baumol, 'Macroeconomics of unbalanced growth: The anatomy of urban crisis', *The American Economic Review*, 57(3), 1967, 415–426.

R. Belk, 'Sharing versus pseudo-sharing in web 2.0', *Anthropologist*, 18(1), 2014,7–23.

J. Berg, 'Income security in the on-demand economy: Findings and policy lessons from a survey of crowdworkers', *ILO-Conditions of Work and Employment Series*, 74, 2016, 1–41.

L. Boltanski, L. Thévenot, *On Justification*. Princeton: Princeton University Press, 2006.

F. Braudel, *The wheels of commerce.* New York: Harper & Row, 1982.

J. Breman, M. van der Linden, Informalizing the economy: The return of the social question at a global level. *Development and Change*, 45(5), 2014, 920–940. DOI: 10.1111/dech.12115

D. Broad, 'The periodic casualization of work: The informal economy, casual labor, and the longue durée', In *Informalization: Process and Structure*, edited by F. Tabak and M. A. Crich- low. Baltimore and London: Johns Hopkins University Press, 2000, pp. 23.46.

A, Bruni A., F. Esposito, 'It obliges to do things you normally wouldn't: Organizing and consuming private life in the age of airbnb', *PACO*, 12(3), 2019, 665–690.

E. Brynjolfsson, A. McAfee, *Race against the machine,* Boston: MIT digital business report, 2012.

V. Capecchi, The informal economy and the development of flexible specialization in emilia-romagna, in *The Informal Economy: Studies in advanced and less developed countries*, edited by A. Portes, M. Castells, and L. A. Benton. Baltimore: Johns Hopkins University Press,1989, pp. 189–215.

A. Casilli, Digital labor studies go global: Toward a digital decolonial turn, *International, Journal of Communication*, 11, 2017, 3934–3954.

M. Castells, A. Portes, 'World underneath: The origins, dynamics, and effects of the informal economy'. In *The Informal Economy: Studies in Advanced and Less Developed Countries*, edited by A. Portes, M. Castells, and L. A. Benton. Baltimore: Johns Hopkins University Press, 1989, pp. 11–37.

M. A. Chen, 'Rethinking the informal economy: Linkages with the formal economy and the formal regulatory environment'. In *Linking the Formal and Informal Economy: Concepts and Policies*, edited by B. Guha-Khasnobis, R. Kanbur, and E. Ostrom. Oxford: Oxford University Press, 2006.

P. Cingolani, 'Neoliberalism, Outsourcing, and Dominatio'. In *Multi-Disciplinary Perspective, 1*, edited by A. Scribano, F. Timmermann, and M. E. Korsta, Neoliberalism London: Springer, 2019, pp. 71–184. https://doi.org/10.1007/978-3-319-77601-9_9

N. Couldry, U. Mejias, Making data colonialism liveable: How might data's social order be regulated? *Internet Policy Review*, 8(2), 2010, 1–16 https://doi.org/10.14763/2019.2.1411

Current Population Survey Staff, Electronically mediated work: New questions in the contingent worker supplement, *Monthly Labor Review*, 1, 2018, 1–32.

M. Dalla Costa, S. James, *The power of women and the subversion of the community*. Bristol: Falling wall press ltd, 1972.
H. de Soto, *The other path: The invisible revolution in the third world*. New york city: Harper perennial, 1989.
V. De Stefano, A, Aloisi, *European legal framework for 'digital labour platforms'*, Luxembourg: European commission, 2018, doi:10.2760/78590
C. Delory Momberger, *La condition biographique: Essai de soi dans la modernitè avancèe*. Paris: Téraèdre, 2010.
G. Esping-Andersen, *Social foundations of postindustrial economies*, Oxford-New York, Oxford University Press, 1999.
L. Floridi, ed., *The onlife manifesto*, London: Springer, 2015.
S. Fredman, D. du Toit, M. Graham, K. Howson, R. Heeks, J-P. van Belle, P. Mungai, A. Osiki, 'Thinking out of the box: Fair work for platform workers', *King's Law Journal*, 31, 2020, 236–249.
C, B. Frey, Osborne M. A., 'The future of employment: How susceptible are jobs to computerisation?' *Technological Forecasting and Social Change*, 114, 2013, 254–280.
M. Glucksmann, 'Completing and complementing: The work of consumers in the division of labour', *Sociology*, 50(5), 2016, 878–895
B. Guha-Khasnobis, R. Kanbur, E. Ostrom, eds., *Linking the formal and informal economy: Concepts and policies*, Oxford: Oxford University Press, 2006.
S. Harris, A. Krueger, A. A proposal for modernizing labor laws for twenty-first-century work: The "independent worker", *The Hamilton Project* (Discussion Paper 2015–10 (December), Conditions of Work and Employment Series No. 71), 2015, www.hamiltonproject.org/assets/files/modernizing_labor_laws_for_twenty_first_*century_work_krueger_harris.pdf.*
K. Hart, 'Informal income opportunities and urban employment in ghana', *Journal of Modern African Studies,* 11(1), 1973, 61–89.
D. Harvey, *The condition of postmodernity: An enquiry into the origins of cultural change*, Oxford: Blackwell, 1990.
J. Horton, L. Chilton, The labor economics of paid crowdsourcing. In *Proceedings of the 11thACM conference on electronic commerce*. Cambridge, MA: ACM, 2010, pp. 209–218
A. R. Hochschild, *Managed heart: Commercialization of human feeling*, San Francisco: California University Press, 2012.
J. Howe, *Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business*, Redfern: Currency, 2009.
U. Huws, *Labor in the global digital economy: The cybertariat comes of age*, New York: Monthly Review Press, 2014.
C. Kowalkowski, H. Gebauer, R. Oliva, 'Service growth in product firms: Past, present, and future, *Industrial Marketing Management*', 60, 2017, 82–88
ILO, Digital labour platforms and the future of work Towards decent work in the online world, 2019, www.ilo.org/global/publications/books/WCMS_645337/lang – en/index.htm
M. H. Jarrahi, W. Sutherland, 'Algorithmic management and algorithmic competencies: Understanding and appropriating algorithms in gig work', in iConference 2019: Information in Contemporary Society, Springer, London, 2019, pp 578–589
S. Lash, J. Urry, *The end of organised capitalism*, Cambridge: Polity Press, 1987.
M. Lazzarato, 'From capital-labour to capital life', *Ephemera*, 4(3), 2004, 187–208.
M. Lazzarato, *Immaterial labor, eds paolo virno michael hardt, radical thought in italy: A potential politics*, Minneapolis, University of Minnesota Press, pp. 132–146, 1996
M. Lazzarato, *Lavoro immateriale. forme di vita e produzione di soggettività*. Ombre corte: Verona, 1997.
C. Leadbeater, P. Miller, The pro-am revolution, 2014, www.demos.co.uk/files/proamrevolutionfinal.pdf
V. Lehdonvirta, 'Flexibility in the gig economy: Managing time on three online piecework platforms', New Technology, Work and Employment, 33(1), 2018, 13–29.
T. Levitt, 'Marketing intangible products and product intangibles', *Cornell Hotel and Restaurant Administration Quarterly*, 22, 1981 37–44, https://doi.org/10.1177/001088048102200209
L. Lomnitz L., Informal exchange networks in formal systems; A theoretical model, *American Anthropologist*, 90, 1988, 42–55, https://doi.org/10.1525/aa.1988.90.1.02a00030
A. Mezzadri, A value theory of inclusion: Informal labour, the homeworker, and the social reproduction of value, *Antipode*, 2020, https://doi.org/10.1111/anti.12701

M. Mies, *Lacemakers of narsapur: Indian housewives produce for the world market*. London: Zed, 2012 (first edition 1982).
M. Mies, *Patriarchy and accumulation on a world scale: Women and the international division of labor* (New edition with preface). London: Zed, 2014. (first edition 1986).
E. Mingione, *Fragmented societies. a sociology of economic life beyond the market paradigm*, Oxford and Cambridge MA: Basil Blackwell 1991.
OECD, *Measuring platform mediated workers', OECD digital economy papers, No. 282*, Paris, OECD Publishing, 2019, https://doi.org/10.1787/170a14d9-en.
R. Pahl, C. Wallace, 'Household work strategies in economic recession'. In *Beyond Employment. Household, Gender and Subsistence*, edited by N. Redclif and E. Mingione. Oxford: Basil Blackwell, 1985, pp. 189–227.
I. Pais, La platform economy: Aspetti metodologici e prospettive di ricerca, *Polis*, 1, 2019, 143–162.
E. Palocz, 'Service in the world economy', *Acta Oeconomica*, *39*(1/2), 1988, 171–183
G. Parker, M. Van Alstyne, S. P. *Choudary, platform revolution: How networked markets are transforming the economy and how to make them work for you*, New York: Norton, 2016.
J. Peck, R. Philips, 'The platform conjuncture', *Sociologica*, 14(3), 2020, 73–99. https://doi.org/10.6092/issn.1971-8853/11613
A. Pesole, M.C. Urzí Brancati, E. Fernández-Macías, F.Biagi, I. González Vázquez, Platform workers in Europe, EU commission JRC science report, 2018, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC112157/jrc112157_pubsy_platform_workers_in_europe_science_for_policy.pdf
V. S. Peterson, 'Informalization, Inequalities and Global Insecurities', *International Studies Review* 12(2), 2010, 244–70.
A. Portes, M. Castells, L.A. Benton, eds., *The informal economy: Studies in advanced and less developed countries*. Baltimore: Johns Hopkins University Press, 1989.
A. Portes, S. Sassen-Koob, 'Making it underground: Comparative material on the informal sector in western market economies', *American Journal of Sociology*, 93(1), 1987, 30–61.
A. C. Reddy, B. D. Buskirk, A. Kaicker, 'Tangibilizing the intangibles: Some strategies for services marketing', *Journal of Services Marketing*, 7(3), 1993, pp. 13–17. https://doi.org/10.1108/08876049310044510
V. N. Rideout 'Digital taylorization of social service work', *Canadian Journal of Communication*, 33, 2008, 685–700, https://doi.org/10.22230/cjc.2008v33n4a2092
G. Ritzer, *The mcdonaldization of society: Into the digital age*, London: Sage, 2018.
A. Rosenblat, *Uberland*, San francisco: University of California Press, 2018.
J. Schor, *After the gig: How the sharing economy got hijacked and how to win it back*, San Francisco: University of California Press, 2020.
D. Stark, I. Pais, 'Algorithmic management in the platform economy', *Sociologica*, 14(3), 2020, 47–72. https://doi.org/10.6092/issn.1971-8853/12221
D. Stark, E. A. Watkins, 'The möbius organisational form: Make, buy, cooperate, or coo-opt?' *Sociologica*, 12(1), 2018, 65–80.
F. Tabak, Introduction: Informalization and the long term. In *Informalization: Process and Structure*, edited by F. Tabak and M. A. Crichlow, Baltimore and London: Johns Hopkins University Press, 2000
F. Tabak, M. A. *Crichlow, Informalization: Process and structure*, Baltimore: Johns Hopkins University Press, 2000.
A. Tassinari V. Maccarrone riders on the storm: Workplace solidarity among gig economy couriers in Italy and the UK, *Work Employment and Society*, 34(1), 2020, 35–54.
J. van Dijck, *The culture of connectivity: A critical history of social media*, New York: Oxford University Press, 2013.
I. Wallerstein, *Historical capitalism with capitalist civilization*, London: Verso, 1983.
S. Zuboff, *The age of surveillance capitalism: The fight for a human future at the new frontier of power*, New York, Public Affairs, 2018.