Platform labour on the margins and beyond the digital realm: Mapping the landscape of “platform-generated labour” in the digitally mediated short-term rental market.

Dimitris Pettas *

Institute of Urban and Regional Planning, Technical University of Berlin, Berlin, Germany

ARTICLE INFO

Keywords:
Platform economy
Platform labour
Short-term rentals
Airbnb
Athens

ABSTRACT

This paper explores the landscape of labour in the platform economy and, more specifically, the ways local economic activities and actors are exposed to pressures of platformisation, building on the case of the Airbnb platform and the digitally-mediated short-term rental (STR) market in Athens. Conceptualising STR networks as infrastructural assemblages and through a qualitative study building on 27 semi-structured interviews with relevant actors, I focus on: tracing the wide range of workers who undertake essential tasks, the employment statuses, compensations and modes of engagement of workers, restrictions and gender-dimensions, as well as the content and attributes of STR-related work. My main argument is built around the notion of ‘platform worker’ and the need to expand it beyond workers that are directly related to the platforms, in order to include the on-site labour force upon which the creation and everyday operation of broader platform ecosystems and related infrastructure are depended.

1. Introduction

Globally operating digital platforms are increasingly transforming sectors of the economy, cultural practices, housing and labour landscapes and, more broadly, urban life. Among the multileveled impacts of platform economy (PE), the emergence of new modes of labour has been systematically explored in a series of fields, including law, geography, labour and gender studies. Nevertheless, among these lines of research, significant gaps are evident, as the majority of recent research efforts to grasp the landscape of labour within the PE have developed around platforms that are considered labor-intensive and especially ride-hailing ones (what Schor, Attwood-Charles, Cansoy, Ladegaard, & Wen-gronowitz, 2020 referred to as the “ubercentricity” of research), as well as around workers who are directly related to the platforms, either as contractors/ freelancers or as employees. Moreover, commentators (see Gandini, 2019) have highlighted the importance of further exploring cases of ‘real’ work in the PE and expanding our focus on workers that are up to now classified as ‘users’. Finally, issues related to the impacts of platformisation processes upon local labour markets are rarely addressed through the lens of platform labour.

In an attempt to propose a novel conceptualisation of platform networks (expanding in both digital and urban environments), the emergence of hybrid modes of work and their intersections with local labour markets, this paper explores the ways local economic activities and actors are exposed to pressures of platformisation (see also Boglia-cino, Codagnone, Cirillo, & Guarascio, 2020), building on the case of the Airbnb platform and the digitally-mediated short-term rental (STR) market in Athens. This paper focuses on both homeowners who operate as hosts and a wide range of workers performing “peripheral” tasks such as cleaners, hired hosts, photographers etc., attempting to inform a series of debates on PE that currently develop in parallel, while bridging the socio-economic dimensions and impact of the PE with its organizational attributes, especially in relation to the new, hybrid modes of labour that they entail and the ways the latter affect local labour landscapes. The main contribution of the paper lies in the detailed mapping of the landscape of labour performed in the STR market, including, but also extending beyond actors that are directly related to relevant platforms as hosts and the exploration of the associations between the aforementioned actors and their work conditions. Building on the findings, I argue that “platform-generated labour” is appropriate concerning the inclusion of actors that are indirectly related with the market while, nevertheless, their work conditions are adopting to the on-site labour force upon which the creation and everyday operation of platform labour. In this vein, this paper brings out and explores the on-site labour force upon which the creation and everyday operation

* Corresponding author.
E-mail address: d.pettas@tu-berlin.de.

https://doi.org/10.1016/j.diggeo.2024.100082
Received 11 August 2023; Received in revised form 3 December 2023; Accepted 6 March 2024
Available online 11 March 2024
2666-3783/© 2024 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).
of broader platform ecosystems and related infrastructure are depended. The incorporation of platform-generated labour in ongoing debates on platform work will allow valuable insights on the ways PE disrupts and re-organises context-dependent, pre-existing modes of labour and economic activities, especially through processes of precarisation and informalisation. Following De Stefano (2016), the gig economy does not constitute a distinct economic activity but, instead, is linked with the formal economy, sharing attributes that are evident in ongoing trends in the latter, such as informalisation, precarisation, which are mutually informed and empowered. Similarly, Terranova (2000) argues that “it is fundamental to move beyond the notion that cyberspace is about escaping reality in order to understand how the reality of the Internet is deeply connected to the development of late postindustrial societies as a whole”.

Through the employment of Assemblage Theory (AT), I conceptualise platform-generated networks as hybrid infrastructural assemblages, highlighting the essential role of all modes of labour that are mobilized towards the creation and maintenance of relevant infrastructures. Of particular interest in this paper are the processes through which “conventional” lines of work adapt specific attributes that are routed in the platform organizational models. Within the landscape of PE, ‘sharing economy’ includes the sharing or renting of goods and services, while ‘gig economy’ includes renting out labour through the delivery of specific tasks (Frenken, Van Waes, Pelzer, Smink, & Van Est, 2019). While STRs are largely considered as part of the sharing economy, this paper argues that they also incorporate and rely upon gig work, through the allocation of specific tasks to both high and low skilled workers. My focus is on location-based labour, involving workers that operate on site and are related to the Airbnb platform in both direct and indirect ways. This line of work has substantial disruptive effects (Schmidt, 2017), while it’s place-specific implications and the intersections with the local context are of key importance.

2. Labour in the platform economy

2.1. How are platforms changing work?

Over the last decade, platforms have rapidly expanded around the globe, while their importance as actors and spheres for reorganizing labour is often paralleled with the factories during the industrial revolution (Kenney & Zysman, 2016; Smireck Morris et al., 2017). Kässi, Lehdonvirta, and Stephany (2021) who focused on online freelancers, estimate that 205 million workers profiles are active on online freelancing platforms while, among them, 21 million have high levels of engagement with online tasks, meaning that they have either earned at least 1000 $ or have completed at least 10 specific projects. Moreover, in 2021, there were 777 active platforms that facilitated online (microtask, freelance and competitive programming) and on-site (transportation and delivery) work (International Labour Organization (ILO), 2021).

The vastly informal development of part of platforms activities, has received criticism as a way of eluding obligations that apply to ‘traditional’ economic activities (e.g. taxation, compliance with regulatory frameworks, competition etc.). According to Rauhv and Schleicher (2015), actors of the PE have managed to bend urban politics to their advantage through a set of tactics and strategies that include developing customer bases prior to related regulatory approvals and claiming the role of networks that connect third parties, rather than the one of service providers (see also Frenken et al., 2019). Among commentators on platform labour, there is a broad consensus concerning the negative implications deriving from the misclassification of platform workers as ‘freelancers’ or ‘independent contractors’. Rogers (2016), building on the cases of Lyft and Uber, argues that platforms’ substantial level of control over drivers’ engagement through a series of contractual duties is undermining the ‘independent worker’ status of the latter. Contrasting relevant actors’ rhetoric, platforms’ role is not restricted to establishing and channelling communication between the supply (worker) and the demand (client) sides. Instead, they maintain and exercise high levels of agency and control over the ways services are organised and delivered (through restrictions, incentives, algorithmic performance evaluation), rendering workers’ status closer to the one of an employee rather than of a freelancer (Gramano, 2020; Kuhn & Maleki, 2017). Moreover, a series of risks (financial, legal etc.) and obligations are redistributed from firms to ‘freelancers’ (Kovalainen, Vallas, & Poutanen, 2019).

Drahokoupil and Piasma (2017), along with Drahokoupil and Jaspen (2017) argue that platforms linking demand and supply for labour and services are reorganizing ‘conventional’ occupations and professions that were conducted through formal employment statuses into self-employment, a shift associated with increasing work fragmentation, job instability and low rewards. Additionally, ‘freelance’ workers and independent contractors lack institutional protection and rights (social and health insurance, unemployment benefits, sick days etc.), have to cover themselves the expenses for essential equipment and operational costs, while they are subjected to an entrepreneurial rhetoric that allows to no space for solidarity and mutual support (Bates et al., 2019; De Stefano, 2016; Eurofound, 2018; Forde et al., 2017; Joyce, Stuart, Forde, & Valizade, 2019; Vallas, 2019). Finally, platform labour is often accompanied by skill mismatch and obstacles to career development (Berg, Furrer, Harmon, Rani, & Siberman, 2018; Eurofound, 2018; Graham, Hjorth, & Lehdonvirta, 2017).

Furthermore, both new and ‘traditional’ lines of work incorporated in the platform economy are subjected to the algorithmic management and evaluation of labour, a condition that has been associated with a view of relevant activities as an emerging field for the exercise of bio-political power. According to Gregory and Sadowski (2021:2-3), “This system of power is now materialised and symbolised by the database, which is used to collect information about people, create profiles, sort them into categories, and make decisions about their lives. The biopolitical platform, thus, governs human life by coordinating the performance of, and extracting the value from, its vital productive energy. The platform pulls the body into its algorithmic practices, simultaneously measuring its development, managing its processes, and feeding off its data outputs”.

In the same vein, Roelofsen and Minca (2018) argue that Airbnb hosts are forced into a distinct kind of performativity, a specific way to produce and communicate ones’ self through bodily performances that comply with guests’ anticipated expectations (e.g. to undertake the role of the ‘local’ who operates a cultural mediator between the guests and the urban environment) which, in turn, are translated by the platform into algorithmic metrics upon which hosts’ performance is evaluated and put into hierarchies (see also International Labour Organization (ILO), 2021). Furthermore, the specific attributes of the technological infrastructure of platforms entails information asymmetries that prevent workers from having an overall understanding of how their work is incorporated in broader production processes and value chains (Graham et al., 2017).

Finally, platform actors, despite claiming a role in the democratization of labour markets, not only have failed to overcome established discriminations, as well as gendered and racial divisions but, instead, are accounting for their aggravation. According to Edelman and Luca (2014) and Edelman, Luca, and Svirsky (2017), in the United States, African-Americans earn 12% less than other hosts for dwellings with similar characteristics (type, location), while they are also more frequently turned down as guests. Such findings are further supported by Canos and Schor (2017) who analyzed more than 200.000 Airbnb listings in the United States and found evidence for racial disadvantage in terms of rates, reviews, hosting policies, and payment mechanisms. Zopf (2016) who argue that Uber and Lyft drivers tend to discriminate against African-Americans. Finally, workers participating in labour exchange platforms, especially those undertaking low paid domestic and service work, comprise of disadvantaged groups such as working-class people of colour (see Hoang, Blank, & Quan-Haase, 2020; Kirsch, Warren, & Shen, 2015; Van Doorn, 2017). Additionally, platform economy builds upon – and further amplifies – uneven developmental patterns and divisions (for further information on the geographical attributes of
platform work see also Kässi & Lehdonvirta, 2018). According to Graham et al. (2017), while most of the demand comes from high-income countries of the Global North, most of the corresponding work is carried out by workers residing in low-income countries of the Global South who, moreover, are getting significantly lower wages compared to individuals performing the same tasks in high-income countries. Furthermore, Galperin and Greppi (2019) argue that specific cognitive shortcuts among employers are building upon established stereotypes that associate expected workers’ productivity with their country of origin. Building on the above, it becomes apparent that platforms constitute major actors for the gradual precarisation, informalisation and individualisation of labour, leading to work fragmentation and even competition among (platform) workers, while aggravating geographical income inequalities.

2.2. Typologies of platforms and platform work

There is a broad recognition that labour facilitated or mediated through platforms is characterised by high levels of labour precarity and vulnerability, varying among different types of platforms and modes of workers’ engagement (Drahokoupil & Piasma, 2017; Vallas, 2019). Given the diverse landscape of platforms and variations of workers’ engagement, a key issue for commentators concerns the modes of labour that give shape to the ‘platform worker’ subject, along with the various typologies and classifications of platform labour and workers.

Concerning platforms per se, a major classification relates to the distinction between those that - directly (e.g. TaskRabbit) or indirectly (e.g. Uber, Deliveroo) channel labour, as opposed to those that facilitate access to goods and property (e.g. eBay, Airbnb) (De Stefano & Aloisi, 2018; Kuhn & Maleki, 2017). Another distinction concerns the varying degrees of localisation of platform mediated activities. On the one hand, there are platforms that directly rely upon local resources (infrastructure, housing stock, labour pools etc.) and have a significant impact on local economies, while on the other hand there are platforms that fully operate online, e.g. Amazon Mechanical Turk (Drahokoupil & Fabo, 2016). Within the diverse landscape of PE, each platform involves different modes of labour, while differentiations are also apparent in the multiplicity of tasks facilitated through one and single platform. Through a review of relevant literature, classifications and typologies of platform labour are building upon:

i) Whether workers operate online or in person, expressed in classifications such as online/ offline workers (Joyce et al., 2019), crowdwork/ work on demand via app. (De Stefano, 2016; Heeks, 2017; Johnston, 2020), platform-dependent vendors/ platform-dependent in-person service providers (Bearson, Kenney, & Zysman, 2020), cloud work/ gig work (Schmidt, 2017) statuses. While both lines of work are more often organised online, the first can take place from any location (e.g. clickwork), while the latter involves the in-person engagement of the worker for the delivery of a service (e.g. hosts, drivers, cleaners).

ii) The direct or indirect engagement of workers (see Bearson et al., 2020). The first category includes a wide range of workers who are either direct employees or contractors of platforms, while the conditions of engagement, as well as their rewards are also mediated (or directly originating) by the latter. Indirect work involves more ‘peripheral’ tasks, which are outsourced to workers by actors that are directly related to the platforms. Morris et al. (2017), focusing on platform-mediated online work, identify two classes of workers, namely the primary (those who accept to perform specific tasks) and the secondary (those who are subcontracted by the former in order to assist through subcontracted microwork) ones. In this frame, microwork comprises of three models: real-time assistance, task management, and task improvement.

Additional categorizations involve the level of workers’ dependence upon platform work, i.e. whether it constitutes the sole or major source of income (Bearson et al., 2020; Joyce et al., 2019; Kovalainen et al., 2019; Schor et al., 2020), workers’ level of control over the ways they organise their engagement (Kuhn & Maleki, 2017), and the skills required in order to conduct specific tasks (Drahokoupil & Fabo, 2016).

2.3. Labour through short-term rentals

Within platform labour debates, digitally-mediated STRs are vastly under-represented as, in many cases, related activities are not considered labour-intensive but, instead, mediators towards providing access to assets (De Stefano & Aloisi, 2018; Schor et al., 2020). Moreover, Airbnb hosts are classified as privileged actors within the PE. For example, Eurofound (2018) has excluded labour mediated through platforms providing access to accommodation from the definition of platform work, overlooking the fact that STRs’ operation is highly dependent upon a diverse range of workers. However, especially in the frame of the rapid professionalisation of the STR market (Coccola-Gant, Jover, Carvalho, & Chamusca, 2021; Dagkouli-Kyriakoglou, Tulumello, Coca-Gant, Iacovone, & Pettas, 2022; Katsinas, 2021), the role of labour as an essential component of STRs’ production and everyday reproduction is increasingly brought out. Drahokoupil and Fabo (2016) highlight the modes of labour involved in providing a dwelling through STR, including cleaning, accountancy and maintenance. Moreover, concerning STR-related activities, along with other modes of platform labour, emotional labour (Bates et al., 2019; De Stefano, 2016; Spangler, 2019) and care work (Kovalainen et al., 2019) constitute key tasks performed by platform workers that operate in-person, while also reflected online performance evaluation through feedback, rating and ranking systems (Gandini, 2019; Knaus, 2018).

The prevailing conditions of precarity, work fragmentation and self-exploitation that are evident across platform workers also reflect upon part of workers who operate as hosts in the STR market. Bates et al. (2019), focusing on hosts who undertake the full tasks involved in short-term renting identifies a series of negative work conditions: flexible, unstable and extended working hours, dependence on help from family and friends’ networks. Moreover, STRs account for processes of “home-unmaking” (Soaïta & McKee, 2019) through the transformation of dwellings from primary places attached to the private sphere to “emerging spaces of domestic entrepreneurship” (Stabrowski, 2017: 327).

I argue that the creation and everyday operation of digitally-mediated STRs is highly dependent upon a broader ecosystem of workers, infrastructure and narratives. Thus, these extended STR networks can be conceptualised as distinct, yet overlapping assemblages, involving components that are not directly related to or controlled by the platforms, while, despite the fact that in many platform typologies STRs are considered as mediators that facilitate access to property, they are also labour intensive, especially concerning more professional STR networks. In these assemblages, similarly to other extended, platform-generated networks (Kenney, Bearson, & Zysman, 2019), human components attach to the networks in diverse ways and various levels, each resulting to different labour conditions.

3. Analytical framework, ontological admissions and methodology

The analytical and epistemological framework of this paper lies on the grounds of AT (DeLanda, 2006, 2016; Deleuze & Guattari, 1980) and the conceptualization of STR networks as infrastructural assemblages that operate in both physical/ urban and digital spheres, de/recoding and bringing together a series of human, material and expressive components: urban and natural resources and assets (building stock, transport infrastructure, public spaces, sites of cultural and archaeological interest, natural and cultural landscapes), workers, labour, knowledge, services. In this work, I focus on specific aspects of STRs’ assemblage-making processes, namely i) the modes of labour that support their emergence and everyday reproduction, ii) the driving factors and conditions behind human actors’ engagement and iii) the attributes, as well as the transformation of properties and capacities of actors involved.
Building on that, I move to an extensive mapping of all modes of labour that are essential for the operation of the STR market, including but also extending beyond the owner/host. I argue that this approach can inform relevant studies on platform labour, also beyond digitally mediated STRs.

For DeLanda (2016), the main ontological distinctiveness of AT, is related with the social entities that are entitled to be considered as agents. Assemblage Theory, instead of regarding exclusively human beings as agents, moves to the conceptualization of social wholes (assemblages), defined by their emergent properties. Emergent properties of an assemblage do not derive from the properties of its parts but from their interactions. Apart from the concept of emergence, the deployment of the concept of exteriority prevents assemblages from being reduced to an aggregate of parts. Exteriority implies that parts have some level of autonomy, in order to be able to detach from a certain assemblage and attach to another. For Anderson, Kearnes, McFarlane, and Swanton (2012), AT (as well as Actor-Network Theory) is ‘framed by ambivalence toward the a priori reduction of social-spatial relations to any fixed form or set of fixed forms’. To use Deleuze and Guattari’s terms, assemblage thinking presupposes a rhizomatic, rather than a tree-like understanding of the emergence of networks, leading to an approach based on multiplicity, non-hierarchical incorporation of actors and data, that is not built upon dualistic schemas and categories. AT, more than a set of methods, constitutes a, strongly philosophically grounded, ontological alternative for the understanding and exploration of the social world and its production. More specifically, AT accounts for an ontology that is relativist (exploring relations and associations) and realist (admitting that is only one given social reality) at the same time, non-representational, anti-essentialist, and empiricist.

As for the methods associated with the employment of AT in empirical studies, they remain rather open, as long as the overall approach remains consistent with the aforementioned ontological admissions. Baker and McGuirk (2016), through a systematic analysis of various employments of assemblage theory in policy studies, identify four methodological commitments that relevant works had in common, namely to reveal multiplicity, processuality, labour and uncertainty. The research upon which this paper is building, was designed in accordance with the epistemological admissions of AT by adopting an approach that is relativist (i.e. exploring the associations and relations among various components of STR networks, along with the impacts of these relations on individual and collective capacities), focuses on the rhizomatic emergence of the STR assemblages and assuming a flat ontological status (by employing an open and inductive incorporation of actors and relevant data, while also uncovering the crucial role of neglected actors such as peripheral workers and the role of materialities), anti-essentialist (by avoiding to allocate predefined roles to investigated actors but, instead, being open to trace and record unexpected functions), processual (by focusing on the ways the capacities of both individual components and the STR assemblages as a whole transform overtime leading to new connections and relations of exteriority) and, finally, by being open to the multiplicity of STR assemblages, varying from one private person renting out a single room, to larger assemblages that are emerging around corporate actors.

Building on the above, semi-structured interviews were employed as a methodological tool in an attempt that enforce the inductive and flexible character of the research. This paper is building on 27 semi-structured interviews with a wide range of actors of the STR market in Athens. Part of them involve actors that are directly engaged with and acknowledged by the STR platforms, including hosts (may they be individuals or companies) that have either ownership or management rights over the properties and photographers who regularly work for the AirBnB platform as freelancers. The remaining of interviewees consists of workers who are incorporated in various stages of the introduction and the operation of properties in the STR market (including the renovation/construction phase, as well as the everyday operation of the properties as hospitality infrastructure) through the directly engaged actors’ end: cleaners, people operating as hosts through the undertaking of both online and on-site tasks, photographers, architects and interior designers and construction workers. Interviews were conducted online from January 2021 to September 2021, as during this period the COVID-19 pandemic was in full development. The initial participants consisted of hosts who were identified through the Airbnb platform, while the pool of interviewees expanded to include ‘peripheral’ actors through snowballing techniques.

4. A conceptualisation of short-term rental networks as assemblages

AT was developed by Manuel DeLanda as a further elaboration on the Deleuzoguattarian concept of assemblage. The concept of assemblage refers to “a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them across ages, sexes and reigns – different natures. Thus, the assemblage’s only unity is that of co-functioning: it is a symbiosis, a sympathy” (Deleuze & Parnet, 1987: 69). Building on Deleuze’s description, within assemblages, all entities and actors (human, objects, matters etc.) have the same ontological status and importance.

In this paper, I move to a delineation and analysis of i) the extended topology, actors and components and ii) the landscape of labour relations and work conditions in the frame of the emergence and everyday reproduction of STR networks. In doing so, I build upon a conceptualisation of the aforementioned networks as hybrid, loose, infrastructural assemblages that mobilise and bring together a series of material, human, expressive and symbolic components, operating in both the digital and urban spheres and their intersections. Those components, up to different degrees, participate or underplay an essential role in the operation in STR-related activities, establishing the flat ontological status of STR assemblages, as the latter could not have emerged in the absence of components that, up to now, have been neglected in research on the emergence of the STR market. Moreover, I argue that the overall development and operation of STR assemblages, along with the augmentation of collective capacities, cannot be broken down to an aggregate of their components’ pre-existing capacities, as the latter are only partly exercised through the establishment of relations of exteriority. Instead, through co-functioning, both human and material components undertake roles, tasks and functions that are substantially different compared to the periods before – or after – their incorporation in STR assemblages. For example, dwellings, due to their detachment from the sphere of social reproduction and their operation as assets in the tourism accommodation industry are transformed concerning both their material attributes and their everyday rhythms and functions, in ways that explicitly relate to their attachment to STR assemblages.

Similar transformations can be traced in tasks, modes of engagement and transactions of specific lines of work and professions. Following that, a multiplicity of components, both human and material, are going through a series of adaptations and codifications in order to attach to the STR assemblages.

STR assemblages are not homogenous in terms of topological attributes, processes of assemblage making and territorialisation, as well as of degrees of resilience to forces of deterritorialization. More professionalized assemblages (e.g. companies that manage extended property portfolios) involve a wide range of ‘peripheral’ actors, connected through weak links that are built upon dependencies. These links, through their resemblance to conventional stratifications of labour, accounts for the overall hierarchical organization of relevant assemblages. The employer-employee relation, even though often emerging in the absence of official contracts, constitutes a force of legitimisation and territorialisation, accounting for specific, strict codifications of relations of exteriority. Additionally, within more professionalized assemblages, due to the privileged role of investors and companies in processes related to the selection and incorporation of components (from peripheral workers to dwellings and from finance to labour), the capacities
of the latter are more likely to be more efficiently and to a larger extent manifested and exercised through their conscious matching with specific tasks and processes as evidenced, for example, by the ability on behalf of investors to select the location and attributes of dwellings that are incorporated in their portfolio. The latter also has a substantial impact on relevant assemblages’ evolution and emerging capacities through top-down causality, as STR networks are interacting with and affected by larger assemblages, namely the districts they are located in. In this case, concerning STR assemblages emerging within districts that operate in a way that facilitate visitors’ needs (e.g. located in proximity with areas of touristic interest and public transportation infrastructure, hosting cultural and recreational activities etc.), ‘external’ components in the form of services, infrastructure and narratives are also, indirectly but not unconsciously, becoming part of emerging assemblages, leading to the augmentation of their collective capacities. The aforementioned accounts of territorialisation, concerning both the organizational attributes of STR assemblages and their nesting in the urban environment, render professionalized STR assemblages more resilient to pressures of deterioratorialization.

Nevertheless, ‘internal’ (i.e. not referring to pressures in the form, for example, of regulatory policy frameworks) pressures of deterioratorialization are crucial. First, the augmentation of skills on behalf of engaged human actors increases their chances to enter new assemblages, especially more ‘conventional’ ones in the tourism industry. Yet, in the case of STR assemblages, it is not solely the augmentation of new, individual capacities but also the inability to fully manifest, exercise and be credited for pre-existing ones that operates as a force of deterioratorialization. In that sense, the deterioratorialization of personal identities and subjectivities – in this case undertaking a rather ‘negative’, than empowering character - and the rise of the precarious worker subject lead to the destabilization of STR assemblages. The mismatch between skills and tasks, as well as compensations, along with the necessity-driven modes of engagement and the overall exploitative working conditions for the majority of engaged actors can create conditions of deterioratorialization.

Finally, agency over the development and operation of STR assemblages is not restricted to the deliberate planning on behalf of privileged human actors. Instead, the platform environment itself, beyond its evident role as a material component, also accounts for the algorithmic and data-driven control and agency over the ways relevant activities are performed, articulated and organised. In this way, the platform operates as an agent of both biopolitical and disciplinary accounts of power, building on both productive and disciplinary/normalising exercises of power over the components it brings together. As for the first, according to Foucault (1980, 1991), power does not always undertake oppressive attributes but, instead, operates as a productive mesh that creates discourses and materialities, provides with rewards, being diffused in the societies through specific sets of ‘economies of power’. In the case of STRs, relevant platforms operate as hubs that register, verify, evaluate, and contract and property rights that are provided by engaging human actors. In a hierarchy and distribute material and expressive components through, for example, the algorithmic evaluation of services and the provision of ‘super host’ statuses, the verification of legal agreements between hosts and the Airbnb company through the acceptance of the terms of use, the showcase of hosting neighbourhoods’ descriptions. In this way, algorithmic agency, besides setting and verifying a series of requirements, is rather performed through the disproportionate distribution of rewards and opportunities alongside assemblages’ components (operating as a constant reminder of normality and the reward of conformity to the norm), than through strict controlling mechanisms and frameworks.

Nevertheless, the platform also operates as a mode of disciplinary power, rendering assemblages’ components (people, dwellings, various modes of labour) into objects of knowledge through the extraction of data from multiple sources, while also transforming and modifying them. For Foucault (1975), even though disciplinary power often undertakes the form of penal mechanisms (in this case through the indirect ousting of hosts who fail to be successful within the reputational economy model of platforms), its main objective is the adaptation and correction of deviations. In this way, the platform, through the constant collection, processing – but also codification, interpretation and communication - of data fulfils the five functions of disciplinary power as analyzed by Foucault (1975) as it: i) integrates actions and behaviours into a system of evaluation and differentiation, ii) divides and categorises individuals according to their behaviour, iii) prioritises individuals on the basis of their compliance to the norm, iv) forces individuals to comply and v) establishes the boundaries between normal and abnormal, desirable and undesirable.

5. The platformisation of labour in Athens

The STR market emerged and established in Athens in the midst and in the aftermath of the 2008 economic crisis. While, during its early stages, STR-related activities developed as part of households’ survival strategies towards coping with the multilevelled impacts of the crisis, the STR market gradually attracted the interest of investors and real estate companies as a field for speculation on real-estate property (Balampanidis, Maloutas, Papatzani, & Pettas, 2019). Driven by the transformation of Athens from a one-day stop to a year-round, city break destination, the STR market expanded rapidly, as Airbnb listing rose from 1395 in 2014 to 6736 in 2016 and 15,343 in 2019 (AirDNA). The spread of Airbnb listings in Athens is characterised in geographical terms by high concentrations in residential districts, located around ‘traditional’ touristic areas (Balampanidis, Papatzani, & Pettas, 2021), accounting for the unfolding of transnational gentrification processes (Pettas, Avidkos, Iliopoulou, & Karavasilis, 2021). Moreover, the crisis-induced deregulation of local labour markets and the high levels of unemployment and precarious work arrangements underplayed a key role in the production and operation of the STR market in Athens (Gourzis, Herod, Chorianopoulos, & Gialis, 2021).

5.1. Identifying the components of STR assemblages

Prior to the analysis of the specific actors, components, relations and processes that are of particular interest towards exploring the landscape of labour in the STR market, it is crucial to provide a short, overall delineation of the components that are brought together towards the emergence, operation and reproduction of relevant assemblages. Following DeLanda’s (DeLanda, 2006; 2016) distinction between the material and expressive roles of constituting components in any given assemblage, the following components can be identified in STR-related ones:

- Material: dwellings, the Airbnb platform, the human actors and the labour they provide, money and finance in the form of investments, compensations, rental fees, expenses for equipment etc., electronic devices, ‘external’ infrastructure ranging from lockers and laundries to public transportation, vehicles.
- Expressive: dependencies (e.g., the diverse range of labour relations and hierarchies), solidarity, linguistic (start-up vocabulary, narratives associated with the “live like a local” trend in tourism, framings of the city and its neighbourhoods etc.), the knowledge, qualifications, contracts and property rights that are provided by engaging actors.

It is noted that components can also undertake in-between roles, e.g. the unpaid labour provided by a family member, besides its material role, also undertakes an expressive one, in the form of solidarity; the Airbnb platform, besides its material role, also operates as a hub that distributes expressive components (e.g. performance evaluations, contractual agreements etc.). Moreover, in any given assemblage, components are provided with constraints, risks, as well as resources and opportunities, while of particular interest are the transformations of
engaging actors’ capacities and properties, explored in this paper through the employment and acquisition of skills. Relevant transformations in many occasions account for the establishment of relations of exteriority between STR assemblages’ components and other urban assemblages, operating as forces of deterriorization. Finally, the anti-essentialist stand of AT paves the way for the challenging of several components’ predefined roles, including our established understandings of what the roles of ‘host’ and ‘guest’ entail, along with the notion of ‘home’ and its de-attachment from the sphere of social reproduction through its mobilisation as an asset in STR assemblages. In the remaining of the analysis, I focus on components and processes that relate with the landscape of labour within STR assemblages, while also exploring transformations and shifts of actors’ capacities.

From networks that emerge around companies, domestic and international investors that manage large numbers of dwellings, to those involving owners that offer a single room or apartment, STR assemblages are characterised by high levels of diversity concerning their topological attributes, degrees of professionalisation and actors that operate on site. Starting from the actors that are directly related with the Airbnb platform, three main categories occur. First, companies that manage dwellings that are either purchased or rented by them. In the latter occasion, the companies take complete control over the housing units over a period of time, deducting 15–20% of the profits. Second, local or international investors that own and manage multiple dwellings. In that case, owners either maintain key organizational and coordination tasks, while outsourcing other tasks to “peripheral” actors or outsourcing the total of essential work. The third category comprises of small owners who offer a single room or dwelling. Unlike other types of owners/ managers, the latter – often with the support of other household members - undertake the total of the essential labour, while outsourcing is limited to tasks that require specific skillsets and are most commonly undertaken in the early stages of the STR activity. Apart from property owners (or managers, in the case of part of listings in the portfolios of STR companies), several local photographers are also directly affiliated with the Airbnb platform as freelancers, while the latter connects them with hosts who are in demand of relevant services, also covering the cost of the service.

Moving to ‘peripheral’ actors, research uncovered a whole range of workers and professions that are essential in all stages of the STR activity. These workers are introduced to the STR assemblages by the owners’ end, while the latter maintain control and agency over the ways labour is performed.

‘I am completely depended upon the cleaners. Not so much upon people who do the check-in because I can install log boxes, not so much upon drivers. What is essential for every visitor and what they expect to find is a very clean apartment, fully equipped at the time of the check-in’ (Kostas, owner of three apartments).

The first category of peripheral actors includes hired hosts, comprising of individuals undertaking a series of tasks associated to the role of host but also extending to additional ones. Besides online work (creation and maintenance of the online profile, communication with visitors etc.) hired hosts in many occasions coordinate or conduct the registration of the dwellings and the taxation of transactions that are mediated by the Airbnb platform and involve dwellings’ owners and photographers who relate to Airbnb as freelancers, the engagement of peripheral actors is informal, taking place in the lack of contracts, social and health insurance and institutional protection. Moreover, there is a substantial mismatch between actors’ skills and compensations which, at the same time, are significantly low for tasks that require no particular skills and qualifications. Anna, holder of a masters degree and fluent in three languages, operating as hired host who also undertakes the total of necessary labour and tasks (cleaning, shopping, communication, accounting etc.) and Katerina who works as a cleaner sketch these exploitative modes of engagement:

‘Of course it was shadow money. Now I regret it because I cannot even prove that I have this work experience. When I started, I was being paid on an arrival-basis’ compensation. I was 25 years old back then and I was thinking that the money was ok. I was getting paid 20 Euros for each arrival […] When I realized that I was running the whole business myself, I asked to get paid on a commission basis. Upon saying that, the owner got aggressive and told me that this is impossible because she had to make savings in order to invest in more apartments. (Anna, hired host).

The salary was 500 Euros, shadow money, for a seven days work week and more than eight ours per day. 500 Euros. […] For another guy I was getting paid 20 Euros per visit. But keep in mind that I had to carry everything, from cleaning stuff to laundry. I was doing the laundry at my house, ironing, everything and then taking the clean sheets and towels to the apartment. I was not getting any extra money for that’ (Katerina, cleaner).

The aforementioned conditions are moderated concerning workers with specific skillsets and qualifications, namely architects, interior designers, photographers and drivers. However, as the economic crisis caused a pause in construction activity and the engagements with STRs emerged as the only alternative for architects, engineers and construction crews, money transactions were also taking place as part of the shadow economy.

‘During the crisis there wasn’t any new construction activity, everyone was looking for alternatives. Airbnb-related work, also concerning interior design was a way out for many colleagues. My job mostly involved consulting: “use this kind of tile, paint this wall that colour” etc. Since I didn’t have to prepare any kind of building permit or something relevant, we were getting paid in shadow money. If you ask me now - that there are more alternatives - I would never engage with this line of work again’ (Vasilis, architect).

Moving to more official transactions, the vast majority of the owners comply with the national regulations for renting out through Airbnb, which include the registration of the dwellings and the taxation of generated income according to tax scales that apply to the conventional rental market. However, different types of owners benefit in disproportionate accounts, depending on two parameters. The first concern the scale of operations and the number of dwellings that are under a single owner or company. The creation of internal scale economies and agglomerations (as investors tend to purchase dwellings that are located in proximity to one another) on behalf of privileged actors such as companies and investors enable them to compress running costs and maximize profits. At the same time, the aforementioned networks are more competitive within the market due to the higher degrees of professionalisation and the provision of more and high-end services, reflected in the algorithmic evaluation of the listings and resulting in higher asking prices.

‘If you manage multiple apartments, especially if they are in the same neighborhood you can save a lot of money. Someone who owns a whole building can install two internet connections and that’s it. You can reduce
running costs and also save time, also concerning expendables and personnel. One may pay the cleaner 10 Euros and think it is cheap but someone with more apartments can give 50 for all of them and that will be even cheaper. Also, if you have multiple apartments, you can turn it into a full-time job and be available all the time. You cannot afford that with one apartment’ (Eva, hired host).

“We are not all (e.g. small owners and investors/companies) on the same boat because each offers different services. From one’s 24/7 availability for communication and how clean the apartment is to the renovation one can afford, there are many parameters and it all comes down to them, I mean how successful one is going to be in the market […] The companies ask for more money not only because they compensated the costs but also because they worked on their product that well that they ‘gained the right’ to do so. Some apartments had direct view to Acropolis, other were large and undergone through luxury renovations. For me the apartment was fixed, I got it from my parents, while I could not invest huge amounts of money in renovating it’ (Marios, owner of 2 apartments).

The second parameter that defines owners’ earnings concerns the location of the dwellings, as different neighbourhoods attract visitors of different profiles and economic statuses, resulting to different asking prices (see also Balamanidis et al., 2019), while proximity to the city center and public transportation infrastructure are also of key importance. Again, companies and investors hold a privileged position within the market, being able to strategically select the spread of their activity in geographical terms.

Moving to the remaining actors, drivers are exclusively associated with professionalized STR networks, also informally. The drivers have to fulfil certain preconditions, most importantly a good command of English, while they return part of their profits to the owners/investors in the form of shadow commissions. Finally, photographers working for Airbnb as freelancers is a professional category that substantially benefited from their engagement in the STR market, as the legitimization associated with the ‘official Airbnb photographer’ status led to their empowerment.

‘I am very satisfied because they (Airbnb) pay well and on time. Also, it helped me (the Airbnb photographer status) to overcome some problems that I used to have landing jobs because I am young, I look younger than my age, and also a woman. So, I was having troubles landing jobs but after becoming an Airbnb photographer, the same people that would never provide me with the opportunity to work for them, they were happy to have me’ (Anastasia, photographer).

Building on the above, STRs account for the platformisation of local labour markets and professions, through the expansion of the freelancer status and the informalisation of occupational statuses and monetary transactions. It is noted that some lines of work, especially cleaning and construction services, have been commonly taking place as part of the shadow economy even before their attachment to the PE. However, the difference between mobilizing labour towards supporting the social reproduction of a household and its incorporation in for-profit business models is of crucial importance here. In this sense, while a comparison between pre-existing modes of hired domestic labour and the acquisition of relevant services through platforms such as TaskRabbit may be of relevance, STR networks’ operation as organised accommodation and hospitality infrastructure calls for a different approach. Thus, the work conditions in the STR market, along with processes of precarisation should be counter-explored with those prevailing in the conventional tourist accommodation industry. Furthermore, the chances of working under official work relations are higher in more professionalized networks that resemble conventional touristic accommodation units, putting in question narratives of workers’ empowerment in networks that operate closer to the initial, DIY logic of Airbnb. Finally, besides a few exemptions, namely photographers who are cooperating with Airbnb as freelancers, compensations are low, while often do not correspond to workers’ skills and qualifications.

5.3. Content and attributes of STR-related work, employment and acquisition of skills

In this part of the analysis I focus on new lines of work that emerged and mobilized specifically towards supporting STR infrastructure (hired hosts and owners who also undertake a series of everyday tasks), along with actors and professions whose work is going through adaptations (cleaners, photographers affiliated with Airbnb), exploring issues related to work fragmentation and flexibility, modes of exploitation and self-exploitation and the algorithmic evaluation of work performance. Work fragmentation, exploitation and self-exploitation were evident in participants’ descriptions of everyday schedule and tasks:

‘During the day I have to be constantly alerted for new reservations, requests, communication with visitors […] I cannot really tell how many hours I am working per day, it also depends on the season but also there are days that I have to respond in one message and others that I have to respond to twenty five, plus communicating with the driver in order to arrange visitors’ commute to and from the airport. Did I mention that I also do accounting stuff? Yes, I also do that, while I am only getting just 10% of the profits and the owner is doing nothing’ (Eva, hired host).

Work fragmentation, seasonality and multi-tasking extends to cleaners, who also undertake work-related tasks outside their working hours, in their homes or in outside facilities such as laundries and dry cleaners. At the same time, the platform itself, allocates freelance photographers with additional tasks, including the inspection and evaluation of apartments towards complying with the standards of the Airbnb Plus program.

‘I receive the daily schedule early in the morning or the previous night. I have to buy all necessary expendables such as coffee capsules, bleach etc., while moving around constantly both clean and dirty sheets and towels from the apartments, since I was washing them either at my place or in laundries in the neighbourhood. Keep in mind that I had to carry all this stuff by bus or on foot in huge IKEA bags: expendables, cleaning stuff and laundry for several apartments […] On many days I start at 6:00 a.m. and finish at 11 p.m.’ (Martha, cleaner).

Building on the above, hosts and cleaners undertake a multiplicity of tasks related to the everyday operation of the STR activity. Labour is performed both online and on site, while several tasks (including online communication, shopping and cleaning) are spatially and timely dispersed in engaged actors’ private spaces and time zones that are not part of their working hours. Also, the aforementioned actors mobilize a series of personal resources (domestic equipment, means of transportation etc.) while often rely upon the help of family members and friends in order to cope with the demands of their workload.

‘Since I also had to have a ‘regular’ job, I involved my family. My father is doing a lot of check-ins, especially during the summer. The whole family helps. My mother is the supervisor of cleaning, my father the supervisor of check-ins and I am the supervisor of everything’ (Elpida, owner of one apartment).

Within the competitive environment of the STR market, pressure, especially for less professional owners/hosts who struggle to compete with professional networks, is intensified by the algorithmic evaluation of their services. Therefore, even though the platform only sets limited standards and specifications on the way they conduct the activity, small owners who also operate as hosts work under the condition of self-exploitation towards being competitive. In this way, algorithmic evaluation enables the Airbnb platform to maintain high levels of control over the provision of services, despite the absence of strict guidelines and preconditions. The algorithmic evaluation performance and its impact on actors’ prospects is also mobilizing additional modes of labour, namely emotional, performed by all actors that interact with visitors, regardless of their status.

‘I have to be constantly alerted in order to get the best reviews possible. I cannot afford something less, because this reflects on the algorithm and then I will be placed lower in the platform’s suggestions. That’s why I am ready to deal with ‘crazy’ demands and behaviours and to solve absurd problems’
Professions such as photographers, cleaners, architects, interior designers, drivers and construction workers, the essential and/or enabling skills of hosts are more diverse, as a result of the simultaneous performance of manual, intellectual and emotional labour.

As expected, language-related skills are key for all actors that interact with visitors and the command of good English is a prerequisite for hosts’ engagement. Besides that, hosts who have substantial travelling experience themselves highlighted this knowledge as a crucial factor for performing better. Participant hosts also focused on the role of soft skills in the frame of performing intellectual and emotional labour, most importantly organizational skills and patience. Hosts, especially in more extended, professionalized networks are burdened with the overall coordination of people and tasks, while also contributing to their performance when necessary. ‘Patience’, ‘kindness’, ‘politeness’ and ‘communication’ are employed in ways similar to those entailed in working in service and hospitality industries.

‘Organization skills were crucial. Before I took over it was chaos and I had to put some order in it, I had to coordinate a diverse range of people and do it fast. It was nice for me that I realized that I can manage a group of people, establish good relations with them through mutual respect’ (Kyriakos, hired host).

‘Besides speaking English, French, Spanish and Turkish, social skills were also important, such as the fact that I could manage unexpected problems on site, being cool with that etc. […] The fact that my previous jobs also had to do with customer service was also helpful on that. I had to deal with drunk [nationality] people to [nationality] people with whom I couldn’t communicate in any language. But this is the job. Keeping it cool, being calm and everything will work out’ (Eva, hired host).

Through their engagement with the STR market, actors evolved their skills and acquired new ones. Besides organizational and social skills, as well as skills related to financial management and accounting, part of hosts but also photographers, architects and interior designers took a professional turn in the tourism industry, concerning both the introduction of their properties in the STR market and other lines of work related to tourism.

‘Yes, my experience as a host was reflected in my professional life after Airbnb. Actually, among other stuff, as I keep on doing two jobs, I am now organizing and conducting guided tours in Athens. Getting in touch with tourists through Airbnb certainly helped me better understand what tourists want and this is how I got the idea for the tours’ (Alexandra, hired host).

Skill acquisition, along with the precarious working conditions in the STR market, also accounts for the high degree of temporality concerning actors’ involvement in the former. For the vast majority of peripheral actors, their engagement is perceived as short-term, necessity-driven, also related with the implications of the economic crisis. Given the chance, participants either quit in order to join lines of work that better match their skills and qualifications, while providing them with basic workers’ rights or are willing to do so in the near future.

5.4. Restrictions and gendered dimensions of STR-related work

The unstructured and informal work conditions concerning both directly and indirectly involved actors lead to a series of obstacles and restrictions concerning participants’ professional and personal life. Working long hours and being in a state of constant alert and availability towards serving visitors is a crucial aspect of STR-related work, resulting to what participants describe as a state of constant stress and exhaustion. Additionally, since for small owners and peripheral actors, STR-related activities only account for part of their income, their engagement is often taking place at the expense of other lines of work and educational activities. Moreover, the informal status of their engagement and the lack of proofs concerning their work experience results to gaps in their resumes, further undermining their professional pursuits.

Messages were coming all day. I had to be alerted during weekends, at midnight, at 4:00 a.m., always. I did not have any time for myself. This is the job and I was trying to be cool with it in order not to freak out […] I didn’t have any vacations for four years, not even for three days. No, I left once and she (the owner) made me regret it even though we didn’t have any bookings. Another time I faked pneumonia in order to leave for three days […] And of course I didn’t have fixed working hours. I could not schedule anything ahead or even within the day. This conditions completely destroyed my sleep schedule, I was constantly tired and actually, there was space for nothing else in my life, everything revolved around Airbnb’ (Konstantina, hired host).

The aforementioned conditions have disproportionately severe impact upon female workers. First, manual, as well as emotional labour involved in the everyday operation of STRs is almost exclusively performed by women. In several occasions, in the frame of their extended work schedule, the multiplicity of performing tasks, informal work status and the subsequent absence of labour protection frameworks and standards, female participants face health issues, while the lack of health insurance further aggravates these problematic conditions.

‘I am now left with several musculo-skeletal issues from working too hard for many hours with no breaks or vacations. From cleaning, running around, carrying stuff. Since I was in this work when I was 35, not 20, many problems came up. I still have issues with my neck’ (Katerina, cleaner).

‘There are some friends of mine, men, who are also in the same line of work but they work with people who also employ cleaners. On the contrary, concerning myself, it was somehow taken for granted that I would also do the cleaning. Because I am a woman. And this was accompanied by derogatory framing, ‘we found a girl who will do it’ (the cleaning)’ (Konstantina, hired host).

Bearing in mind that women are disproportionately burdened with tasks related to the social reproduction of their households, the extended hours and unstructured schedule of STR-related work also creates problematic conditions in their work/life balance. Again, towards coping with such issues, family networks are mobilized towards supporting female workers. Additionally, on site labour is performed in spaces that have a hybrid character, neither being part of the domestic sphere nor corresponding to the conditions that characterize conventional workplaces, such as hotels. Female participants are often engaging in encounters from a position of vulnerability, through interacting with strangers in private spaces without the protection that is provided in standard workplaces and could prevent physical and verbal abuse.

I am always scared when I go for a photo session. It is always worst when a man opens the door and it’s just the two of us in an apartment. I get very happy when a woman opens the door. Instead, if there is a ‘typical’ man, I need some time to feel safe, to talk with him and be sure he is ok. Most of the times it is ok but still I don’t feel comfortable when a man tells me “let’s go to the garage now to take some pictures and what I do is to text some friends so that they know where I am (…) Once, I came across a guy who during the whole session was talking to me about a massage place that he owns and he
was showing me pictures of the girls who work there. And he was showing me pictures of some girls with décolletage shirts, while saying ‘look at her, she is not really good at her job but her bosom makes up for that’. At some point, he asked me if I was afraid doing this job and at this point I was thinking that I should not be there” (Myrto, photographer).

“There was this older guy that was staying in my apartment and he was insisting on spending time with him in the living room. One morning, he came home with a cake and he was putting pressure on me to eat it, like ‘I bought it for you, you should eat it’. And I can recall that, on the day of his departure, since he was all over the place during his stay, I didn’t want to say goodbye to him alone and I called a friend to visit so I would not be alone with him. This was the only time that I was locking my bedroom door at night” (Hara, owner of a shared apartment).

Overall, gender-based discrimination is more evident in STR-related work, rendering women workers vulnerable to a series of actually and potentially harmful conditions. From the undertaking of disproportionate accounts of manual and emotional labour to the exposure to unstructured and unprotected everyday encounters, female participants are subjected to discriminations independently of their skills, qualifications and modes of engagement.

6. Conclusions

Conceptualising PE networks as assemblages, beyond enabling the grasping of the extended topologies of relevant networks, brings out the need to incorporate all modes of labour that are involved in the creation and everyday reproduction and support of the multi-leveled and diverse infrastructures that are mediated by platforms in the analysis of relevant networks. Findings presented earlier render clear that the operation of the STR market is heavily dependent upon labour input by actors that are largely neglected in relevant academic and policy debates.

In this frame, the ways platformisation impacts and transforms ‘traditional’ lines of work incorporated in STR networks is of crucial importance. First, platforms such as AirBnB contribute to the emergence of additional layers of production and consumption within the hospitality industry. In this way, workers that perform tasks which are also part of the ‘traditional’ tourism industry (e.g. cleaning, hosting) experience an intensified and aggravated version of the condition of postfordism and its main attributes, namely extreme flexibility and individualisation of labour, led by a shift from rather bounded production units to decentralised production through networks (see also Hampson, Ewer, & Smith, 1994; Szniec, 2017; Vallas, 1999; Vidal, 2013). While, through juxtaposing ‘traditional’ hospitality units to STR ones, the shift from fixed production units to rather loose networks is evident, it is key to further explore the role of the platform infrastructure and its (insufficient) incorporation in relevant policy and legislation regimes in the deepening of the conditions of flexibility and individualisation. Flexibility, translated in the lack of fixed working hours and constant availability is enforced by the fact that the platforms both reward the latter and punish the lack of it through the introduction of relevant data and metrics which are also communicated to potential guests, playing a decisive role on the performance of any given listing. Given the fact that STRs operate outside the reach of official labour control mechanisms while, the platforms themselves, have not recognised the various modes of labour necessary for the everyday operation of the market, this pressure, apart from its evident impact on people operating as hosts, is also transferred to ‘peripheral’ workers whose engagement is largely uncharted and invisible for state mechanisms. Flexibility, a condition that empowers both the privileged STR actors and – indirectly – the platforms is also imposed through the lack of contracts and workers’ rights that renders peripheral platform workers disposable and – unlike the norm in ‘traditional’ tourism industry - is inherent in their incorporation in STR networks.

Furthermore, individualisation of labour is also enabled and rooted in specific functions of the hospitality platforms, especially through processes of home-unmaking and the creation of favourable conditions for the shift of dwellings’ function from a key part of social reproduction to commercial assets and - unregulated - workspaces. Also, here lies the fluid character of platforms such as Airbnb as provisioners of both access to property and (indirect) facilitators of gig work, as expressed in the case of engaged cleaners. In this sense, individualisation is enforced in similar ways as those discussed within debates around gig work while, additionally, the lack of online associations and confirmations of the on-site work peripheral workers perform further render them invisible and vulnerable. Moreover, peripheral workers – unlike privileged actors - are experiencing power asymmetries concerning both access to data and information available on the platform and sharing the rewards that derive from their performance, while their invisibility (also within the platform environment) deprives them from the recognition of their work experience.

Building on the above, the term ‘platform generated’ work is more accurate towards describing the engagement of both workers who are directly related to the platforms but also peripheral ones. The reason for that is twofold: First, the whole development and everyday operation of the STR would not be possible without the labour input of peripheral workers and, second, the lines of work that those workers perform have undergone transformations which would have not taken place without their association with platform related activities. Extending this argument to the content of platform labour, it is crucial that PE is not solely built upon the emergence of new lines of work, but also upon the platformisation of established professions by “transferring” the conditions that prevail in the ‘core’ of platform labour to local labour landscapes.

Finally, the predominance of informality and precarity opens up a series of questions of key academic and policy interest, relating with the establishment of hybrid workspaces in which on site, platform generated labour is performed. As formerly private spaces are distancing from the sphere of households’ social reproduction and emerge as workspaces, they are going through transformations which are not grasped by existing legal frameworks. In the case of STRs, dwellings are undertaking such a hybrid function: they are used as assets, the profitable function of which involves different modes of labour but still, for existing policy and regulatory environments, they are considered part of the domestic sphere. Thus, while emerging modes of labour fall into existing legislative frameworks, they develop within spaces that operate outside the reach of labour control mechanisms. This dimension of PE further undermines workers’ rights, while enforcing the condition of vulnerability for engaged actors.

**Funding**

This study has received funding from the European Union’s Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 895305.

**CReditT authorship contribution statement**

Dimitris Pettas: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Validation, Writing – original draft, Writing – review & editing.

**Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.


