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Original Article

Economy and Space

EPA: Economy and Space
1–15
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DOI: 10.1177/0308518X231191933
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Stratified pathways into platform work: Migration trajectories and skills in Berlin's gig economy

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Abstract

Platform labour scholars have noted the prevalence of migrant workers in the gig economy. This paper builds on this research but interrogates the broad concept of 'migrant labour'. The study draws on biographical interviews with platform workers in grocery delivery and domestic work platforms in Berlin, Germany as well as expert interviews with union representatives, migrant organisations and white-collar platform company employees. Through an examination of the mobility strategies of platform workers in this subset of the platform economy, the study reveals a stratification of migrant trajectories and of skills needed to engage in platform work across different types of labour platforms. The study finds that platform companies draw on a workforce that consists of recently arrived young migrants with comparatively high education, language skills and digital literacy. Through close analysis of an understudied section of the gig economy, the paper contributes to the ongoing theorisation of the nexus of migration regimes and platform-mediated labour regimes. The findings complicate the notion of 'accessibility' of platform work and call for the inclusion of visa regimes, immigration categories and particular skill sets in future research on platform labour.

Keywords

Gig economy, labour platforms, migration, labour, visa regimes

Introduction

Digital platforms that mediate labour feature prominently in debates on the future of work. While 'platform work' can refer to a wide range of job types (Kenney et al., 2019), this paper examines two types of place-based[1] platform work, grocery delivery and domestic services. As studies from across the world have shown, this type of platform work is predominantly carried out by migrants and racialised workers (Altenried, 2021; Barratt et al., 2020; Lam and Triandafyllidou, 2021; Piasna et al., 2022; Surie and Sharma, 2019; Van Doorn, 2022; Zhou, 2022). The study takes this empirical insight as a starting point to explore various migratory pathways into platform labour in the German capital Berlin. Building on literature that centres the precarious working conditions under algorithmic

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management (Ravenelle, 2019; Van Doorn, 2017; Veen et al., 2020) as well as the emerging research on the relationship between platform labour and migration (Lata et al., 2023; Van Doorn et al., 2022) this paper takes a deeper look at migrant trajectories to reveal distinct migration pathways and personal profiles of platform workers. Scrutinising the visa categories and legal statuses in platform work can indicate how migration regimes shape a worker's ability to find work and, in turn, supply a workforce to the emerging platform economy. By opening up the broad category of 'migrant labour', the paper teases out two aspects which tend to be obscured in existing platform labour studies through the use of this broad term. First, the question of how states' efforts to select highly-skilled labour (Ellermann, 2020; Shan and Fejes, 2015) exist in tension with labour platforms' reliance on ever-new workers, primarily migrants, to come in and take on seemingly unskilled, platform-mediated jobs. Second, the study intervenes in a debate amongst platform scholars that have linked 'skill' and 'migrant labour' in a causal way, suggesting that platform work is carried out by migrants due to its accessibility, for example, by simplifying onboarding (Altenried, 2021; Benvegnù and Kampouri, 2021), or reducing opportunities for racial discrimination by employers and bureaucrats (Schaupp, 2021; Van Doorn and Vijay, 2021). While this may be true for some types of platform work, this study will demonstrate how the design and function of German domestic service platforms demand additional skills and hidden labour from workers, making them inaccessible to migrants typically found in these sectors off-platform. These additional skills question the classification of service labour platform workers as 'low-skilled'.

I proceed by reviewing the current debates on platform labour and migration. Then I describe the German immigration system, which illustrates the research puzzle: namely, given that German immigration policies select against labour migration into low-wage work, what kind of migration trajectories fuel the gig economy in Berlin? Using interviews with platform workers at two types of currently understudied service labour platforms, grocery delivery and domestic service platforms, I illustrate how the labour force on these platforms comprises a group of highly mobile, recent arrivals to Berlin. The findings point to student visas and youth mobility visas, so-called 'Working Holiday Visas', as the two main categories of visas that facilitate mobility into Berlin's grocery delivery and domestic work platforms. Additionally, the study found platform workers strategically employ 'ethnic capital' (Mateos and Durand, 2012) through ancestral claims to European citizenship to foster international mobility. Combined with information from expert interviews, I show how the skills required to get platform jobs differ widely across different types of platforms and that migrants already doing domestic work off platforms may find themselves excluded from doing the same work when mediated by a platform. Understanding this stratification in terms of visa regimes and platform type can help position future research. As a qualitative study, the findings are not statistically representative of the platform economy globally. However, they do raise questions about existing understandings of migrant labour in platform studies and can inform research agendas more broadly. I conclude with a call to unpack the notion of 'platform work as migrant labour' in the platform labour debate and point to avenues for future research to push forward the research agenda on migration and the gig economy.

Platform labour and migration

The research on place-based platform labour primarily encompasses three overlapping bodies of literature around (i) employment forms and lack of labour protections (Dubal, 2017; Ravenelle, 2019; Van Doorn, 2017; Veen et al., 2020); (ii) the use of technology and algorithmic management to discipline workers (Ivanova et al., 2018; Schaupp, 2021); and (iii) forms of worker resistance which include 'guessing' and 'gaming' algorithms (Ferrari and Graham, 2021) as well as collective action (Johnston, 2020; Orth, 2022; Wells et al., 2021). Most of this literature regards platform work as highly precarious and diverging from labour protections afforded in standard employment. However,

some scholars have questioned whether a precarity lens alone is adequate for understanding platform labour given that migrants and racialised minorities constitute a large part of the workforce (Van Doorn et al., 2022), and in the context of informal and migrantised[2] labour, platform work is not *extraordinarily* precarious (Altenried, 2021; Van Doorn, 2017, 2020; Zhou, 2022). The emerging literature on migration and platform labour has therefore shifted its focus slightly to explore the relationship between mobility and platform-mediated work. This literature has established that migration is not just a side aspect of the platform economy but central to its functioning, as platform companies rely on ever-new workers to come in and take on seemingly unskilled, platform-mediated jobs (Van Doorn et al., 2022). What this mobility looks like is highly context-specific: Platform research in emerging economies such as China and India, for example, points to largely rural-urban migration patterns (Surie and Sharma, 2019; Zhou, 2022), whereas research carried out in North America, Europe and Australia largely finds platform workers to be international migrants (Altenried, 2021; Barratt et al., 2020; Lam and Triandafyllidou, 2021; McDonald et al., 2019; Van Doorn, 2022).

Following from this, platform labour is always to be understood in locally specific contexts with their own histories of racialisations and contingent labour (Gebrial, 2022). In Germany, these histories include large-scale labour immigration in the aftermath of post-war reconstruction facilitated by the so-called 'guest worker' regime in West Germany (1955-1973) and 'contract worker' programmes in East Germany (1963–1989). Since the end of these schemes, German immigration policies have been set up to discourage labour migration from outside the EU, with Germany playing a pivotal role in restricting immigration to the EU as a whole (Ratzmann and Bauer, 2020). In the context of the restrictive tendencies of the German immigration system, it is anything but the norm for workers from outside the Schengen Area to be able to migrate to Germany to take up low-wage jobs (Ellermann, 2020). The work visa categories that exist in Germany, Blue Card Visas and Skilled Worker Visas, come with high income and skill thresholds: Blue Cards are an EU work visa category tied to a wage threshold of 1.5 times the average annual gross salary in the relevant EU country[3] and as such not relevant for low-wage platform work. The skilled worker visa, a German visa introduced in 2020 to counter labour shortages, mandates intermediate-level German language skills (Federal Government, 2022b).[4] While a skilled worker visa is more flexible concerning income thresholds, the language requirement poses a significant barrier for many who might otherwise qualify to apply for this visa. Considering that work visas are not a viable option to facilitate labour migration into the platform economy, it is remarkable that platforms managed to find enough workers for their rapid expansion. Most recently, the grocery delivery sector has been a case in point: previously underdeveloped in the country, it grew rapidly throughout the pandemic (Dannenberg et al., 2020; Hildenbrand et al., 2021), requiring thousands of workers to sign up within weeks (Partington and Lewin, 2021; Stothard, 2021).

So far, however, the literature still needs to explain how this works in contexts where labour migration into low-wage work is heavily discouraged and policed (Ellermann, 2020; Shan and Fejes, 2015). To explore this tension between the demand for workers and restrictive state regulation on migration, this study hones in on the case of Berlin. It addresses the question of what migratory trajectories fuel Berlin's platform economy and how visa regimes and platform-mediated labour regimes co-constitute this particular workforce. This paper contributes to the broader platform labour literature by illustrating the specific migratory pathways platform companies rely on.

Research design and methods

Most existing research on place-based platform work falls into the categories of food delivery or ride-hailing, while less publicly-visible forms of platform labour, such as domestic work, remain under-investigated (Flanagan, 2019; Gilbert, 2023; Ticona and Mateescu, 2018). Furthermore, grocery delivery platforms had just emerged in Germany in 2021, and their dynamics needed to be better

understood. For these reasons, the study was designed to include workers from three different platforms that mediate domestic services, such as babysitting, pet sitting, cleaning and elderly care, as well as three different grocery delivery companies. Domestic work platforms all followed the 'gig' model, limiting themselves to the intermediary between client and worker, whereas the grocery delivery platforms in this study issue employment contracts that require official documents.

The paper is based on in-depth biographical interviews with platform workers conducted between March 2021 and December 2022 ($n = 20$) and expert interviews ($n = 8$). Workers were recruited using various field access strategies, including referral by organisers and community members, advertising on Facebook groups for new arrivals and job seekers in Berlin, and snowball sampling. As a qualitative study, the participants are not statistically representative for Berlin's platform economy as a whole. However, participants were selected to represent a wide range of different legal visa statuses and categories of immigration. In contrast to accounts of undocumented workers in ride-hailing and food delivery in Italy, France and Belgium (Iazzolino and Varesio, 2023; PICUM, 2022), this study did not find undocumented migrants in the platform labour force in domestic work and grocery delivery, despite continued efforts to sample for this status. All research participants were legally documented in Germany, even if some of their work may have been undocumented. To account for possible sampling bias, findings were triangulated with expert interviews. These interviews with union representatives, employees and volunteers of migrant justice groups and white-collar employees at one domestic work and one grocery delivery platform, contextualised platform work within migrantised labour markets. Interviews were conducted in English, German and Spanish, recorded, transcribed and analysed.

Migration pathways to platform work

The study found that platform workers in grocery delivery and domestic work tended to have come to Berlin fairly recently (within 1-2 years of the interview) and were educated at the tertiary level. They primarily represented three trajectories of migration: workers registered as international students; workers on working holiday visas; and workers who had recently obtained dual citizenship in another EU country through their European ancestry. None of these legal statuses falls into the category of formal labour migration. Nevertheless, they permit workers to engage in paid work to varying degrees, making them available to the low-wage service workforce that is excluded from work visas but essential to the operation of labour platforms in these sectors.

Studies in Scandinavia (Könönen, 2019; Maury, 2020; Newlands, 2022) found international students to be prominent in the platform workforce. This study corroborates these findings for Berlin grocery delivery and domestic workers. A recruiter at a grocery delivery platform estimated that about 50% of their delivery and warehouse workers were international students. Student visas allow for up to 20 hours of work per week or full-time work for up to 120 days a year in Germany. Additionally, those who graduate with a German university degree are allowed to stay in the country for an additional 18 months to seek a job in the profession they trained in (Federal Office of Justice, 2020). The students I interviewed, came mainly from South Asia, and had relied on educational agents to apply for university in Germany. In a detailed analysis of the class differences in Mumbai's education agency industry, Tuxen and Robertson (2019: 291) point to a bifurcated educational consultancy market that distinguishes between the sons and daughters of the wealthy elite seeking pedigree degrees abroad and the 'strivers' of the Indian middle-class interested in long-term emigration to industrialised countries looking for long-term settlement. While the platform workers in this study certainly belonged in the 'striver' category, they were able to leverage family resources and loans to forge long-term mobility pathways. All of them had already completed Master's degrees in their countries of origin and had been working in professional careers before coming to Germany. They planned on applying for professional jobs once they had completed their studies.

The second dominant visa category was the working holiday visa, a youth mobility programme geared towards backpackers who want to supplement extended travels with casual work in hospitality or farming. In Facebook and messenger groups where prospective working holiday travellers exchange tips and advice on navigating settling in Germany, newcomers were frequently referred to platform companies as a first job. Working holiday visas are limited to people under thirty and to a select few nationalities,[5] mainly from industrialised countries as well as Argentina, Chile, Brazil and Uruguay. *Working holiday visas are granted for 1 year, cannot be renewed, and do not allow visa holders to bring family members to Germany. However, working holiday visas are still attractive to migrants because they do not carry any restrictions on working hours, and the visa also does not tie migrants to a specific employer*. Even though working holiday visas in Germany do not stipulate language or education requirements, the platform workers who came on working holiday visas, mostly from Chile and Argentina, were also, without exception, educated to a degree level. Like student workers, the study participants on working holiday visas had all either held professional jobs in their home countries or recently graduated from university.

Lastly, some Latin American platform workers I interviewed also spoke of obtaining an EU passport as a mobility strategy. Owing to European mass emigration to Latin America between the 1850s and the 1950s, many people born in Argentina, Uruguay and Chile are eligible for EU citizenship on the grounds of 'ethnic' understandings of citizenship, even if they have never been to Europe (Harpaz, 2015; Mateos and Durand, 2012). In Italy, for example, there is no generational limit to becoming naturalised as an Italian citizen, that is, proof of any Italian ancestor, no matter how many generations removed, warrants a claim to Italian and hence EU citizenship (Tintori, 2011). As naturalisation into EU citizenship grants full residency and labour rights, it lifts any restrictions on the type of employment, working hours and income thresholds other visas have. Of course, becoming a naturalised EU citizen does not remove every barrier to the labour market – language requirements, difficulty in navigating bureaucracy, non-accreditation of non-EU university degrees and knowledge of the local labour market conventions remain issues – but obtaining an EU passport liberates an individual from many challenges that come with migrating as a third-country national through other visas, such as mandatory integration and language courses, limits on working hours, industries or limited time in the country.

To summarise, grocery delivery and domestic work platforms in Berlin heavily draw from particular migrant populations, namely recent arrivals, mostly young people on study visas, working holiday visas and those with ancestral claims to EU citizenship. These visa categories and residency statuses provide different conditions regarding how many hours one can work and how long one can stay in the country. Yet, what they have in common is that they are more flexible concerning labour than official work visas: they do not mandate minimum earning thresholds, do not tie migrants to a specific employer and do not require workers to have secured a job before they arrive in Germany, or have already attained a level of intermediate fluency of German as is the case with existing work visa categories. In the next section, I will contextualise these strategies as the ability to navigate the restrictive European immigration system to gain access to the German labour market and maintain an appropriate visa status. I argue this is another dimension of platform companies' tendency to externalise operational costs to workers and customers.

Contextualising mobilities

The bordering work of states to keep anyone but the most highly sought-after professionals from coming is always contested by migrants who forge mobility pathways despite states' attempts to control their movement (Cvajner et al., 2018; De Genova, 2017). In this context, obtaining student and working holiday visas, as well as leveraging 'ethnic capital' to obtain ancestral citizenship, can be understood as a bottom-up practice to pursue international mobility for those who do not belong to a narrow

range of people eligible for work visas. For other sectors of the economy, the strategic use of non-work visas is well documented, for example, the use of au pair visas (Cox, 2018; Hess and Puckhaber, 2004), tourist visas (Shinozaki, 2015) and student visas (Anderson, 2010; Maury, 2020). Similarly, platform workers' strategic choices of visas and ancestral citizenship applications in this study can be interpreted as a successful bottom-up mobility strategy to overcome entry barriers in the German labour market since platform work is not financially lucrative enough to meet the mandated income thresholds of Blue Card Visas. Similarly, skilled workers visas are out of reach for study participants because they do not meet the German language test threshold.

What is more, these mobility strategies are perfectly suited for the transient nature of platform work, where most workers sign up not long before they start working and do not stay with the same company for longer than a few months. Therefore, they may also be read as another iteration of platform capitalism's logic of externalisation. Platforms are known to sidestep existing employment regulations to avoid costs associated with being an employer, and this study's findings suggest that they also externalise the steep costs of international mobility. A recruiter at a grocery delivery firm recounted how his company had considered acting as a visa sponsor for labour migrants at the height of the labour shortage in 2021 but decided it was too costly given high turnover rates in the industry. Instead, the company preferred to focus their budgets on marketing initiatives aimed at recruiting international students who were already in the country and with whom they did not have to deal with the requirements of acting as a visa sponsor. This practice results in shifting the high costs associated with international migration onto the workers as companies solely hire people who have already managed to forge pathways through a highly selective immigration system. This externalisation of the costs associated with international mobility is evident in the story of one worker I will call Misha. Misha recounted how she lost a job as a warehouse at a grocery delivery warehouse when her visa status changed to which allowed formal employment. She tried to convince the grocery delivery platform to act as a visa sponsor. When they refused and fired her, Misha switched over to working for a cleaning platform:

> The German Federal agency of employment [said] 'we don't want to give you a visa for this [job].' So this is how I quit my job at [a grocery delivery platform] and work at [a cleaning platform] now. It's strange because I am allowed to work with my documents as self-employed. So I started just doing some cleaning jobs with my self-employed paper. (Misha, 24, from Bosnia with an Italian residence permit)

This example highlights that the responsibility to have and maintain the 'right' visa status is put on the workers and that their visa status shapes what types of jobs a worker can get in the platform economy, potentially amplifying hierarchies between different types of platform work with grocery platforms refusing to act as visa sponsors and domestic work platforms refusing to act as employers. Workers without the 'right' documents are forced to work for cleaning platforms with less strict regulations but for lower pay and less security (Fairwork Foundation, 2022), paid for one gig at a time.

The capital needed to fund international mobility from outside Europe into the EU stands in stark contrast to the wages one can earn with a low-wage job in the countries of origin. Working holiday visas require up-front investments that quickly up to €3000-4000, which amounts to nearly the entire annual pay for a minimum-wage job in Chile or Argentina. Every study participant on a working holiday visa had either previously held a professional job that allowed them to save up the necessary funds to apply for a working holiday visa, or they were able to borrow money from their families to enable them to make the initial move. Even starker is the contrast with students from South Asia, where prospective student visa applicants must put at least €11000 into a specific bank account that gets locked until the student arrives in Germany. In addition, the students among the platform workers I interviewed tended to pay extraordinary fees of up to €13 000 per term – in a country where higher education is mainly tuition-free – to enrol at private universities that taught in English. Given the

financial precarity of platform work, these sums show that having platform-mediated service jobs in the country of origin would not enable migrants to save enough money to move to Europe on either a student or a working holiday visa to carry out platform work in Berlin.

In addition, student and working holiday visas are associated with additional requirements beyond financial capital. For student visas, these include both prior levels of education and the ability to speak German or English at a very high level of proficiency in order to be able to enrol at a university. In the case of working holiday visas, only young people of very few select nationalities can apply. Student and working holiday visas enable migrants from emerging economies to outmanoeuvre a highly selective European immigration system stacked against mobility for low-wage labour. However, the capital needed to overcome this visa regime is highly costly, from upfront capital to qualify for these visas and transport costs for inter-continental flights to paying a premium on accommodation in a rapidly gentrifying city like Berlin where migrants are much more likely to be affected by high rents. And even though EU citizenship does not require the same amount of upfront capital, the ability to claim ancestral ties to Europe it is situated within the context of Latin America's highly racially segmented postcolonial societies, where being of European descent correlates with a higher socioeconomic status (Bastia and Vom Hau, 2014; Harpaz and Mateos, 2019; Mateos 2019). Consequently, the described strategies are not simply available to any prospective labour migrant. While study participants were disadvantaged in a global hierarchy of mobility (Harpaz, 2019), they had enough capital, both in terms of money and educational capital, to be able to forge a pathway into Europe.

Overall, the findings indicate that participants tended to be from middle-class backgrounds in their countries of origin, holding university degrees and often having gained professional experience and respective professional salaries that allowed them to save up or borrow the money required to get a German visa. The relative privilege of the platform workers in this study should not be taken to mean they are not precarious as workers in Germany, both concerning their working conditions and their immigration status. Rather, it is to highlight that platform workers, by and large, experience downward social mobility as the following quote exemplifies:

> For me, working at [cleaning platform] was really a struggle to break up my prejudices. And being this little privileged girl. . . I grew up in an elite school, being a middle-class person. I have very mixed feelings about cleaning, going to people's houses [because of] the image I have of a housemaid or a housekeeping person. It was kind of really difficult for me to realise that I was NOW doing that. (Maria, 31, student from Colombia)

All of the workers interviewed for this study, whether they were international students, working holiday visa holders or new EU citizens through ancestral ties, said they would not have considered doing platform work before coming to Europe, citing the loss of face, security concerns and the level of exploitation in platform jobs in their country of origin. The findings underline that platform jobs in and of themselves do not enable mobility because a professional salary, family wealth or high loans are necessary to afford international mobility and continue to be necessary. After all, platform jobs also do not enable migrants to secure a work visa or permanent residence. Instead, platforms take advantage of the relative privilege of these migrants' ability to navigate a global hierarchy of mobility to subsidise recruitment costs.

However, differences in visa conditions cannot explain why migrants from other Schengen zone countries, who can freely move and work in Germany, were absent from the sample, despite continued efforts to engage with these communities. Germany's non-platform mediated low-wage sectors such as farming, the meat processing industry and construction work draw in workers from Romania, Slovakia, Poland and Hungary (Bosch et al., 2019; Corrado and Palumbo, 2020). The absence of EU citizens from Eastern Europe was particularly striking in the domestic work sector since these jobs are primarily done by Eastern Europeans in Germany (Lutz, 2017; Riedner, 2015). To triangulate initial

findings on mobility pathways in these sectors in Berlin, I approached union representatives and migrant organisations with a cross-sector view on migrantised labour markets in Germany. These experts confirmed little overlap between the demographics of seasonal migrant workers in other low-wage sectors and the same work mediated by platforms. Union representatives working primarily with migrant populations, for example, did not see their clients switch over to platform work. This was surprising for both domestic work and grocery delivery as labour conditions for migrant workers outside of platform work can be more precarious than on platforms, including regular wage theft, homelessness, unstable housing and sexual, physical and psychological abuse by landlords and employers. Indeed, the workers interviewed for this study themselves often compared their platform jobs favourably to other low-wage jobs they had done outside of platforms. Especially cleaners who interchangeably did cleaning jobs on and off platforms liked the ability to find new customers quickly and to get paid for each job they did. In grocery delivery, the fact that platforms offered comparatively high wages in Berlin at the time of data collection when compared to other low-wage industries (Krings, 2021) also indicates that there might be some barriers to accessing these jobs if extant groups of low-wage workers do not switch over to these jobs. In other words, it is not generally *migrant workers* that do platform work but a very *particular* group of migrants—young, educated from outside the EU on temporary visas—that feature prominently in platform-mediated service work in Berlin. Even though platform work is being carried out by migrants who do not qualify for skilled worker visas and therefore have to employ mobility strategies outlined in this section, it seems to not draw in workers who do similar jobs off platforms, especially in domestic work. The following section will engage with the absence of EU migrants in the sample and suggest that workers who are already part of the off-platform care work and cleaning sector, who would benefit from having more autonomy over their schedules and work arrangements that platform work offers, may remain excluded from platform work due to the importance of these skills in platform-mediated work. It will highlight that the platform-mediated labour market is not just stratified in terms of immigration status but also in terms of what types of skills it requires.

Accessibility and stratification of platforms

Platform researchers have posited that algorithmic management and the standardised structure of platform-mediated labour lead to faster onboarding and hiring processes, enabling platform companies to work with unskilled rather than skilled workers (Altenried, 2021; Schaupp, 2021). In addition, some scholars have argued that technology-mediated jobs are more accessible and attractive to migrants because algorithmic management minimises contact with bureaucrats and human resources in a language one does not speak and potentially fewer opportunities to be directly exposed to racism (Benvegnù and Kampouri, 2021; Van Doorn and Vijay, 2021). However, this study's findings on grocery delivery and domestic work platforms complicate this notion of accessibility.

To work for platforms in these sectors, a basic level of digital literacy and some foreign language proficiency is required. Labour platforms in Germany are usually available in English and sometimes in German. Languages widely spoken amongst Germany's seasonal and settled migrant populations, such as Polish, Romanian, Arabic, Kurdish, Turkish or Vietnamese, are, to date, not available for labour platforms in Berlin. While some cleaners and delivery workers I encountered managed to talk to clients with a very basic command of English or German using Google Translate to navigate platform interfaces, this workaround still requires digital skills and basic literacy. A union representative pointed out that many of her Romanian clients who worked in the cleaning sector were illiterate and hence relied on agencies and brokers to overcome literacy and language barriers when they come to Germany for work. Taking advantage of automated translation would require both literacy and technical skills they do not have. Aside from needing to translate platform interfaces, platform workers also reported frequent issues with faulty automated payment systems that required manual readjustment

by workers and follow-ups with platform management. Therefore, it seems that one needs basic digital skills to get a job and, importantly, to get paid correctly. In addition, two workers interviewed in Spanish explained that they lost a platform job because they could not speak enough English. In one case, the cleaning app deactivated the worker's account after the company called her to enquire about a cancelled cleaning, and she tried to explain the situation in broken English. In the second case, the worker was fired from a grocery delivery warehouse because he could not keep up with his colleagues in English. Platforms, therefore, do not fulfil the intermediary function that traditional labour brokers provide in terms of language mediation. Even platform work in low-wage service jobs that are often considered to be 'unskilled' is perhaps better seen as an example of work that requires some 'general-purpose digital skills' (Calderón-Gómez et al., 2020:18).

Moreover, interviews with workers also revealed that the skill level demanded varies considerably between different platform-mediated jobs. While grocery delivery platforms are predicated on fast delivery, platforms offering household-related services are designed to meet the need for heightened trust between strangers (Ticona and Mateescu, 2018). As proximity is not the decisive variable, care and domestic work apps prioritise detailed worker profiles with lots of visual elements akin to social media networking sites (Ticona et al., 2018). Platforms sort and rank worker profiles algorithmically and customers then pick out a worker from a ranked list to negotiate the details of a job directly with them.[6] These differences in how platforms function affect the language, literacy and digital skills requirements a worker is confronted with, and these skill requirements were more pronounced on domestic work platforms compared to grocery delivery work. Because domestic platform companies charge membership fees or take a percentage of hourly earnings, all study participants in this sector tried to develop long-term relationships with their customers to eventually take their work 'off the platform' to avoid these fees. This strategy also enabled them to mitigate risks such as bad faith customers, sexual predators and other problems such as long-distance travel to different clients' homes that diminished their take-home pay. Building relationships with customers depends on the competence to first, brand yourself on an online profile to attract customers, and moreover, the ability to forge and maintain interpersonal relationships to secure a steady flow of income. As the literature on entrepreneurship and influencers on social media platforms (Scolere et al., 2018) shows, this self-branding and relationship-building work is not only very gendered, with non-male workers particularly affected, but also leads to uncompensated over time (Duffy, 2017; Duffy and Pruchniewska, 2017). The following quote from the interview with a long-term cleaning platform worker reveals the many different aspects a seemingly unskilled job entails, especially when mediated by a platform:

> Cleaning is not just about cleaning. [. . .] They don't just pay you for what you do. They also pay you for the performance that you do in front of them, of being really happy, really *sympathisch* [engl. likeable]. [It is a] kind of an act [. . .and. . .] I have this gay performance: 'I'm this really happy queer [person] because in Berlin I can live freely!'. [. . .] I have an image on my profile [with] the LGBT flag on my wall behind me. And I have *the* dyed hair. I always speak to them [ed. the clients] in German. When they see me trying to speak the language, they feel like they are helping this queer migrant to get their German done. So, yeah, you have to sell them the fantasy [in person], and you do it through the platform as well. (Ricardo, 28, from Argentina with an Italian passport)

In this case, the worker felt positioning themself as a queer migrant in need of assistance – practising their German, being rescued from a supposedly homophobic part of the world – was necessary to earn enough money through the cleaning platform. By playing into racist stereotypes about homophobia outside the West, this worker built a reliable customer base amongst the German queer community.

As this exemplifies, domestic work platforms have considerably different skill requirements from delivery or warehouse work. Yet, there also seems to be a stratification of domestic work depending on how relational it is. This study found that cleaning jobs were most often carried out by Latin

Americans who spoke enough English to communicate with their clients. In contrast, the only person who worked with elderly people in this sample was the only one who spoke German fluently. Migrants that commonly work in cleaning and care work off platforms—especially in elderly care, most workers come from Central and Eastern Europe (Lutz, 2017)—were entirely absent from the study despite continued efforts to sample this demographic. While this may not be statistically significant, experts who advise workers in the cleaning and care sectors confirmed that platform companies play no role in the migrant communities they work with. Therefore, it seems reasonable to suggest that the centrality of digital and branding skills in platform-mediated domestic work and the role of German language skills on platforms that offer household-related services may be a barrier to accessing these more relational jobs via a platform.

The previous sections have shown that once the category 'migrant worker' is unpacked, the notion of accessibility of platform-mediate work needs to be reconsidered. In Berlin, grocery delivery and domestic work platforms do not recruit from the diverse migrant population in the city but from a subsection of young, recent arrivals from outside the EU. While platform technology can facilitate faster and simpler hiring processes and thus provide quick access to income for some migrants, these technologies also produce exclusions. I have argued that platform requirements of self-branding, language skills and navigating digital interfaces create barriers leading to stratification between different types of platform jobs and different groups of migrants. The extent to which additional skills are necessary for platform jobs compared with their off-platform counterparts varies considerably between different platform models. Contrary to most of the literature on ride-hailing and food delivery, platform work in domestic services in Germany requires basic literacy, digital literacy, English/German language and branding skills that make this type of platform work inaccessible for many groups of migrants in Germany who have typically sought work in these sectors.

Conclusion: The co-constitution of labour and migration regimes

This study took a closer look at workers in domestic work and grocery delivery and found that a particular demographic of platform workers – young, educated – is common for these sectors in Berlin. Given the global hierarchy of im/mobility, research participants had to employ specific mobility strategies to overcome an extremely selective immigration regime in Germany, including enrolling in university courses, working on working holiday visas and obtaining an EU passport wherever possible. This externalisation of international mobility costs means that platform workers participating in this study had to have the ability to put up or borrow large sums of money. While they were globally disadvantaged regarding access to the German labour market, they were often relatively privileged in their countries of origin as most had already completed tertiary education and many had held professional jobs before they migrated.

While the study can thus contribute to shedding light on understudied sectors of place-based service work, further research is needed to understand this relationship across different sectors of the platform economy and in various geographic locations since immigration and labour policies are locally-specific. In future research, platform labour scholars need to take migration routes that do not constitute 'classic' labour migration and low-waged jobs outside of platforms into account. This will lead to a better understanding of whether and how platform labour producdes fundamentally different experiences for different groups of migrants depending on other factors in their lives, for example their legal status or lack thereof. Relatedly, longitudinal and multi-sited research that follows migrants long-term trajectories in the labour market could further provide insights into what happens to migrant workers once they leave platform work. Research in Finland has suggested that platform jobs do not offer sufficient income to obtain permanent residence, nor do they meet the requirement of post-graduation visas that allows students to stay only if they can present an employment contract corresponding to their education (Könönen, 2019; Maury, 2020). As companies take advantage of global

mobility hierarchies (McCollum and Findlay, 2018), they can reinforce differences between legal migration statuses. Future research should therefore explore how formerly privileged workers *become* precarious in the process of migration and in the process of pursuing platform work rather than assuming a causal link between being a migrant and precarity. *It seems, for example, that the working holiday visa provides platform companies in Germany with an educated, unattached and young workforce of contingent labour, similar to how working holiday visas are used to address labour shortages in agriculture in Australia (Reilly, 2015; Tan and Lester, 2012). Exploring this phenomenon through a multi-sited ethnography that includes countries of origin is a promising avenue for future research*. The study also points to the need for future research on the classification of platform-mediated service work as 'unskilled' work. Depending on the type of job, working for a platform can require a range of soft skills, especially in the domestic sector. When platforms replace traditional labour brokers, language fluency and self-branding become additional skills that workers need to obtain work. *The role these skills play in the stratification of platform labour forces needs to be better understood*.

Lastly, understanding how different groups of migrant workers end up working for different platforms is not only of academic interest but can also help address some of the labour violations platform workers face. Using community-based approaches, German unions have in the past managed to engage highly fragmented migrant workforces in industries that rely on mobile contingent labour such as farming, meat processing, construction and domestic work (DGB German Trade Union Federation, 2022). Similar approaches may be warranted to organise platform workers, and to that end, understanding the migratory movements and diaspora communities that engage in platform work is crucial. Future research should support these efforts by offering a closer analysis of migratory trajectories in the platform workforce. Labour protections do not automatically lead to better rights for migrants; therefore, activists and unions need to put the hierarchies that visa and migration regimes produce at the centre of their efforts to ameliorate working conditions in the platform economy.

Acknowledgements

I would like to thank my colleagues Franziska Baum, Stephan Liebscher, Tatiana López Ayala, Valentin Niebler, Antonie Schmiz, Karin Schwiter, Kiley Goyette, Moé Suzuki as well as the anonymous reviewers for their valuable feedback on earlier versions of this article.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

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Notes

1. I use the term 'place-based' to distinguish between so-called 'crowd work' platforms where workers can log on from anywhere to take on freelance jobs, and platform mediated work that requires geographical proximity in analog space.
2. I use the term 'migrantised' to highlight a particular type of racialisation common in the German debate around who has a 'background of migration' (*Migrationshintergrund*).
3. Council Directive 2009/C50, Article 5(3). In Germany the annual income threshold is €56.400 per year, and slightly lower at €43.992 for professions with a labour shortage such as engineering, software, sciences, and medicine (Federal Government, 2022a).

4. The government has announced that it is planning additional reforms to the immigration system (Reuters, 2022). At the time of writing, details were still not confirmed.
5. These include Argentina, Australia, Brazil, Chile, Hong Kong, Israel, Japan, the Republic of Korea, New Zealand, Taiwan and Uruguay.
6. The sorting feature is also common on crowd work platforms such as *Amazon Mechanical Turk* or on websites such as *fiverr* that offer graphic design jobs.

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