

# Uberization of translation

## Impacts on working conditions

Gökhan Fırat  
University of Surrey

Digital labour platforms, encompassing on-demand translation work via apps and websites, have grown exponentially in recent years and have significant consequences for translation workers. This study explores the critical literature on digital labour platforms from a labour studies perspective and submits the findings of a quantitative survey of 70 translation workers residing in Turkey and working on/for digital labour platforms. Our research suggests that the introduction of digital labour platforms into translation production and business networks has not yet provided a significant contribution to the working conditions of translation workers in Turkey. Instead, we argue that their working conditions have been rearranged and reorganized in accordance with the uberization of (translation) work. According to the survey findings, engaging in such work on/for digital labour platforms exposes translation workers to risks related to employment status, income level, work-life balance, social protections, free agency, bargaining power, dependence on the platform, allocation of risks and rewards, and data collection, protection and privacy.

**Keywords:** translation and technology, cognitive and platform capitalism, uberization of work, uberization of translation work, working conditions on digital labour platforms

### 1. Introduction

TAUS (Translation Automation User Society) reports that the language industry is undergoing a new tech-driven transformation centred around Artificial Intelligence (AI), neural machine translation (NMT) and digital platform marketplaces (TAUS 2017, 2018). According to TAUS, this new transformation process is expected to change or rearrange what is translated and how, who performs translation and the business model of translation. Debates around this recent wave of change in the language industry tend to focus on the first two issues

(what/how and who); less discussed but of growing importance in this industry is the new tech-powered business model in the form of cross-border, cloud and app-based digital labour platforms and their ramifications on the working conditions of translation workers. For the purpose of this article, “labour platform” includes both “web-based” as well as “location-based applications” (ILO 2018b, xv) and “translation workers” refer to the practitioners who perform translation and related work at a cost for public consumption. This study aims to advance our understanding of the relatively new phenomenon of digital labour platforms by exploring their ramifications for translation workers. To this end, the following research questions will be addressed:

1. How do digital labour platforms affect the working conditions of translation workers?
2. What are the risks of digital labour platforms for translation workers?

To respond to the research questions, a small-scale, quantitative survey was conducted with 70 translation workers living in Turkey and working on/for digital labour platforms. As a conceptual background, we use the term “uberization of work” (Vercellone, et al. 2018) which stems from the business model developed by Uber, the app-based transport company. It refers to the tech-powered, data-driven businesses that use flexible types of employment relationships and contracts which are replacing those forms of permanent employment carried out for a single company (Vercellone, et al. 2018, 93–94). The main argument behind this concept is that the newly emerging digital labour platform companies such as Uber perpetuate the classic capitalist business model while generating greater risks for workers (Hill 2015; Fuchs 2017a, b; Srnicek 2017). Using this conceptual framework and supporting it with a field study, this article reports that the introduction of digital labour platforms into translation production and business networks has not yet provided a significant improvement on the working conditions of translation workers in Turkey. Instead, we argue that their working conditions have been rearranged and reorganized in accordance with the uberization of (translation) work. Our research suggests that engaging in such work exposes translation workers to risks related to employment status, income level, work-life balance, social protections, free agency, bargaining power, platform dependence, allocation of risks and rewards, and data collection, protection and privacy.

The next section will introduce the concept of “uberization of work”, and then discuss its connection to the language industry. Thereafter, we will analyze the survey results to show how the new tech-driven transformation has affected the working conditions of translation workers residing in Turkey. The article ends with a call for further research and some considerations for achieving better working conditions in the language industry.

## 2. Uberization of work

The “uberization” phenomenon refers to the business model of Uber Technologies, Inc., the app-based transport company. Since it has become one of the most prominent examples of a new business paradigm (i.e. sharing, collaborative, on-demand or gig economy) that is rapidly disrupting an old industry model, its name has been used to describe the techno-capitalist transformation, signalling a major shift in how companies operate and engage with their workers. Just like terms such as Taylorism, Fordism, and Toyotism have been used as analogies to refer to the management culture and labour processes after the second half of the twentieth century, the terms “uberization of work”, “platform capitalism” (Srnicsek 2017) or “uber-capitalism” (Fuchs 2017a, b) have been among the analogies to define the recent configuration of labour-management and organization, especially seen after the tech-driven transformation of capitalism in the twenty-first century (Moulier-Boutang 2008/2011; Fuchs 2010, 2011).

Uber-like platforms have been around since the 2010s to bring different groups (buyers and sellers) together on a digital labour platform, enabled by the development of mobile applications, high-speed Internet networks, AI-driven automation systems, rating/rewarding mechanisms, and the exploitation of (big) data. They have gained importance because the platform economy is predicted to grow from 14 billion USD to 335 billion USD by 2025 (Vaughan and Hawksworth 2014, 2) and appears to be “a permanent fixture of a ‘new world of work’ that is flexible, digital, and globally networked” (Harmon and Silberman 2018, np).

The uberized platform businesses mainly (1) operate under the basic assumptions of the capitalist market economy (such as private property, private control of the means of production, accumulation of capital, and competition), (2) use an online platform or an application to enable peer-to-peer transactions, (3) claim to cut out any middle person, (4) benefit from a large crowd of freelance and precariat workers (also known as gig-workers or crowd-workers), (5) deploy automation systems and exclude themselves from the legal labour regulations, (6) adopt a reward/rating system for product, work or service quality, and (7) monetize the data collected from producers and customers (Scholz 2016a, b; Scholz and Schneider 2016; Srnicsek 2017). Essentially, digital labour platforms provide the necessary infrastructure, governance conditions, tools and additional services for the exchange of work and facilitate the corresponding compensation.<sup>1</sup> Through

---

1. Digital labour platforms have different methods for generating revenue and organizing work, and they vary in the types of work they facilitate and in their labour practices. For detailed information about different types of digital labour platforms, see also Johnston et al. (2020).

such platforms, direct clients, agencies, platform operators and end-users offer micro and macro tasks including translations to individuals around the world who perform them in exchange for money. Platform workers complete and deliver the tasks, and then the platforms collect the payments and pay the workers the price indicated by the workers/clients/platforms, minus the platform's fee.

When it comes to the legal status of these platforms, the owners and boosters of digital labour platforms claim not to be covered by existing employment regulations. However, many workers, scholars, labour unions, commentators and lawmakers insist that the non-compliance of labour platforms with employment law standards should not be taken for granted. Some people think that new realities of work have outgrown old-fashioned legal concepts, and hence we need new regulations to safeguard platform workers without limiting the innovative potential of the platform economy. And some insist on making clear that the novelties of labour platforms do not deserve or justify special treatment, and therefore the most important thing is to implement existing labour governance structures and social protection schemes that protect workers' rights in the context of platform-based work (see also De Stefano and Aloisi 2018; Johnston et al. 2020; Urzi Brancati et al. 2019).

Another important point worth mentioning is that digital labour platforms often associate themselves with terms such as "sharing" and/or "collaboration" by promoting a positive narrative of ongoing progress, flexibility, disintermediation, skills upgrading, and possibly also democratization (Caruso 2017). However, the uberized businesses have faced criticism over the years as recent research shows that the discourse on platform-based digital labour often suffers from inconsistencies between the use of terminology and the reality of the field, especially with regard to working conditions. Some of the main criticisms are that they prioritize profit maximization, wealth creation, and boundless economic growth over their workers by taking advantage of the digital revolution, and that they are designed to monopolize, extract, process and control huge amounts of data that can then be used to generate revenue (Scholz and Schneider 2016; Srnicek 2017; Vercellone et al. 2018). Langley and Leyshon (2016, 13) state that this is mostly because "the generative force of the platform in digital economic circulation turns, in different ways, on the practices of intermediation and processes of capitalisation." According to them, prevailing explanations and narratives cast these digital economic circulations as "horizontal, networked exchange relations between users which are new and different because of their disintermediated, collaborative, and even democratising qualities" (13). However, they believe that deploying these established accounts are problematic, in short, because "they render platforms largely invisible in the understandings that they offer of the digital economy" (13). Cohen (2017, 68–69) in turn claims that efforts to draw attention to "the mul-

tifarious shortcomings of the sharing economy – most notably its tendency to compound precariousness and to fortify deepening patterns of inequality” – is dismissed as “either mischaracterizations” or “growing pains of a transition still moving through its early stages.” According to Fuchs (2017a, par. 2), the main trouble with these kinds of digital networks in the age of uber-capitalism is that “for many everyday people the contemporary economy means precarious work, insecurity, debt, temporary unemployment, and high levels of inequality.” Scholz (2016) also discusses the pitfalls of an uberized platform economy and states that because digital labour platform workers are treated as independent business owners rather than employees, platform owners can bypass statutory requirements such as paid holiday leave, minimum wage, unionization, pension contributions, collective bargaining, health insurance and protection from unfair dismissal.

The impacts of the rise of Uber-like, global, cloud-based platform technologies on platform workers have been explored by many institutions, including the International Labour Organization (ILO), which sets international labour standards and principles. In one of the reports prepared for the ILO as part of its Future of Work Initiative, Choudary (ILO 2018a) concludes that “while labour platforms can create new opportunities for workers that lead to worker empowerment, some business model choices can also inadvertently result in poor working conditions which, if sustained, can result in worker exploitation” (8). Choudary, therefore, proposes a framework for understanding worker exploitation, comprising five elements that are influenced by platform design (9):

1. Removal of free agency
2. Reduced bargaining power and rights
3. Domination, or making workers subservient to the platform
4. Increasing dependence of workers on the platform
5. Fairness in the allocation of risks and rewards across the ecosystem

According to Choudary (ILO 2018a), digital labour platforms that exhibit one or more of the five characteristics above are likely to exploit workers and deteriorate their working conditions, instead of empowering them and improving their conditions. The following parts of the article will explore whether a similar phenomenon is happening in the language industry with the recent tech-powered transformations.

### 3. Uberization of (translation) work in the language industry

Computers, the Internet, CAT Tools and translation memory (TM) technologies have made a big impact on the industrial landscape of translation (O’Brien 2012;

O'Hagan 2020; Şahin 2013a, b, 2016). And there is a growing consensus that the language industry is going through a new transformation process with the increasing adoption of various technologies, including AI, (N)MT, blockchains, smart contracts, digital platforms, and business models into translation practice. This process has led to a strong trend towards the automation of translation environments and the use of various platform-based translation processes such as collaborative translation, crowdsourcing, crowd-working, concurrent translation and agile or continuous localization processes (Alfer and Zwischenberger 2020; Gough and Perdikaki 2019; Jimenez-Crespo 2017; McDonough Dolmaya 2012). Most importantly, it has resulted in the emergence of new modes of business practices in the form of digital platforms. In a recent Common Sense Advisory (CSA) Research survey (Pielmeier and O'Mara 2020), 89% of freelance respondents reported that they regularly work using digital platforms (vendor portals, marketplaces and online computer-assisted translation platforms) and on average they work with five platforms in their daily work routine. Researchers and industry organizations expect to see the demand for these kinds of platforms grow as automation and AI advance (Gough and Perdikaki 2019; TAUS 2018). Another reason behind this growth expectation is that many of the labour platforms are founded with or funded by venture capital investments, as in the case of Unbabel, the AI+human translation platform which has over 200 employees and funding amounting to \$ 91 million (Unbabel 2019). Another cloud translation automation platform, Smartcat, with a global marketplace of over 350,000 freelance translation workers, has raised over \$ 14.6 million from venture capitalists (Slator 2020). Their massive accumulation of venture capital is mostly driven "by the investors' hope for new forms of value creation through the 'disruption' of existing business models, which are often portrayed as ossified, overregulated and inefficient" (Schmidt 2017, 3).

In the specific case of labour platforms for translation, platforms connect translation workers (translators, editors, post-editors, transcreators, project managers, etc.) with translation buyers (individuals, institutions, direct clients, (translation) agencies, etc.) and engage them in the exchange of various language services for money (also see Section 2). The only requirement for joining these platforms is to have knowledge of two languages, an Internet connection, a computer or smartphone and an email address. For instance, Stepes, an online translation agency, defines itself as more "Uber" than the "Uber app" and claims that anyone who is bilingual and has a smartphone can be a translator on their platform (Stepes 2021).

This uberization of translation has already been remarked upon by TAUS (2017, 25) as in: "We have heard many start-ups in our sector already refer to themselves as the Ubers of translation [...] self-driving translations will be the

norm in '22". However, according to Muzii (2018, 17), uberization is not a new thing in the language industry, rather "this is exactly what has been happening for decades in the localization industry, where freelancers have been experiencing this kind of 'novelty,' called moonlighting". And prior research by translation scholars has already revealed some of the main characteristics of the uberization of (translation) work in the language industry, as exemplified below.

Abdallah and Koskinen (2007, 674–677) point out that the language industry has a new structure of "indirect production network", which is based mostly on "outsourcing and subcontracting". Their research demonstrates that geographic distance and the number of intermediaries between translation workers and buyers make it difficult to build a trust relationship, allow translation workers to participate in decision-making processes and produce 'trustworthy' translations (677–684). Olohan (2017, 11) further argues that this indirect production mode of the language industry "might well be described as a post-Fordist flexible regime in which labour is reduced to an economic input, required to be flexible so that it can be mobilised or dispensed with as required." She expands on this in her discussion of translation workers' interactions with technology by adding that translation technologies, especially in their networked or cloud-based forms, "produce a misleading impression of autonomy by 'allowing' translators the 'freedom' to complete their work anytime, anywhere" (2017, 11). Instead, she puts forth, "their lived experience may be that of a translator on call, asked to complete translations any time of the day or night to be published as part of continuous updates of global content on globally accessible websites" (11).

The freelancing phenomenon was also studied by Moorkens (2017, 464), who believes that "the rapid globalization and a background of neoliberal policies applied by Western economies since the 1970s have precipitated a race to the bottom on costs and increased focus on productivity", which in the end "has pushed more translators to work on a freelance basis" and created "a growing class of contingent workers with limited job security." Moorkens (2020) adopts Digital Taylorism into the language industry and warns that cloud-based mass-production translation networks, coupled with the prevalence of freelance work, "may exacerbate several demotivating factors such as interpersonal relationships, working conditions, salary, status, and security" (19). Quoting Klaus J. Zink, he suggests that outsourcing "particularly to countries with less pay and without 'restrictions' of work and environmental laws", as may happen in unrestricted scenarios such as crowdsourcing, is not compatible with sustainable work (Moorkens 2020, 21). Indeed, online translation environments may result in increased monitoring of translation workers and workplace surveillance, reduced bargaining power, loss of independence, lower rates, and living an on-call existence (see Moorkens 2020,

15–18; Garcia 2017). And Dam and Zethsen's (2008, 2011) studies reveal that this precarity of translation work is further compounded by a lower professional status of translation workers. In their research, even the higher-status workers in stable positions in countries with high living standards have been found to have a lower professional status than may have been expected (*ibid*).

The constraints imposed by the ongoing transformation of the language industry on the physical and mental well-being of translation workers have also received attention in the past few years. Research on the translator's workplace, ergonomics and job satisfaction (e.g. (Ehrensberger-Dow et al. 2016; Ehrensberger-Dow and Hunziker Heeb 2016; Şahin and Kansu-Yetkiner 2020; Rodríguez-Castro 2015) report that translation workers have been suffering from various occupational health issues (both mental and physical) and feeling “devalued”, “dehumanized”, “disempowered” and “alienated” mostly due to the lack of human and organizational aspects in the design and workflow deployment of translation technologies and management policies.

And finally, as Sadek's (2018) study demonstrates, especially with the advent of digital technologies, we now see a systematic violation of intellectual property and data ownership rights in the translation field. According to Sadek (*ibid*), the intellectual property and data ownership policies and practices of our digital age have devastating repercussions on translation workers and society at large.

Building on the concerns discussed above, we conducted a small-scale, quantitative survey with 70 translation workers living in Turkey and working on/for digital labour platforms to answer two questions in particular: How do digital labour platform companies impact the working conditions of translation workers, and what are the risks of these platforms for them? The following sections present the methodology of the survey and the findings. Due to word and space limitation, we were not able to include all the questions and visuals of the survey in this article; however, they are always available upon request.

#### 4. Survey methodology

The survey questions were prepared in English, and the online survey was disseminated both in English and Turkish and filled out by 70 respondents who identified themselves as translation workers performing translation work through at least one digital labour platform. It was limited to translation workers who live in Turkey and work on/for digital labour platforms. Participation in the survey was voluntary and anonymous. Respondents were engaged by spreading information about the survey with a snow-ball technique through translation-



related social media groups, and by identifying platform workers on various digital labour platforms such as Smartcat, Fiverr, Upwork, Stepes, Motaword, Hızlıceviri, Bionluk, Protranslate and Proz, and establishing direct contact with them via email. The survey went live on May 23, 2019 and was closed on June 8, 2019. The survey questions were prepared based on similar field studies conducted with translation workers (e.g. UK Translator Survey Final Report by the European Commission, the CIOL and the ITI, 2016) and digital workers (e.g. ILO 2016, 2018a, b, c; Harmon and Silberman 2018). The survey was created using Google Forms and the questions were formulated to collect information in two separate tracks. The first group of questions were designed to determine the professional profiles of the respondents, and the second focused on how digital labour platforms have impacted their working conditions especially with regard to (1) employment status, (2) income level, (3) work-life balance, (4) social protections, (5) free agency, (6) bargaining power, (7) dependence on the platform, (8) allocation of risks and rewards and (9) data collection, protection and privacy. The survey consisted of multiple-choice questions with predefined answers offering respondents the opportunity to choose from and rank several options or to use a scale ranging from “very satisfied” to “very dissatisfied” or “strongly agree” to “strongly disagree”. The survey methodology and questions were reviewed and approved by The Ethics Committee for Master and PhD Theses in Social Sciences and Humanities, Boğaziçi University (SOBETİK, Application Number: 2019/57, Issue: 2019–62).

## 5. Analysis of survey results and discussion

### 5.1 Professional profiles of the survey participants

The age of the participants ranged from 20 to 77 years of age and their experiences in the language industry ranged from 1 to 20 years. 74.3% of the survey participants had been working on/for digital labour platforms for more than a year. Of the 70 respondents, 55 answered the question about their educational background. More than half had a diploma in translation (50.9%), while 29.1% had a bachelor's degree in which translation was a significant component of the study, and 14.6% had a Masters degree in translation or in a field of study in which translation was a major component. Most respondents (80%) described their main working role in the language industry as translator. Apart from being a translator, respondents also reported a variety of other (secondary) roles, including proofreader (61.4%), editor (44.3%), reviewer (40%), post-editor (27.1%), inter-

preter (22.9%), transcreator (20%), language teacher (14.3%) and project manager (12.9%).

Most of the survey participants perform translation (98.6%), proofreading (61.4%) and editing (57.1%) tasks on digital labour platforms. Other than these regular translation-related tasks, some new tasks such as machine translation post-editing (MTPE) (35.7%), quality assurance (14.3%), copywriting (12.9%), transcreation (11.4%), transcription (7.1%), project management (7.1%) are also performed on these platforms.

The majority of the survey participants (77.1%) defined their employment status as “freelancer” working for translation agencies and direct clients. Others had a fixed salaried job inside/outside of the language industry but were performing translation activities as a freelancer in their spare time.

## 5.2 Reasons for working on/for digital labour platforms

The main reasons why the survey participants work on digital labour platforms were to have more control and flexibility over their jobs (68.6%) and to work with clients abroad and earn foreign currency (57.1%). More than half (54.3%) worked on labour platforms as they preferred to work from home, and 37.1% tried to earn money on these platforms while studying. Other reasons for working on digital labour platforms included the possibility of making more money through online work than in the offline economy (31.4%), finding and working with direct clients (38.6%), or because they had difficulties finding standard employment (27.1%).

More than half (50.7%) of the survey respondents noted that platform work earnings were their primary source of income to meet their basic needs, and 23.2% stated that it was an important, though not essential component of their budgets, while 21.7% indicated it was nice to have, but they could live comfortably without it.

## 5.3 The level of income and satisfaction with the income

Figure 1 illustrates that 70% of the respondents (including around 54.3% 0–500 USD + 15.7% 500–1000 USD) earn an average of up to 1000 USD/month from the translation profession in general. Only 22.9% of them reported an income above 1000 USD/month (around 11.4% between 1000–1500 USD + 11.5% more than 1500

USD).<sup>2</sup> One participant preferred not to disclose an income and 4 participants noted that they have no regular monthly income from translation work.

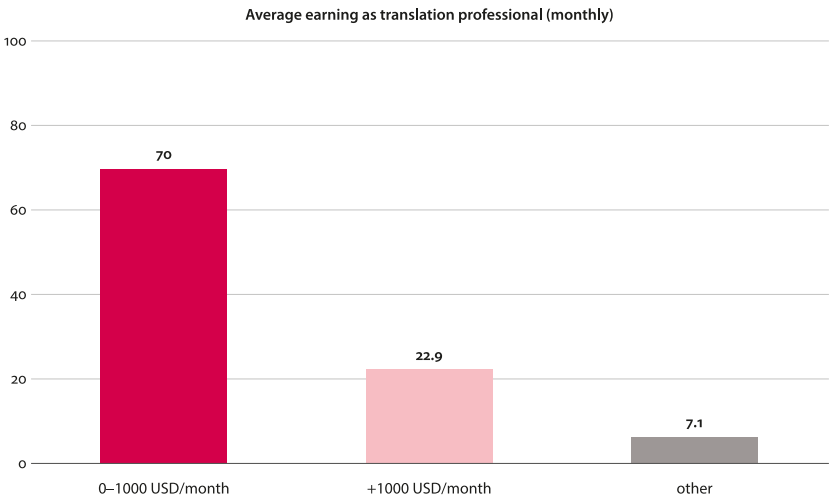


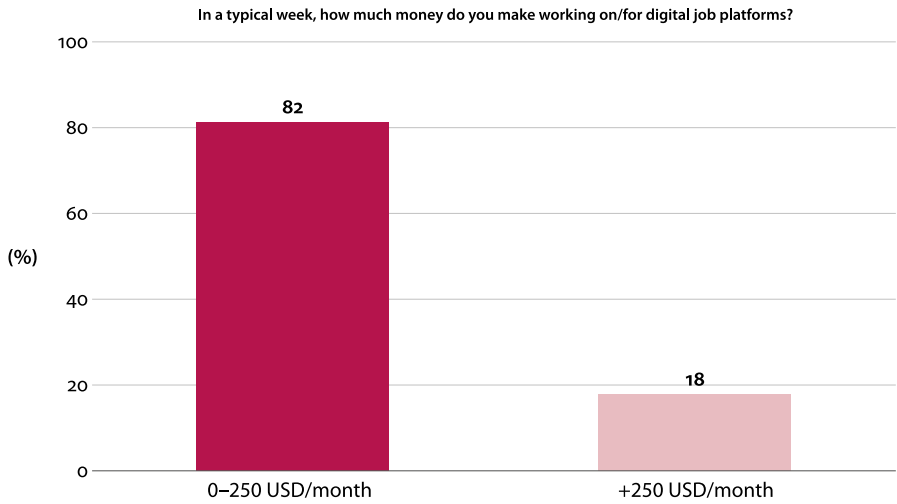
Figure 1. Monthly earnings as a translation worker

Respondents were also asked to note their weekly earnings from translation work on digital labour platforms. As can be seen in Figure 2, a significant number, around 82% out of 67 respondents, stated that they earn up to 250 USD in a typical week from digital labour platforms.

72.9% of the participants agreed or strongly agreed that there is not enough work, and that they could not find enough well-paying tasks on the digital labour platforms. Likewise, 67.1% agreed or strongly agreed that the insufficient work volume made them search for tasks on various labour platforms. More than 80% of survey respondents also agreed or strongly agreed that the prevailing competitive atmosphere on labour platforms results in an overall reduction in rates.

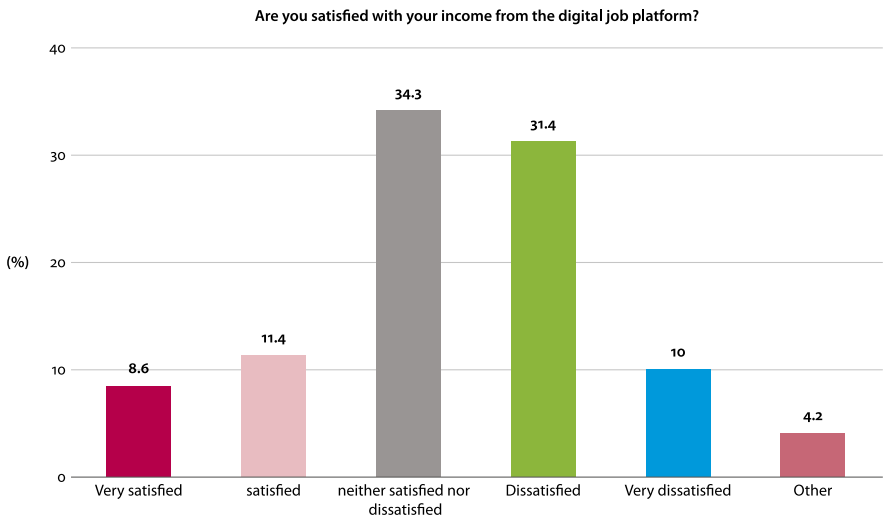
Regarding their level of satisfaction from digital labour platform earnings, only 20% of the respondents were satisfied or very satisfied with their monthly

2. In the survey questions of Figure 1–2, there was an overlap in some income thresholds being repeated in more than one category (e.g. 0–500 and 500–1000 or 0–250 and 250–500). Since our point was to measure the income level with regards to below or above poverty line, we still included them in our analysis by combining them into two categories (i.e. up to/above 1000 USD as in Figure 1 and up to/above 250 USD as in Figure 2). This is because the overlapping might only have applied to people who felt they made exactly 250 or 1000 USD; however since the categories were listed in a logical order and there was a box (other) in which they had the chance to fill in an income amount if they found the categories confusing, we believe it had no effect on the results.



**Figure 2.** Weekly earnings from digital labour platforms

income, compared with 41.4% who indicated they were dissatisfied or very dissatisfied, and 34.3% who were neither satisfied nor dissatisfied. Details can be found in Figure 3.



**Figure 3.** Satisfaction with monthly income

Additionally, working predominantly as freelancers, 72.8% of the survey respondents did not feel financially stable and secure, and 65.2% indicated that they were not saving for retirement.

The survey results suggest that even though the language industry has shown consistent year-on-year growth,<sup>3</sup> this growth has not been matched by the financial earnings of the survey respondents. A large number of the respondents (70% earn up to 1000 USD/month) reported translation income as below the poverty line<sup>4</sup> defined by the Confederation of Labour Unions in Turkey (Türk-İş 2019) in July 2019, which means that they would not be able to make a decent living, based solely on their translation income. Additionally, earnings from freelance work do not include compensation for social security contributions for insurance and retirement. Freelance workers are not paid when they are sick and when they take annual leave. Their work does not allow them to take paid holidays, and in many cases, they are responsible for the costs of procuring and maintaining their required equipment (office, PC, Internet, software licenses, office equipment, electricity, etc.). It also seems the weekly earnings from digital labour platforms (82% earn up to 250 USD/week) are inadequate to make a significant contribution to improve some of their basic needs and secure decent living conditions for themselves and their families. Because their activities and income on digital labour platforms are neither continuous nor guaranteed, this situation may put translation workers in a more vulnerable situation, thus resulting in an escalation of precariousness which may contribute to greater labour market and income inequality, low overall earnings, long working hours, poor job stability, poor health (chronic stress, anxiety, depression, etc.), loss of independence, fewer resources to devote to personal development and a lower financial capacity of spending for training and education.

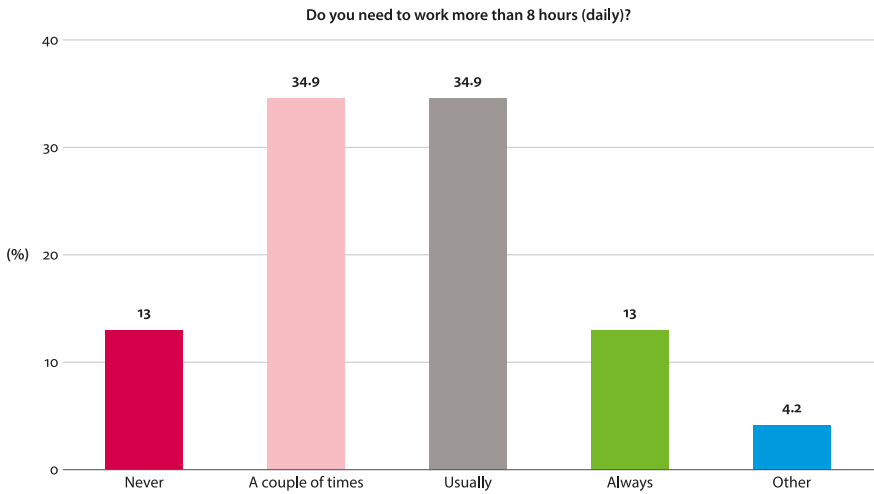
#### 5.4 Working hours and work-life balance

The global 24-hour economy has significantly influenced the way the work-life balance is organized. In this 24-hour economy, long working hours and unstable work-life balance become a serious concern (ILO 2018b, 67–71). As may be inferred from Figure 4, out of 69 respondents only 13% reported that they do not need to work more than 8 hours a day.

---

3. Nimdzi, a language industry market research company, estimates that the language services industry will grow to USD 55 billion by the end of 2020 (Nimdzi 2020).

4. According to the Confederation of Labour Unions in Turkey (Türk-İş), the poverty line for a four-person family with two adults and two children in July 2019 was 1180 USD/month (6759 TRY/month), and the starvation line was 366 USD/month (2075 TL/month). (These figures were updated in April 2021 as 1079 USD/month (9013 TRY/month) for the poverty line and 331 USD/month (2767 TRY/month) for the starvation line (Türk-İş March 2021).



**Figure 4.** Daily work for more than 8 hours

Respondents were also asked whether they were able to take leave or holiday time whenever they wanted. The results indicated that only a quarter of respondents had no problems planning their holidays. And only 5.7% of the survey respondents reported that they did not need to work on weekends, whereas more than 60% usually or always needed to do so. Working predominantly as freelancers, out of 68 respondents, 45.6% stated that they could not afford to take off 4 weeks in a year. When asked why it was difficult to take a leave or go on holiday while working on/for digital labour platforms, many of the respondents (82.3%) noted that they did not want to take prolonged time off as they did not wish to lose their customers. Also, for many of the respondents (88.2%), temporary non-responsiveness would result in missing out on opportunities to earn money, damage their online reputations, and affect their ability to attract new work in the future (58.8%). Moreover, 79.4% indicated that they needed to be constantly available because of the short reaction times on digital labour platforms.

Clearly, most of the respondents are putting a great deal of effort into earning a living (working more than 8 hours/day during the week, having to work on weekends, not taking (paid) holidays, etc.), and are mentally preoccupied with their tasks and the rewards they are missing out on when they are not working for any reason (holidays, illness, idleness, stress, leisure, etc.). The feeling that they must be available at all times on digital labour platforms and work long hours might blur the line between private and work life, and disrupt social engagements and personal time. And the feast-and-famine nature of work volume on platforms, the long working hours and unstable work-life balance may negatively influence

their biological and social rhythms, sleep, hormones, recovery, circadian rhythms and lifestyle (e.g. the possibilities of physical activities and a regular diet).

### 5.5 Removal of free agency and intermediation

Because of the direct worker-client interactions that they intend to provide, digital labour platforms are often expected to allow platform workers to bypass some intermediaries and obtain more direct access to international direct clients. This would make it possible for translation buyers and workers to be able to connect and do business directly without (translation) agencies in the middle. Even if dis-intermediation is happening at some level, the survey findings suggest that digital labour platforms for translation may have already created new forms of intermediation that results in limited free agency for the platform workers, since 67.1% of the survey respondents mostly worked with local (31.4%) and global (35.7%) translation agencies on these platforms.

This suggests that, in many cases, the unmediated connection between the direct client and the translation worker has not been accomplished yet. For translation workers, this kind of intermediation may result in a new configuration of indirect production networks (Abdallah and Koskinen 2007) and (re)produce mistrust and limited participation in decision-making processes.

### 5.6 Reduced bargaining power and rights

Since the organizational and employment principles of digital labour platforms depend mostly on their on-demand characteristics, there needs to be a large pool of providers and clients from all around the world to guarantee an efficient matching of supply and demand. However, for translation workers, this may turn into a fierce local and global competition with low bargaining power because the availability of work is highly uncertain on these platforms. As mentioned in Section 5.3, 72.9% of respondents complained about the inadequate work volume on these platforms, and 67.1% said that they need to spend a significant amount of time searching for well-paying tasks on various platforms. Digital labour platforms have the ability (and desire) to significantly expand the pool of potential workers available to clients. When workers seek income opportunities through these platforms, this expansion often results in fierce competition among platform workers and thus underbidding practices. As discussed in Section 5.3, 81.4% of respondents think that the prevailing competitive atmosphere on these platforms results in an overall reduction in rates. In return, the lower bargaining power within a highly competitive environment would make translation workers more likely to accept jobs with lower pay and less stability.

Furthermore, the right to organize and collectively bargain is one of the fundamental conventions of the ILO in both online and offline work (ILO 2008, 2013). However, especially with the rise of on-demand employment practices and non-standard arrangements in the digital labour platform economy, various reports (ETUC 2018; ILO 2019) indicate that the right for collective bargaining on digital labour platforms has severely declined. This issue is observable in our survey results, as well: Out of 68 survey respondents, 76.5% indicated that when working on/for labour platforms, they do not have the right to organize and collectively negotiate with job providers or platform owners for improved rights and working conditions. We suspect that some of the survey participants underreported this issue by interpreting the term “negotiation” as an individual right to bargain with their clients about their rates or deadlines. To our knowledge, collective bargaining is not supported by any digital labour platforms on the market at the time of writing. According to European Trade Union Confederation (ETUC 2018, 14–17), the main challenges to collective bargaining include: platform operators’ resistance to collective bargaining because it supposedly would not allow flexible work models, the geographically dispersed workforce and the fragmentation of work in the platform economy, and the heterogeneity of the platform workers’ potential collective organization demands, interests and needs.

Although collective bargaining goes beyond the language industry and is mostly related with the more general regulations and legislations about the digital economy, some aspects of digital labour platforms do raise novel issues to which collective efforts could provide an answer. By establishing collective bargaining agreements, the translation workers could organize their collective voice in the digital workplace and raise their concerns, challenge low ratings, negotiate pay, working hours, minimum wage, and other working conditions.

## 5.7 Increasing dependence of translation workers on the platform

According to Choudary (ILO 2018a, 27), lack of reputation portability may reduce a worker’s ability to find another platform or non-platform work. For instance, recent university graduates may work on/for a labour platform for a few years, but the lack of a formal employment relationship coupled with an inability to showcase the records of their past labour, reputation or client relationships through some formal mechanism like a letter, certificate, or reference, may in time reduce their employability in more traditional jobs. Moreover, if the platform workers were to move to a new platform, they would have to invest time, effort, and money in building their reputation from scratch (ILO 2018a, 27). This fact is also reported in our survey findings: Out of 68 survey respondents, 63.2% said they



were not able to export (in .csv or excel format, etc.) a complete human- and machine-readable work and reputation history at any time from the platform.

## 5.8 Allocation of rewards and risks across the ecosystem

Platform workers highly value their ratings, reviews, and online reputations (Pettersen 2017). This is mostly because good reputation ratings and reviews make their profiles more visible, which can translate into a larger number of tasks at higher rates. After translation workers deliver their services, the clients can rate and/or review specific and/or general aspects of the services such as overall quality and compliance with deadlines. However, Cockayne warns that without providing a rationale or a chance to contest, the seemingly arbitrary 1- to 5-star rating/rewarding mechanism of customer reviews can lead to “control over worker performance and behaviour”, “function as a method to impose discipline” and also “serve to ensure that the worker’s behaviour aligns with what the rating requires” (as cited in Eurofond 2018, 4). Out of 68 survey respondents, only 20.5% stated they can contest ratings or evaluations of their work through official platform channels if they believe the rating and/or review is wrong or unfair.

In addition to this, different levels of access to information on digital labour platforms also result in clients having access to more information on translation workers than the other way around. Most of the labour platforms maintain translation workers’ ratings (such as completed jobs, quality, timely delivery, etc.) so that clients can hire the ones who have higher rates from prior completed tasks. However, in many cases, there is no equivalent mechanism for translation workers to access information about their potential clients that could help them assess whether they are reliable, prompt payers, respectful clients, or effective communicators. Out of 67 respondents, 61.2% stated that on digital labour platforms, they do not have access to enough information about their potential clients. And whilst clients can rate platform workers, the opposite is not always the case. Over half of the survey participants (50.7%) said that they were not able to review, rate, or evaluate their clients on the platforms where they work.

## 5.9 Data collection, protection and privacy

Because of their dependence on data, digital labour platforms collect and re-use a lot of their users’ personal data (e.g. location, payment details, address, resumes and personal details) and translation data (e.g. translation memories and termbases). An important issue with the data collection is that since many of the labour platforms with a CAT Tool environment are connected to publicly available machine translation (MT) providers (Google Translate, Microsoft Bing

Translator, Yandex Translate, Baidu, etc.) via an Application Programming Interface (API), there can also be data leakage risks on these platforms (Canfora and Ottmann 2020, 63–65). Based on some concrete examples, Vashee (2017) reports that there is a risk that these publicly available MT APIs store every single word, phrase, segment, and sentence that is sent to them. Therefore, the use of a digital labour platform that has integrated API access to publicly available MT systems may undermine corporate and personal privacy and expose high-value confidential data to anyone who knows how to use a search engine or has basic hacking skills (Faes 2017).

Furthermore, several studies have begun to address the re-use of translation data and its impacts on the work processes of translation workers from an ethical perspective (Kenny et al. 2020). For instance, Moorkens and Lewis (2020) remark: “Source texts and translations in the form of parallel texts have been recycled, initially via translation memory tools, then as training data for MT systems, with data requirements (and data value) growing exponentially in the case of NMT” (477–478). In this regard, they explore the Berne Convention and some other regulations upon which the current copyright ownership (with moral and economic rights) for translation is based, and state that “the attribution of translation copyright (and the reuse of translation as data) is subject to a number of conflicting and inconsistently-interpreted laws and conventions” (478). They conclude that at present, benefits from translation leveraging and reuse are rarely passed to the translator, and “there are possible conflicting claims from translators as creators or derivative work and from database maintainers, particularly if a degree of creativity or intellectual effort has been expended in this work (478).”

We asked the survey participants how they perceive the works that they translate/edit on digital labour platforms with regard to copyright protections. A considerable proportion of the survey participants (77.9% of 68 respondents) indicated that while working on/for digital labour platforms, they seldom (47.1%), usually (27.9%) or always (2.9%) translate/edit (creative) works that should be protected with copyright regulations.

## 6. Limitation of the study

The author is aware that the design of the current study has some limitations. First, since the participation in the survey was anonymous, we were not able to identify from whom the responses came, preventing us from following up to verify if the participants are actual translation workers and not other professionals. However, we reduced this bias by disseminating the survey only on digital labour platforms and online translation environments, and asking questions to iden-

tify the professional backgrounds of the participants. Secondly, some translation workers are in-house, freelance, part-time or remote workers, and their involvement in the translation process is in some ways different than that of freelancers. This might create a disparity among their responsibilities and working conditions, but addressing all of the potential differences is beyond the scope of this article. In order to maintain a perspective that is broad enough to include all of the relevant labour sources, we use the term “translation worker” which covers most of the roles and working practices of the survey participants.

## 7. Conclusions

Within the scope of this article, we explored how digital labour platforms have affected the working conditions of translation workers living in Turkey, especially with regard to employment status, income level, work-life balance, social protections, free agency, bargaining power, dependence on the platform, allocation of risks and rewards, and data collection, protection and privacy. By focusing on key concerns about the current tech-powered transformation of the language industry, this study highlighted one issue that requires urgent attention: the role and impact of uberization of work in the degradation of translation workers' conditions.

Although digital labour platforms promise a new model for collaborative, cooperative production of translation and some novel business opportunities for translation workers, the survey findings suggest that those opportunities are subsumed under the rule of capitalism and often fall short of decent and fair labour standards. The International Labour Organization's substantive elements of Decent Work includes adequate earnings and productive work, income equality, decent working time, appropriate balance between work, family and personal life, social security, stable and secure work, and social dialogue that involves workers' and employers' representation (ILO 2008, 2013). However, the results of our research indicate that the introduction of new technologies (digital labour platforms) and business models (uberization of work) into the translation production networks has not yet provided a significant contribution to the working conditions of translation workers living in Turkey. Work organization has not become more democratic, horizontal, or direct; translation workers have not been included in key decision-making processes; their roles, skills and outputs have not been valued; and the appropriation of data still remains an issue. What emerged is: more precarious working conditions (with an unsecured employment status, poor level of income, long working hours, no social protection or job security, etc.), weakened work-life distinction, reduced bargaining power, increased

dependence on platforms, unfair distribution of risk and rewards, and worsened intellectual property and data protection practices.

The findings of this study are also consistent with the research conducted by the International Labour Organization (ILO 2016, 2018a, b, c), which warns that digital labour platforms have been introducing some new challenges, uncertainties, and limitations to the world of work and may lead to undesirable terms and adverse working conditions for (digital) workers. In this sense, the present study can be viewed as one of many attempts to contribute to the literature examining the impact of technologies and business models on (translation) work, and it calls for further research on translation workers not only in light of their cultural roles but also their economic significance as producers, consumers and importantly as data providers in the era of uber-capitalism. The findings also suggest that larger and more comprehensive studies with a larger sample consisting of translation workers from around the globe are needed for detailed investigation of how Uber-like business models are affecting them in order to understand and define their advantages and disadvantages and raise awareness in the language industry and encourage the translation community to take effective measures to protect its own interests.

## 8. Considerations for the future

If it is true that the consequences of the current tech-driven transformation on translation workers are for the most part negative in the era of uber-capitalism, two important questions remain: (1) What would greater democratic and fair control over the translation production, translation technology and utilization of surplus look like and (2) what would be the alternative types of translation businesses in the digital age?

We should note that the current tech-powered developments are neither linear nor determined. There are research and propositions that avoid (technological) determinism and solutionism while offering solid alternative ways against “the two opposing and yet complimentary nightmares that are the integral uberisation of society and the sovereignist protection of the capitalism of yesteryear” (Kyrou, Moulrier-Boutang and Stiegler 2016, par. 8). As such, the free/libre and open-source software (FLOSS), open translation (Open Translation 2011), open value networks (Siddiqui and Brastaviceanu 2013), platform cooperativism (Scholz 2016a, b), commons-oriented open cooperativism (Bauwens and Kostakis 2017), data cooperatives (Hardjono and Pentland 2019) and distributed cooperative organizations (Disco 2021) could be recognized in the context of initiatives that are seeking for “tech for good”, “tech for all”, “responsible tech” and “solidarity

economy” which generally try to make tech-powered businesses and organizations more aware of the social and worker impact of their ventures.

These movements were born as an antithesis of the capitalist platform economy with a strong claim and conviction to advocate for the common economic and social concerns of workers by co-operating in a common (digital) space. There are a growing number of successful examples of these models that offer more or less the same digital works, goods and services on technologically equivalent digital labour platforms compared to their capitalist counterparts mentioned in this study, “but the engagement of workers in these [...] business models are vastly different, due to their distinct goals and missions” (Saner, Yiu and Nguyen 2019, 2). Unlike profit-maximizing businesses, these enterprises “prioritize social objectives”, “have a strong conviction to advocate for the common economic and social concerns of workers” (2–3) and “allow platform workers to have more control over resources, production, and decision-making, bringing them a sense of identity and empowerment” (3).

Some proposals have been made in the translation field to preserve cooperation, openness and sustainability (such as Baker 2009; Baumgarten 2016; Cronin 2017; Kenny et al. 2020; Moorkens and Lewis 2019; Moorkens and Rocchi 2020; Sadek 2018; Tymoczko 2010), and to counteract hegemonic neoliberal policies via translation (Santos 2014). Further to this, the practical grounds of platform cooperativism and openness in the translation field have already achieved progress (see Open Translation 2011; Coop 2021). By applying the notions and lessons of the open (source) and collective models to the translation field, a growing number of collective, cooperative and open-source translation initiatives have been launched around the world (Wikimedia Foundation, Guerrilla Translation, Fair MT, GlobalVoices, Guild Translation & Localization Co-Op, Omega-T, TraduXio, OpenTM2, MosesSMT, Apertium, OpenLogos, etc.) to gradually build a freer and fairer (translation) society with greater solidarity. That being said, “because of the important place of translation and its potential for social development and access to knowledge among other goals” (Sadek 2018, 370), more research and practical applications are needed to find a way to build alternative modes and models of translation production, distribution, trading, and consumption that prioritize democratic governance, human rights, nature, decent working conditions, fairness and equality.

## Acknowledgements

I would first like to gratefully acknowledge the valuable contribution of the survey respondents, and constructive feedback, improvements and suggestions of the journal editors and anony-

mous reviewers. This article was prepared as a part of our MA research (Firat 2019) supervised by Professor İsmail Kaplan, and I am truly indebted to him for his openness, humility, and intellectual rigour. I would like to express my profound gratitude to Professors İsa Kerem Bayırlı, Mehmet Şahin, Jonathan M. Ross, Turgay Kurultay, Başak Ergil, and Adria Martin Mor for their thorough feedback, encouragement, and insightful comments, and to Gökhan Doğru, Olga Deputatova, Robert Johnson, Hakan Meral Ezgi Ceylan, Alihan Erdoğan and Cüneyt Tekin for their attentive reading and suggestions on even multiple drafts of this research.

## References

- Abdallah, Kristiina, and Kaisa Koskinen. 2007. "Managing Trust: Translating and the Network Economy". *Meta: Journal Des Traducteurs* 52 (4): 673–687. <https://www.erudit.org/en/journals/meta/1900-v1-n1-meta1954/017692ar/abstract/>
- Alfer, Alexa, and Cornelia Zwischenberger, eds. 2020. *Translaboration: Exploring Collaboration in Translation and Translation in Collaboration. Special issue of Target* 32 (2). <https://doi.org/10.1075/target.20105.alf>
- Baker, Mona. 2009. "Resisting State Terror: Theorizing Communities of Activist Translators and Interpreters". In *Globalization, Political Violence and Translation*, E. Bielsa and C. W. Hughes. (Eds.): 222–242. Basingstoke: Palgrave Macmillan. [https://doi.org/10.1057/9780230235410\\_12](https://doi.org/10.1057/9780230235410_12)
- Baumgarten, Stefan. 2016. "The Crooked Timber of Self-reflexivity: Translation and Ideology in the End Times". *Perspectives* 24 (1): 115–129. <https://doi.org/10.1080/0907676X.2015.1069863>
- Bauwens, Michel, and Vasilis Kostakis. 2017. "Why Platform Co-Ops Should Be Open Co-Ops". In *Ours to Hack and to Own: The Rise of Platform Cooperativism, A New Vision for the Future of Work and a Fairer Internet* by Trebor Scholz and Nathan Schneider. (Eds): 163–166. New York: Or Books. <https://doi.org/10.2307/j.ctv62hfg7.31>
- Canfora, Carmen, and Angelika Ottmann. 2020. "Risks In Neural Machine Translation". *Fair MT* 9 (1): 58–77. <https://doi.org/10.1075/ts.00021.can>
- Caruso, Loris. 2017. "Digital Innovation and the Fourth Industrial Revolution: Epochal Social Changes?". *AI and Society* 33 (3): 379–392. <https://doi.org/10.1007/s00146-017-0736-1>
- Cohen, Maurie J. 2017. *The Future of Consumer Society*. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198768555.001.0001>
- Coop. 2021. "Platformcoop Directory". *Platform Cooperativism Consortium*. Accessed May 2021. <https://directory.platform.coop/#1/31.1/-84.8>
- Cronin, Michael. 2017. *Eco-Translation: Translation and Ecology in the Age of the Anthropocene*. London; New York: Routledge, Taylor and Francis Group. <https://doi.org/10.4324/9781315689357>
- Dam, Helle Vønning, and Karen Korning Zethsen. 2008. "Translator Status". *The Translator* 14 (1): 71–96. <https://doi.org/10.1080/13556509.2008.10799250>
- Dam, Helle Vønning, and Karen Korning Zethsen. 2011. "The Status of Professional Business Translators on the Danish Market: A Comparative Study of Company, Agency and Freelance Translators". *Meta* 56(4): 976–997. <https://doi.org/10.7202/1011263ar>

- De Stefano, Valerio and Antonio Aloisi. 2018. *European Legal Framework for Digital Labour Platforms*. Luxembourg: European Commission. <https://doi.org/10.2760/78590>, JRC112243. <https://ec.europa.eu/jrc/en/publication/european-legal-framework-digital-labour-platforms>
- Disco. 2021. "Open Value Cooperativism and Disco in 7 Principles and 11 Values". *Guerrilla Media Collective Wiki*. Accessed May 2021. <https://wiki.guerrillamediacollective.org/Category:DisCO>
- Ehrensberger-Dow, Maureen, and Andrea Hunziker Heeb. 2016. "Investigating the Ergonomics of the Technologized Translation Workplace". In *Reembedding Translation Process Research* by Ricardo Muñoz Martín. (Ed), 69–88. Amsterdam: John Benjamins. [https://www.researchgate.net/publication/308278360-Investigating\\_the\\_ergonomics\\_of\\_a\\_tecnologized\\_translation\\_workplace](https://www.researchgate.net/publication/308278360-Investigating_the_ergonomics_of_a_tecnologized_translation_workplace). <https://doi.org/10.1075/btl.128.04ehr>
- Ehrensberger-Dow, Maureen, Andrea Hunziker Heeb, Gary Massey, Ursula Meidert, Silke Neumann, and Heidrun Becker. 2016. "An International Survey of the Ergonomics of Professional Translation". *ILCEA Revue de l'Institut des Langues et des Cultures d'Europe et d'Amérique* 27. <https://journals.openedition.org/ilcea/4004>
- ETUC. 2018. *Collective Voice in the Platform Economy: Challenges, Opportunities, Solutions*. Accessed May 2021. <https://www.etuc.org/sites/default/files/publication/file/2018-09/Prassl%20report%20maquette.pdf>
- Eurofond. 2018. *Platform Work: Types and Implications for Work and Employment: Literature Review*. Accessed May 2021. <https://www.eurofound.europa.eu/sites/default/files/wpefi8004.pdf>
- European Commission, CIOL, and ITI. 2016. *UK Translator Survey: Final Report*. London, UK: European Commission. Accessed May 2021. <https://www.ciol.org.uk/sites/default/files/UKTS2016-Final-Report-Web.pdf>
- Faes, Florian. 2017. "Translate.com Exposes Highly Sensitive Information in Massive Privacy Breach". *Slator*. Accessed May 2021. <https://slator.com/technology/translate-com-exposes-highly-sensitive-information-massive-privacy-breach/>
- Firat, Gökhan. 2019. "Commercial Translation and Professional Translation Practitioners in the Era of Cognitive Capitalism: A Critical Analysis". MA thesis. Boğaziçi University.
- Fuchs, Christian. 2010. "Labor in Informational Capitalism and on the Internet". *The Information Society* 26 (3): 179–196. <https://doi.org/10.1080/01972241003712215>
- Fuchs, Christian. 2011. "Cognitive Capitalism or Informational Capitalism? The Role of Class in the Information Economy." In *Cognitive Capitalism, Education and Digital Labour*, by Michael Peters and Ergin Bulut. (Eds), 75–119. New York: Peter Lang. <http://fuchs.uti.at/wp-content/uploads/cognitivecapitalism.pdf>
- Fuchs, Christian. 2017a. "Legal Struggles in the Age of Uber-Capitalism: Are Uber-Drivers Workers or Self-Employed." *Huffpost Online*. Accessed May 2021. [https://www.huffingtonpost.co.uk/christian-fuchs1/legal-struggles-in-the-ag\\_b\\_12720298.html?guccounter=2](https://www.huffingtonpost.co.uk/christian-fuchs1/legal-struggles-in-the-ag_b_12720298.html?guccounter=2)
- Fuchs, Christian. 2017b. *Social Media: A Critical Introduction* (2nd ed.). London: Sage Publications.
- Garcia, Ignacio. 2017. "Translating in the Cloud Age: Online Marketplaces". *HERMES – Journal of Language and Communication in Business* (56): 59. <https://tidsskrift.dk/her/article/view/97202/146008>. <https://doi.org/10.7146/hjicb.voi56.97202>

- Gough, Joanna, and Katerina Perdikaki. 2019. "Concurrent Translation – Reality or Hype?" In *TC40*. London. [https://www.researchgate.net/publication/335692375\\_Concurrent\\_Translation\\_-Reality\\_or\\_Hype](https://www.researchgate.net/publication/335692375_Concurrent_Translation_-Reality_or_Hype)
- Hardjono, Thomas, and Alex Pentland. 2019. "Data Cooperatives: Towards a Foundation for Decentralized Personal Data Management". *Arxiv.Org*. Accessed May 2021. <https://arxiv.org/abs/1905.08819>
- Harmon, Ellie, and M. Six Silberman. 2018. "Rating Working Conditions on Digital Labor Platforms". *Computer Supported Cooperative Work (CSCW)* 27 (3–6): 1275–1324. [https://www.researchgate.net/publication/325372246\\_Rating\\_Working\\_Conditions\\_on\\_Digital\\_Labor\\_Platforms](https://www.researchgate.net/publication/325372246_Rating_Working_Conditions_on_Digital_Labor_Platforms). <https://doi.org/10.1007/s10606-018-9313-5>
- Hill, Steven. 2015. *Raw Deal: How the 'Uber Economy' and Runaway Capitalism are Screwing American Workers*. New York, NY: St. Martin's Press.
- ILO (International Labour Organization). 2008. *Measurement of Decent Work. Discussion Paper for the Tripartite Meeting of Experts on the Measurement of Decent Work*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms\\_100335.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_100335.pdf)
- ILO (International Labour Organization). 2013. *Decent Work Indicators: Guidelines for Producers and Users of Statistical and Legal Framework Indicators – ILO Manual. 2nd Version*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms\\_223121.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_223121.pdf)
- ILO (International Labour Organization). 2016. *Non-Standard Employment Around the World: Understanding Challenges, Shaping Prospects*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms\\_534326~2.pdf](https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_534326~2.pdf)
- ILO (International Labour Organization). 2018a. *The Architecture of Digital Labour Platforms: Policy Recommendations on Platform Design for Worker Well-being*. Geneva: ILO Publications. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms\\_630603.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_630603.pdf)
- ILO (International Labour Organization). 2018b. *Digital Labour Platforms and the Future of Work: Towards Decent Work in the Online World*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_645337.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_645337.pdf)
- ILO (International Labour Organization). 2018c. *Work on Digital Labour Platforms in Ukraine: Issues and Policy Perspectives*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---travail/documents/publication/wcms\\_635370.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_635370.pdf)
- ILO (International Labour Organization). 2019. *Organizing On-Demand: Representation, Voice, and Collective Bargaining in the Gig Economy*. Geneva: International Labour Office. Accessed May 2021. [https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---travail/documents/publication/wcms\\_624286.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_624286.pdf)
- Jimenez-Crespo, Miguel A. 2017. *Crowdsourcing and Online Collaborative Translations: Expanding the Limits of Translation Studies*. Amsterdam: John Benjamins. <https://doi.org/10.1075/btl.131>



- Johnston, Hannah, Alina Caia, Michael Six Silberman, Monica Ceremigna, Diego Hernandez, and Valerica Dumitrescu. 2020. "Working On Digital Labour Platforms: A Trade Union Guide For Trainers On Crowd-, App- And Platform-Based Work". *Etui.Org*. Accessed May 2021. [https://www.etui.org/sites/default/files/2021-02/Working%20on%20digital%20labour%20platforms-A%20trade%20union%20guide%20for%20trainers%20on%20crowd-%2C%20app-%20and%20platform-based%20work\\_2021.pdf](https://www.etui.org/sites/default/files/2021-02/Working%20on%20digital%20labour%20platforms-A%20trade%20union%20guide%20for%20trainers%20on%20crowd-%2C%20app-%20and%20platform-based%20work_2021.pdf)
- Kenny, Dorothy, Joss Moorkens, and Félix do Carmo. 2020. "Fair MT: Towards Ethical, Sustainable Machine Translation". *Translation Spaces* 9 (1). <https://doi.org/10.1075/ts.00018.int>
- Kyrou, Ariel, Yann Moulrier-Boutang, and Bernard Stiegler. 2016. "Stop the Uberisation of Society!" [orig. Stop à l'uberisation de la société !]. Translated by Sam Kinsley. *Liberation*. Accessed May, 2020. Accessed May 2021. [https://www.liberation.fr/debats/2016/04/10/stop-a-l-uberisation-de-la-societe\\_1445229/](https://www.liberation.fr/debats/2016/04/10/stop-a-l-uberisation-de-la-societe_1445229/)
- Langley, Paul, and Andrew Leyshon. 2016. "Platform Capitalism: The Intermediation and Capitalization of Digital Economic Circulation". *Finance and Society* 3 (1): 11–31. <http://financeandsociety.ed.ac.uk/article/view/1936/2571>
- McDonough Dolmaya, Julie. 2012. "Analyzing The Crowdsourcing Model and Its Impact On Public Perceptions of Translation". *The Translator* 18 (2): 167–191. <https://doi.org/10.1080/13556509.2012.10799507>
- Moorkens, Joss. 2017. "Under Pressure: Translation in Times of Austerity". *Perspectives* 25 (3): 464–477. [https://www.researchgate.net/publication/313886822\\_Under\\_pressure\\_translation\\_in\\_times\\_of\\_austerity](https://www.researchgate.net/publication/313886822_Under_pressure_translation_in_times_of_austerity)
- Moorkens, Joss. 2020. "A Tiny Cog in a Large Machine: Digital Taylorism in the Translation Industry." In *Translation Spaces: Fair MT – Towards Ethical, Sustainable Machine Translation*, 9 (1): 12–34, by Joss Moorkens, Dorothy Kenny, Félix do Carmo. (Eds). John Benjamins Publishing Company. <https://doi.org/10.1075/ts.00019.moo>
- Moorkens, Joss, and Davis Lewis. 2019. "Research Questions and A Proposal for the Future Governance of Translation Data". *The Journal of Specialised Translation*, no. 32.
- Moorkens, Joss, and David Lewis. 2020. "Copyright and the Reuse of Translation as Data". In *The Routledge Handbook of Translation and Technology* by Minako O'Hagan. (Ed.): 469–81. Abingdon: Routledge.
- Moorkens, Joss and Marta Rocchi. 2020. "Ethics in the Translation Industry". In *The Routledge Handbook of Translation and Ethics* by Kaisa Koskinen and Nike Pokorn. (Eds). Abingdon, UK: Routledge. <https://doi.org/10.4324/9781003127970-24>
- Moulrier-Boutang, Yann. 2008. *Cognitive Capitalism* [orig. *Le Capitalisme Cognitif*]. Translated by Ed Emery. 2011. Cambridge: Polity Press.
- Muzii, Luigi. 2018. *Upstream*. Independently e-published. Accessed May 2021.
- Nimdzi. 2020. *Size and State of the Language Services Industry Today*. [Webinar]. Accessed May 2020. <https://www.nimdzi.com/webinar-the-size-and-state-of-the-language-services-industry-today/>
- O'Brien, Sharon. 2012. "Translation as Human-Computer Interaction". *Translation Spaces* 1 (1): 101–122. <https://doi.org/10.1075/ts.1.05obr>
- O'Hagan, Minako. (ed). 2020. *The Routledge Handbook of Translation and Technology*. London and New York: Routledge.

- Olohan, Maeve. 2017. "Technology, Translation and Society: A Constructivist, Critical Theory Approach." *Target, Special Issue: Translation in Times of Technocapitalism* 29 (2): 264–283. [https://www.researchgate.net/publication/318023875\\_Technology\\_translation\\_and\\_society\\_A\\_constructivist\\_critical\\_theory\\_approach](https://www.researchgate.net/publication/318023875_Technology_translation_and_society_A_constructivist_critical_theory_approach)
- Open Translation. 2011. *Open Translation Tools*. [E-book]. Accessed May 2021. [http://archive.flossmanuals.net/\\_booki/open-translation-tools/open-translation-tools.pdf](http://archive.flossmanuals.net/_booki/open-translation-tools/open-translation-tools.pdf)
- Pettersen, Lene. 2017. "Rating Mechanisms Among Participants in Sharing Economy Platforms." *First Monday* 22 (12–4). <https://doi.org/10.5210/fm.v22i12.7908>
- Pielmeier, Hélène, and Paul O'Mara. January 2020. "The State of the Linguist Supply Chain: Translators and Interpreters in 2020". *CSA Research*. Accessed May 2021. <https://insights.csa-research.com/reportaction/305013106/Toc>
- Rodríguez-Castro, Mónica. 2015. "Conceptual Construct and Empirical Validation of A Multifaceted Instrument for Translator Satisfaction". *The International Journal of Translation and Interpreting Research* 7 (2): 1–21. <https://doi.org/10.12807/ti.107202.2015.a03>
- Sadek, Gafar. 2018. "Translation: Rights and Agency – A Public Policy Perspective for Knowledge, Technology and Globalization". PhD thesis. University of Ottawa. [https://ruor.uottawa.ca/bitstream/10393/37362/1/Sadek\\_Gaafar\\_2018\\_thesis.pdf](https://ruor.uottawa.ca/bitstream/10393/37362/1/Sadek_Gaafar_2018_thesis.pdf)
- Şahin, Mehmet. 2013a. "Using MT Post-Editing for Translator Training". *Tralogy*, II(6). Retrieved from <http://lodel.irevues.inist.fr/tralogy/index.php?id=255>
- Şahin, Mehmet. 2013b. Technology in Translator Training: The Case of Turkey. *Hacettepe University Journal of Faculty of Letters* 30 (2): 173–190.
- Şahin, Mehmet. 2016. Translation Technologies for a Less Commonly Translated Language: Promises and Challenges. *Translatologia*, 1(1). Retrieved from <http://www.translatologia.ukf.sk/2017/01/translation-technologies-for-a-less-commonly-translated-language-promises-and-challenges/>
- Şahin, Mehmet, and Neslihan Kansu-Yetkiner. November 2020. "From Translation Market to Translation Curriculum: Psychosocial and Physical Ergonomics in Turkey". *The Interpreter and Translator Trainer* 14 (4): 440–460. <https://doi.org/10.1080/1750399X.2020.1843123>
- Saner, Raymond, Lichia Yiu, and Melanie Nguyen. 2019. "Platform Cooperatives: The Social and Solidarity Economy and the Future of Work". In *UNTFSSSE International Conference*. Accessed May 2021. <https://knowledgehub.unsse.org/knowledge-hub/platform-cooperatives-the-social-and-solidarity-economy-and-the-future-of-work/>
- Santos, Boaventura de Sousa. 2014. *Epistemologies of the South: Justice Against Epistemicide*. London: Routledge.
- Schmidt, Florian A. 2017. *Digital Labour Markets in the Platform Economy*. Friedrich-Ebert-Stiftung. Accessed May 2021. <https://library.fes.de/pdf-files/wiso/13164.pdf>
- Scholz, Trebor. 2016a. *Platform Cooperativism: Challenging the Corporate Sharing Economy*. New York: Rosa Luxemburg Stiftung. Accessed May 2021. [https://rosalux.nyc/wp-content/uploads/2020/11/RLS-NYC\\_platformcoop.pdf](https://rosalux.nyc/wp-content/uploads/2020/11/RLS-NYC_platformcoop.pdf)
- Scholz, Trebor. 2016b. *Überworked and Underpaid: How Workers are Disrupting the Digital Economy*. Cambridge: Polity Press.
- Scholz, Trebor, and Nathan Schneider. (Eds). 2016. *Ours to Hack and to Own: The Rise of Platform Cooperativism, A New Vision for the Future of Work and a Fairer Internet*. New York: OR Books. <https://doi.org/10.2307/j.ctv62hfg7>

- Siddiqui, Yasir, and Tiberius Brastaviceanu. 2013. "Open Value Network: A Framework for Many-to-Many Innovation." Montreal, Canada: Sensorica. Accessed May 2021. [https://www.researchgate.net/publication/264044245\\_Open\\_Value\\_Network\\_A\\_framework\\_for\\_many-to-many\\_innovation](https://www.researchgate.net/publication/264044245_Open_Value_Network_A_framework_for_many-to-many_innovation)
- Slator. 2020. "Smartcat Raises USD 14.6m in Series B to Scale TMS Tech, Marketplace". *Slator*. Accessed May 2021. <https://slator.com/ma-and-funding/smartcat-raises-usd-14-6m-in-series-b-to-scale-tms-tech-marketplace/>
- Srnicek, Nick. 2017. *Platform Capitalism*. Polity Press.
- Stepes. May 2021. "More Uber Than Uber." [Website Log]. *Stepes*. <https://www.stepes.com/translators/more-uber-than-uber/>
- TAUS. 2017. *The Translation Industry in 2022*. Amsterdam: TAUS. Accessed May 2021. <https://www.taus.net/insights/reports/the-translation-industry-in-2022>
- TAUS. 2018. *Translators in the Algorithmic Age*. Amsterdam: TAUS. Accessed May 2021. <https://www.taus.net/insights/reports/translators-in-the-algorithmic-age>
- Türk-İş. July, 2019. "The Starvation and Poverty Line for a Family of Four in Turkey (TL/month)". *TÜRK-İŞ Newsletter*. <http://www.turkis.org.tr/TEMMUZ-2019-ACLIK-ve-YOKSULLUK-SINIRI-d268748>
- Türk-İş. April, 2021. "The Starvation and Poverty Line for a Family of Four in Turkey (TL/month)". *TÜRK-İŞ Newsletter*. <http://www.turkis.org.tr/NISAN-2021-ACLIK-VE-YOKSULLUK-SINIRI-d509757>
- Tymoczko, Maria, Ed. 2010. *Translation, Resistance, Activism*. Amherst, MA: University of Massachusetts Press.
- Unbabel. 2019. "Unbabel Raises \$60M Series C to Become the World's Translation Layer". [Blog]. Accessed May 2021. <https://resources.unbabel.com/press-releases/unbabel-raises-60m-series-c-to-become-the-translation-layer-of-the-internet>
- Urzi Brancati, Cesira, Annarosa Pesole, and Enrique Fernández-Macías. 2019. *Digital Labour Platforms in Europe: Numbers, Profiles, and Employment Status of Platform Workers*. Luxembourg: Publications Office of the European Union. [https://doi.org/10.2760/16653\\_JRC117330](https://doi.org/10.2760/16653_JRC117330). <https://ec.europa.eu/jrc/en/publication/digital-labour-platforms-europe-numbers-profiles-and-employment-status-platform-workers>
- Vashee, Kirti. 2017. "Data Security Risks with Generic and Free Machine Translation". *Medium*. Accessed May 2021. <https://itnext.io/data-security-risks-with-generic-and-free-machine-translation-d0ce53596815?gi=bc1d74dede48>
- Vaughan, Rober, and John Hawksworth. 2014. "The Sharing Economy: How Will It Disrupt Your Business? Megatrends: The Collisions". *PricewaterhouseCoopers*. [https://pwc.blogs.com/files/sharing-economy-final\\_o814.pdf](https://pwc.blogs.com/files/sharing-economy-final_o814.pdf)
- Vercellone, Carlo, Francesco Brancaccio, Alfonso Giuliani, Federico Puletti, Giulia Rocchi, and Pierluigi Vattimo. 2018. "Data-Driven Disruptive Commons-Based Models". *DECODE*. <https://halshs.archives-ouvertes.fr/halshs-01952141/document>

## Address for correspondence

Gökhan Firat  
Centre for Translation Studies  
School of Literature and Languages  
University of Surrey  
Guildford, Surrey, GU27XH  
United Kingdom  
[g.firat@surrey.ac.uk](mailto:g.firat@surrey.ac.uk)