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The gender of the platform economy

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Abstract: The COVID-19 crisis has accelerated the expansion of the platform economy (PE), which promotes working from distributed places mediated by digital platforms, and is disrupting work and life organisation. To date, PE effects on gender equality are largely unexplored, while in parallel gender equality achievements are recoiling, and gender-based violence has intensified. This special issue aims at contributing to cover this gap, and address the state of the art of the research on the interplay between platform economy and gender. The introduction to the special issue provides an overview of the topic and of the special issue contributions.

Special issue editors

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PAPERS IN THIS SPECIAL ISSUE

↓ **EDITORIAL: Introduction to the special issue on 'The gender of the platform economy'**

Mayo Fuster Morell, *Universitat Oberta de Catalunya*

"Doing gender" by sharing: examining the gender gap in the European sharing economy

Thomas Eichhorn, *German Youth University*

Christian Hoffmann, *Leipzig University*

Katharina Heger, *Freie Universität Berlin*

Platform as new "daddy": China's gendered wanghong economy and patriarchal platforms behind

Xiaofei Han, *Carleton University*

Don't blame the internet: it has little to do with gender inequality in crowd work

Branka Andjelkovic, *CENTAR, Public Policy Research Center*

Tanja Jakobi, *CENTAR, Public Policy Research Center*

Addressing gendered affordances of platform economy. The case of UpWork

Elisabetta Stringhi, *University of Milan*

Hidden inequalities: the gendered labour of women on micro-tasking platforms

Paola Tubaro, *National Centre for Scientific Research (CNRS)*

Marion Coville, *University of Poitiers*

Clément Le Ludec, *Institut Polytechnique de Paris*

Antonio A. Casilli, *Institut Polytechnique de Paris*

Visibility layers: a framework for systematising the gender gap in Wikipedia content

Pablo Beytía, *Humboldt University of Berlin*

Claudia Wagner, *RWTH Aachen University*

Assessing gender inequality in digital labour platforms in Europe

Paula Rodríguez-Modroño, *Pablo de Olavide University*

Annarosa Pesole, *European Commission*

Purificación López-Igual, *Pablo de Olavide University*

Governing invisibility in the platform economy: excavating the logics of platform care

Vicky Kluzik, *Goethe University Frankfurt*

Governable spaces: a feminist agenda for platform policy

Nathan Schneider, *University of Colorado Boulder*

Feminist policy and platform economy: insights, methods and challenges

Sonia Ruiz García, *Independent researcher*

Platform capitalism's social contract

Niels Van Doorn, *University of Amsterdam*

EDITORIAL

Introduction to the special issue on 'the gender of the platform economy'

The platform economy (PE)—also known as the collaborative platform economy or the sharing economy—is used as a floating signifier for the collaborative production, consumption and distribution of work and capital among disseminated groups of people supported by digital platforms. The PE is growing rapidly and exponentially, generating great interest. The situation created by COVID-19 has accelerated the digitalisation and platformisation of the economy, and is disrupting the organisation of work and life.

From the start, the PE was greeted as a more open, inclusive, democratic, and ecological model when compared to the traditional economy (Algar, 2007; Botsman & Rogers, 2011; Cohen & Kietzmann, 2014; Heinrichs, 2013; Gansky, 2010). However, in the study of the relationship between PE and gender, there is currently a significant gap between what is known and what would be desirable to know (Schoenbaum, 2016). PE effects on gender equality are largely uninvestigated. In parallel, gender equality is declining. Some of the gender equality achievements of the last decades are not progressing or even receding, while new forms of gender inequality emerge (EIGE, 2020). This special issue aims to contribute to addressing this gap. This introduction presents the state of the art related to research on gender and the platform economy, and the set of papers included provide a rich overview of the key issues at the intersection of gender and digital platforms. Overall, this special issue contribute with a representative sample of the diverse areas of economic activity in which the platform economy is developing (such as e-commerce, the gig-crowd world, or care), and of the diverse models of platforms (from more social ones, such as Wikipedia, to more profit-oriented types, such as...), while considering the global dimension of the phenomenon with cases from four continents (Africa, Asia, Europe, and North America).

The set of articles also provides good examples of the diverse conceptions of gender cohabiting in the field (from gender as a women's issue to deep feminist theory engaging with gender as a patriarchal power system). Both theoretical and empirical papers frequently start from intersectional frameworks.

The papers in this special issue include theoretical and empirically-based approaches, both quantitative and qualitative, including surveys, case focus or case comparison. Most of the empirical contributions address a plural set of issues connected to gender inequality in access to resources and participation, such as dis-

crimination, gender hierarchies, pay gaps and role segregation (Beytía & Wagner; Eichhorn, Hoffmann, & Heger; Han; Andjelkovic & Jakobi; Tubaro, Coville, Le Ludec, & Casilli,). One paper discusses how technological architectures reflect gender dynamics (Schneider). Other papers deal with the care gap (Kluzik; Rodríguez-Modroño, Pesole, & López-Igual) and work-life balance issues, as well as gender-based violence (Stringhi). Several touch on public policy recommendations pointing to the urgency of gender approaches in policy-making, one of which specifically focuses on the gender mainstreaming of policies (Ruiz). Finally, an theoretical essay adopts a more grounded approach to the political social contract of the platform economy (van Doorn).

The special issue is edited by Mayo Fuster Morell and Ricard Espelt of the Dimmons research group and David Megias of the K-riptography and Information Security for Open Networks (KISON) research group, both part of the Internet Interdisciplinary Institute (IN3) at Universitat Oberta de Catalunya (UOC). It was done in collaboration with the Barcelona Chair in Digital Economy—a joint action with the City Council of Barcelona and Barcelona Activa.

Platform economy

The digital revolution has resulted in the spread of the **platform economy**, which refers to the production, consumption and distribution of work and capital among physically dispersed groups supported by digital platforms (Benkler, 2006; Botsman & Rogers, 2010; Castells, 1999). The PE is growing rapidly and exponentially (Codagnone et al., 2016; Kenney et al., 2020), generating great interest. The situation created by COVID-19 has even further accelerated the digitalisation and platformisation of the economy transforming the entire economic model.

In the EU, around 11% of the workforce state they have already provided services through a platform (Urzi Brancati et al., 2020; CEPS, 2021). In North America, approximately 8% of nationals have worked as part of an invisible workforce (Gray & Suri, 2019), and in the Global South, an estimated 40 million people are platform workers (Graham et al., 2020). Finally, the Online Labour Index (OLI) signals that there has been an increase in web-based labour supply of 150% since 2017 (ILO, 2021). Telework was becoming more prevalent in Europe in the decade preceding the COVID-19 pandemic but it was still a slim percentage (around 10%). However, in July 2020 nearly half the employees in the Eurofound e-survey worked at home at least some of the time, and a third reported working exclusively from home (Sostero et al., 2020).

One of the distinctive characteristics of collaborative production through a digital platform is its versatility: cases of peer-to-peer production and consumption based on collaborative initiatives supported by digital platforms have emerged in a wide variety of sectors and areas of business. But more than just a sector of the economy, the PE is becoming a pillar of the emerging model of production and consumption which is gradually disrupting most sectors of economic activity. The role of manufacturers in the industrial era has been replaced by platforms in the digital one.

The PE includes a variety of forms and terms such as “commons-based peer production” (Bauwens & Kostakis, 2014; Benkler, 2006), “the collaborative economy” (Botsman & Rogers, 2011), and “the sharing economy” (Codagnone et al., 2016; Schor, 2016; Sundararajan, 2016). Well-known pioneering examples include initial cases of free/open-source software and Wikipedia, but it has expanded to online microwork (e.g. Upwork), mobility services (e.g., Blablacar ride-sharing, Uber taxi services), food delivery (e.g. Deliveroo), and care (e.g. Care.com), among others. At least 33 types of economic activities have been identified (Fuster Morell & Espelt, 2019), from software production to home-sharing, transport, and food delivery. However, most existing research has only focused on a few sectors, such as vacation rental platforms like Airbnb and taxi services like Uber (Codagnone, 2016, 2022; van Doorn, 2018). Platform work refers to the working conditions of platform workers; similar terms include crowd work and gig work (Codagnone et al., 2016; Coyle, 2016; De Groen et al., 2016; De Stefano, 2015; Drahokoupil & Fabo, 2016; Frenken & Schor, 2017; Kilhoffer et al., 2019; Martin, 2016).

Another characteristic of collaborative production is the variety of forms it may take, from social economy, scaling up platforms or open cooperatives (Scholz & Schneider, 2016) to the most ferocious capitalist corporate spirit (Srnicsek, 2017). The platform economy can be based on mainstream profit-oriented models, known as ‘platform capitalism’ (Srnicsek, 2016), or alternative prosocial models around cooperativism and democratic organisations, known as ‘platform cooperativism’ (Bauwens & Kostakis, 2014; Scholz, 2016). Platform cooperativism can become large-scale, such as Smart—a cooperative of cultural freelancers operating through a digital platform that has reached more than 150,000 members in Europe (Vercellone et al., 2018). However, most research has largely focused on profit-oriented models (Langley & Leyshon, 2017), while alternative prosocial models are under-researched (Srnicsek, 2016). Widely-known platform economy definitions still display a bias towards mainstream models like Airbnb, Uber, Deliveroo, and Taskrabbit (Sundararajan, 2016). These definitions generalise the characteristics of these

models toward the entire platform economy ecosystem (Laukkanen & Tura, 2020).

PE was initially characterised as a more open, inclusive, democratic and ecological model (Algar, 2007; Botsman & Rogers, 2011; Cohen & Kietzmann, 2014; Heinrichs, 2013; Gansky, 2010). Virtually all exchange sites and digital platforms within the platform economy explicitly advocate for open access and equality of opportunity (Schor et al., 2016), although there is little evidence to corroborate these assumptions, particularly regarding gender equality. The platform economy presents challenges for gender equality (ibid.) and different authors argue that this model reproduces gender, race, and class hierarchies and biases (Edelman & Luca, 2014; Schor, 2014).

State of play of the platform economy and gender equality

Gender equality is a fundamental human right, even as it continues to be a not achieved right and global goal (UNFPA, 2020). It is defined by three pillars: the state of equal ease of access to resources and opportunities regardless of gender, equal participation in decision-making, and freedom from all forms of violence according to the European Commission (EC) and United Nations (EC 2020: Gender Equality Strategy 2020-2025; UNDP 2018: Gender Equality Strategy 2018-2021). The situation created by **COVID-19** has added further challenges such as the increase of gender based violence and the unequal distribution of care work (UNFPA, 2020; United Nations 2020). Is the expansion of the platform economy favouring or prejudicing gender equality?

There is no single understanding of 'gender' among scholars (Butler, 1990), which reflects the richness of the issue. Fuster Morell and Grau's Systematic Literature Review (SLR) on gender approaches in the digitally mediated economy (Fuster Morell & Grau, 2021) highlights the lack of publications and diversity of gender approaches. A feminist theory of technology and information and communications technology (ICT) approach, a feminist political economy approach, and, finally, a mainstream economic analysis and women's participation and labour in the digital economy approach.

A first set of works developed from the **feminist theory of technology and information and communications technology (ICT)**, based on a feminist approach to ICT and digital technology but with no specific economic dimension, includes Asiedu (2012), Bath (2014), Cockburn & Ormrod (1993), D'Ignazio & Klein (2020), Dimond, Fiesler, & Bruckman (2011), Faulkner (2001), Fotopoulou (2016), Fountain (2000),

Gurumurthy & Chami (2017), Haraway (2006), Perez (2019), Plant (1997), Shaw (2014), sm Kee, J. (2017), VNS Matrix (1995), Wajcman (2004, 2007, 2010), Wyatt (2008), and Youngs (2005, 2015). Technology is not gender-neutral; the gender dynamics embedded in technology maintain the patriarchal system which oppresses women (Cockburn & Ormrod 1993; Faulkner, 2001; Wajcman, 2010), and new gender-based practices throughout technology serve as a mechanism of control (Powell & Henry, 2017). Since the early 1990s, there has been extensive research relating to the tradition of feminist theories of technology, gender studies of technology, and technofeminism. Many of these studies have historically been motivated by a desire for political change (Wyatt, 2008), but the economic consequences of such gender inequalities remain insufficiently studied.

A second set of works is on the **feminist political economy**, characterised by political and feminist economics on power and economics but with no specific ICT dimension, starting from a critical analysis of the hegemonic economy. It included some of the feminist and political critics of the hegemonic value creation system, such as the value of immaterial labour (Fortunati, 2007; Hardt & Negri, 2000; Jarrett, 2015; Terranova, 2000) to the new digital production (Huws, 2003). This includes analyses of the platform economy from political economy perspectives, such as the analysis of the largely invisible work in platform work, and from this, consideration between the connection of historical tendencies on domestic labour and on-demand services platforms (Huws, 2019b; Van Doorn, 2017). There is the necessity to not only adopt a microeconomy business dimension of the platform economy but also a macroeconomic and global perspective, given that the platform economy is geographically polarised, with data and tasks being bought in the Global North and sold in the Global South. This division of work replicates other historical patterns of economic colonialist domination and global chains of productive and reproductive systems (Duffy, 2007; Graham et al., 2020; Gurumurthy, 2012; Gurumurthy, Chami, & Thomas, 2016; Huws, 2003, 2019; Lee, 2011; Van Doorn, 2017; Waldby & Cooper, 2010).

Finally, the third approach, **mainstream economic analysis and women's participation and labour in the digital economy**, may be the most visible because it includes some of the works of international institutions such as the World Bank Group (WBG, 2016) and the Organisation for Economic Co-operation and Development (OECD, 2017). From this literature, gender analysis is reduced to 'women' and lacks a feminist critical framework on ICT and other critical economy analysis of a mainstream economic dimension. There is a focus on 'women and men's' differences in access and participation, and, in some respects, this may contribute to a limited

understanding of how gender relations start with the conceptualisation of economic activity itself, the technological design, and so on. This research approach addresses the study of the nature and areas of gender divides (Herbert, 2017) located in specific regions such as Europe (Davaki, 2018), and identifies women's disparities in access, capacity to use, and ways of engaging with ICT (UNCTAD, 2019). It also offers actions to reduce the gender digital divide through policy interventions (Ambujam & Venkatalakshmi, 2009) at the European level (Davaki, 2018), and ways to promote female talent in STEM professions (Propel London, 2019; Rowntree, 2020; WISE, 2017), including a focus on developing countries (Sharmin, 2019) and encouraging girls to study and choose STEM careers (Ansip, 2016). Research also examines the gender difference in the occupational structure of the digital economy (Piasna & Drahoukoupil, 2017), and the gender pay gap (Foong et al., 2018). Secondly, this research approach also addresses the time and space flexibility in work that the digital economy may bring about (Schoenbaum, 2016; Carchio, 2019; Ravanera, 2019; World Bank Group, 2016). Even if their contributions are relevant to understanding equal access, these authors do not engage with feminist economic theory. Their work on the discriminatory dimension of the platform economy focuses on the involvement of women, discriminatory practices, and ratios. But they do not analyse the core conception of the economy behind the platform economy cases such as what is the purpose of the economy, and the power dynamics in the capitalist system.

In these three approaches to the study of gender, diversity comes from how gender is defined. Thus, a gender approach from an understanding of gender as a binary social category offers a descriptive-level analysis, describing empirical differences between men and women but without analysing or explaining the reasons for them, or connecting them to structural elements. Conversely, a gender approach from a deeper understanding of gender as a power structure of inequalities involves structural analysis of inequalities. The differences between gender analysis in feminist research and in other non-feminist research lie mainly in the latter using a feminist theoretical framework and using the term 'gender' to replace the term 'women' (Ackerly & True, 2019). These different understandings of gender can be considered as anchor points within a spectrum of diverse gender approaches. Each has strong points and relevant dimensions to consider regarding the interplay between the platform economy and gender equality despite limits in the analysis of gender in digital settings, a lack of a comprehensive integration of the three gender approaches, and lack of an interdisciplinary approach where the platform economy is involved in the intersection of the economy, technology and gender.

Gender analysis in platform economy studies

A **focus on gender analysis in platform economy studies** points to a limited set of works (EIGE, 2020), mostly from the third gender approach of **mainstream economic analysis and women's participation and labour in the digital economy**, some from the second **feminist political economy**, and very few from the first **feminist theory of technology and ICT**.

In addition, the existing works are dispersed and do not provide a complete view of **gender equality principles**. Several streams of platform economy studies have analysed specific dimensions of the first two dimensions of gender equality in the platform economy: equal access and participation. The first set of analyses focuses on the equal conditions of **access to technology and ICT skills** (EIGE, 2020). Not a very diverse percentage of access to technology appears, no matter what the gender (Herbert, 2017; UNCTAD, 2019); however, more differences are present in terms of skills (Propel London, 2019; Rowntree, 2020; WISE, 2017). Another set of studies focuses on **women's inclusion in platform work** (Eurobarometer, 2016; Smith, 2016). The emerging evidence suggests that platform work seems to reproduce the well-established gender exclusion, segregation, and gender gap present in the broader economy (EIGE, 2020; Freeman, 2010; Mirchandani, 2010; Overseas Development Institute, 2019; Rubery & Fagan, 1993; Schor, 2016, 2017, 2020). However, gender-disaggregated quantitative data on platform work is, in general, very limited and does not allow for deep analysis. The most widely used information in Europe, the COLLEM survey, is limited to a number of European Union member states and very limited gender-disaggregated data (Forde et al., 2017; Urzì Brancati et al., 2020).

Very few of the studies come from an **intersectional perspective** (Crenshaw, 1989). From the point of view of multivariable discrimination analysis, different authors argue that the platform economy, as well as gender, reproduces race and class hierarchies and biases (Edelman & Luca, 2014; Graham et al., 2020; Huws, 2019a; Schoenbaum, 2016; Van Doorn, 2017).

From socio-technical systems and a focus on the social implications of the **technological base of the platform**, several analyses indicated how apparent neutral approaches to technological design reveal biased gendered assumptions (Broussard, 2018; Bucher & Helmond, 2018; Davis & Chouinard, 2016; D'Ignazio & Klein, 2020; Llewellyn Evans, 2017; Marwick, 2014; Massanari, 2015; Nagy & Neff, 2015; Nakamura, 2014; Noble, 2018; Rosner, 2018). For platform economy algorithms, their analysis points to a concern with the platform economy's use of algorithmic

management and the adoption of gamification techniques, which enable intensive forms of surveillance and reinforced discrimination (Zuboff, 2019), and may also reproduce gender stereotypes (Kenny & Donnelly, 2020). Specific analyses have also been conducted on gender and platform data, which point towards the need to adopt a gender perspective in data (D'Ignazio & Klein, 2020).

Another set of studies on the intersection of platform economy and gender equality has focused on **work-life balance** with inconclusive results (Huws et al., 2018). While platform work has been celebrated as a flexible alternative to traditional employment for those with family responsibilities (Singer, 2014), this seems to be at the cost of reinforcing the unequal distribution of care work, with platform employment being an option for keeping women at home while they perform paid work (EIGE, 2020; Huws, 2019a). Conversely, the development of online platforms for household services, ranging from food delivery to cleaning, offers new solutions for providing such services as a substitute for unpaid household labour. However, this work is precarious, as the providers of platform work care services, mostly women, are poorly protected and find it difficult to exercise basic employment rights (EIGE, 2020; Gregg, 2011).

All of this shows that current platform economy studies on gender have tackled fragmented elements of the literature regarding equal access and equal participation. However, a pillar of gender equality missing in the gender analysis of the platform economy is gender-based violence at work in the digital platform or at home while working, in the context of intimate partner violence, or in any other way. In summary, while the 2020s are seeing the rise of the fourth wave of the feminist movement, initial studies on gender dynamics in the emerging economic model of production do not indicate that technology might contribute to reducing gender inequality. On the contrary, it may reinforce it.

Status on the interplay between public policy design and gender equality, platform economy regulations and public policies

The platform economy has become a top priority for governments around the world (Codagnone & Martens, 2016; Hong & Lee, 2018). Furthermore, the situation created by COVID-19 has increased the importance and role of policy interventions in the economy. Global institutions are addressing the issue, and the platform economy is seen as a way out of the economic crisis arising from COVID-19. At the European level, institutions have developed new regulations for the platform economy, such as the European Agenda for the Collaborative Economy (European Commission, 2016). The European Committee of the Regions (CoR) asked for

the promotion of prosocial models of the platform economy (Florianschütz, 2019).

City governments have to confront the greatest challenges and opportunities (Davidson & Infranca, 2016; Mont et al., 2020; Voytenko Palgan et al., 2021). In 2018, 50 cities worldwide celebrated a Sharing Cities Summit and signed 'A declaration of common principles and commitments for city sovereignty regarding the platform economy' (see Sharing Cities Declaration, 2018), where one of its principles is to promote gender equality and inclusion in the platform economy. For cities in particular, it is of great interest how policy-making could favour an equitable and sustainable shift in the PE as a way out of the COVID-19 economic crisis. However, the PE occurs in a regulatory vacuum, with unsystematic policy reactions and uncertainty as to which policies may be more beneficial. This is a trend that, together with its novelty, raises several questions about not only what substantive policies to adopt, but also how policy-making could adapt, take advantage of and respond to the PE, its effects and potential (Pais & Provasi, 2015).

The innovative nature of the PE (connected to co-creation practices and digital tools) makes it a particularly suitable sector for the deployment of collaborative policy-making and public innovation (Rodriguez & Fuster Morell, 2018), opening up possibilities for policy innovation (Davidson & Infranca, 2016). That said, it still seems necessary to deepen the interrelation between this type of market disruption and new ways of experimenting in policy-making (Mazzucato, 2016).

However, despite the importance of such policies, research is limited and the platform economy runs in a regulatory grey zone, with unsystematic policy reactions and uncertainty as to which policies may be more beneficial (Pais & Provasi, 2015).

Gender equality is promoted by policies generally. One of the more recent policy steps towards gender equality is the **UN 2030 Agenda for Sustainable Development Goal 'Achieve gender equality and empower all women and girls'**, and the other 16 goals are also infused with a concern for gender equality. However, there are few specific policies connecting gender equality policies with the concrete public policies which would make them effective, especially when it comes to the platform economy specifically. The policy goals lack public policies which deploy current legislation to improve the interaction between gender legal instruments and policy-making (Kantola and Lombardo, 2017). Moreover, platform work poses challenges for the application of gender equality and non-discrimination legislation in the area of employment (EIGE, 2020). Most platform workers are classified as self-employed or independent contractors, which results in limited access to social and work protection measures, including those essential for achieving gender

equality. In addition, it is unclear if gender equality plans could adapt to platforms. For example, there is no consideration of the gender dynamics embedded in technologies to ensure that the algorithms operating in the platform are not based on sexist stereotypes, as is suggested by research (Bucher & Helmond, 2018). There is also a troubling lack of gender-disaggregated data on platform work to inform policy design.

The EU Gender Equality Strategy 2020–2025 observes that integration of a gender perspective in the digital economy is essential to reach the goal of gender equality. However, there is very limited treatment of equality issues in digital policy, even if equal digital access and digital skills have attracted some attention, such as the participation of girls and women in STEM and ICT education (Davaki, 2018; Herbert, 2017; Ravanera, 2019).

In addition, most empirical analyses of the platform economy have concerned microeconomics on single platforms, while a macroeconomic perspective on the platform economy has rarely been attempted (Codagnone, 2016), and there is a lack of gender disaggregated data. This limits the knowledge available to inform public policy design and the empirical characterisation of platform economy expansion.

In summary, there is a lack of research on public policy regulation of the platform economy, particularly regarding a gender perspective, and the adaptation of current gender equality policy regulations to digital platforms.

Raising questions on the platform economy and gender equality

Some of the questions addressed in this issue, and other questions at the intersection of platform economy and gender equality, are related to the PE impact, addressing the general question of how the expansion of the PE favours gender equality, how the PE handles diversity and how gender interacts with other axes of exclusion (such as race, social, and origin). Another set of questions are related to the design of the platform economy, such as how the technological and economic base and the different models of the PE—more socially oriented vs. more extractionist oriented—perform in terms of gender inclusion and diversity. Finally, another anchor of research analyses the context and policy implications of the platform economy.

Papers in this issue

“Doing gender” by sharing: examining the gender gap in the European sharing economy, by Thomas Eichhorn, German Youth University, Munich; Christian P. Hoffmann, Leipzig University; and Katharina Heger, Freie Universität Berlin

Abstract: In this study, we apply Van Dijk’s digital technology access model to examine the role of gender in access to the sharing economy. Based on survey data collected from twelve European countries (N=6111), we find that access to the sharing economy is gendered, with men capitalising on a stronger economic position, while women rely more on cultural and social capital. We relate our findings to intersectionality theory by discussing how class and gender intersect in facilitating sharing participation. Furthermore, we apply a “doing gender” perspective to explain how the sharing economy may both represent and reinforce gender identities through distinct habitual dynamics.

Platform as new “Daddy”: China’s gendered wanghong economy and patriarchal platforms behind it, by Xiaofei Han, Carleton University, Ottawa

Abstract: This paper provides an explorative analysis of gender as a critical dimension of the prospering wanghong economy in China with special attention devoted to the under-researched e-commerce wanghong value chains. While the wanghong economy is often projected as a new platform economy that is by and for the media-savvy women, my analysis highlights the structurally embedded gender hierarchy of this platform business ecosystem. Ultimately, this paper seeks to connect the industrial analysis of the wanghong economy as one of the most prominent “platform economies” in contemporary China with its cultural dimensions. The findings highlight the critical role of major Chinese platform companies as not only new critical intermediaries in perpetuating the ongoing patriarchal system between the state and users but also as active participants that aggressively profit from their construction of gendered wanghong economy value chains.

Don’t blame the internet: it has little to do with gender inequality in crowd work, by Branka Andjelkovic and Tanja Jakobi, CENTAR Public Policy Research Center, Belgrade

Abstract: Before Covid-19, an emerging body of research had questioned whether digital technologies and the platform economy might promote the empowerment of women, only to arrive to either positive (Elance 2013; OECD, 2018) or negative conclusions (Martinez Dy, Martin & Marlow, 2018). Studies have frequently focused

on the ability of digital solutions to mediate simple tasks and so lead to more jobs for women (Eurofound, 2019), whilst few examined the careers of women crowd workers whose digital literacy and educational attainment were identical to or higher than those of men. Research that did look at careers in the digital and on-line world often prized them offering flexible working hours that catered to women juggling professional obligations with domestic chores (Hyperwallet, 2020), but questioned the neutrality of the internet in terms of reproducing offline inequality in the online environment (Martines Dy Martin & Marlow, 2018, Galperin, 2019).

Puzzled by this dilemma, we approached this multifaceted issue by examining the careers of Serbian female crowd workers on global online platforms such as Freelancer, Guru, Upwork and the like, and compared them with those of their male colleagues. We felt that Serbia offered an excellent opportunity for this kind of examination. Firstly, for a number of years, the country has been highlighted as one of the largest per capita contributors of digital platform workers/freelancers in relation to the active workforce (OLI, 2020; AnalyticsHelp, 2018; Payoneer, 2019; Kuek et al., 2015). Furthermore, as research done by CENTAR and others has pointed out, women accounted for a significant share of this population, their participation varying from 32 to 40 percent depending on when the data were collected.

Addressing gendered affordances of platform economy. The case of UpWork, by Elisabetta Stringhi, University of Milan

Abstract: Addressing the gendered affordances of digital platforms is a public policy key goal to empower women in the Platform Economy. This paper discusses how innovative policy-making should consider the specific properties of platform design contributing to the reinstatement of cyberviolence performed on a misogynist basis.

Hidden inequalities: the gendered labour of women on micro-tasking platforms, by Paola Tubaro, National Centre for Scientific Research (CNRS); Marion Coville, University of Poitiers; Clément Le Ludec and Antonio A. Casilli, Institut Polytechnique de Paris

Abstract: Around the world, myriad workers perform micro-tasks on online platforms to train and calibrate artificial intelligence solutions. Despite its apparent openness to anyone with basic skills, this form of crowd-work fails to fill gender gaps, and may even exacerbate them. We demonstrate this result in three steps. First, women's access to these platforms depends on the state of national labour

markets. Second, inequalities in both domestic and professional spheres turn micro-tasking into a 'third shift' that adds to already heavy schedules. Finally, the human and social capital of male and female workers differ – leaving women with fewer career prospects within a tech-driven workforce.

Visibility layers: a framework for systematising the gender gap in Wikipedia content by Pablo Beytía, Humboldt University, Berlin; Claudia Wagner, RWTH Aachen University

Abstract: The gender gap in Wikipedia content is a complex phenomenon that comprises several asymmetries, discursive dimensions, and social concerns. However, there is no theoretical framework to organise this complexity consistently. Based on writings by Foucault, Deleuze and Tkacz, we interpret Wikipedia as a 'field of visibility' and provide a framework to analyse its content gaps. Then we use that model to organise the complexity of the content gender gap, performing a systematic overview of the asymmetries tested in empirical research. We suggest that this analysis is relevant for the effective planning of governance processes that seek to avoid women's subordination in digital platforms' discourses.

Assessing gender inequality in digital labour platforms in Europe, by Paula Rodríguez-Modroño, Pablo de Olavide University, Seville; Annarosa Pesole, Joint Research Centre, European Commission; Purificación López-Igual, Pablo de Olavide University, Seville

Abstract: Digital labour platforms have direct impacts on the social organisation of production and labour. We analyse gender inequalities in digital labour platforms due to gender segregation and the unequal gender distribution of both paid and unpaid care work with data from the COLLEEM survey on platform workers in 16 European countries. Findings show that women's participation is concentrated in more "feminised" tasks and they have slightly worse working conditions than men. This analysis draws on some implications for public policies in order to promote an equitable platform economy.

Governing invisibility in the platform economy: excavating the logics of platform care, by Vicky Kluzik, Goethe University Frankfurt

Abstract: There has been a mounting research output on the social dimensions of the datafication, fragmentation and platformisation of social infrastructures. This paper therefore conceptually excavates the intersectional inequalities behind platform care as a continuation of historically invisibilised reproductive labour, with

platforms acting as technocapitalist assemblages that govern invisibility. Although affective labour provided in private homes cannot be fully hierarchised, sold, nor algorithmically sorted, nevertheless, platforms provide short-term techno-fixes to fill in ‘care gaps’.

Governable spaces: a feminist agenda for platform policy, by Nathan Schneider, University of Colorado Boulder

Abstract: Feminist tradition sees with particular clarity how the digital patriarchy has contrived to be both apparently open and persistently unaccountable. Various feminist critiques amount to a simple insistence: the systems that structure our technology must listen better to the people who rely on them. This article extrapolates from feminist insights and experiences toward a policy agenda for vexing challenges in three domains of the online economy: social-media moderation, platform-mediated gig work, and network infrastructure. The agenda calls for crafting “governable spaces” organised to invite diverse and accountable forms of participation in the inevitable mechanisms of control.

Feminist policy and platform economy: insights, methods and challenges, by Sonia Ruiz García, Barcelona City Council

Abstract: This essay knits a dialogue between feminist political theory and feminist economy aiming at how to address the multiple challenges of platform economy nowadays. The essay first presents an overview of feminist political analysis and a theoretical evolution of feminist economics. Then it explores aims and limits of feminist policy-making process and the development of economic gender policy. Third, the essay provides gender tools in the field of economic policy and outlines suggestions to favour a gendered platform in the context of today’s complex environments. Despite the main focus being on the governmental sphere, feminist vindications are also widely highlighted in the article.

Platform capitalism’s social contract, by Niels van Doorn, University of Amsterdam

Abstract: What kind of social contract underwrites platform capitalism? This essay mobilizes a feminist political economy approach to scrutinize the gender dimension of this question, linking processes of capital accumulation to modes of labor exploitation as well as attendant forms of social differentiation and subordination. Based on findings from a cross-national comparative research project, I discuss a number of ways in which platform companies are expanding their services and influence by identifying particular societal needs and marketing themselves as effi-

cient solutions to workers, citizens and civil society organisations, as well as (local) governments. As such, I argue that we are seeing the emergence of different gendered “platform fixes”, connected to other historical “fixes” that have sought to overcome the limits of capital accumulation and attendant crises of social reproduction. The three platform fixes discussed in this essay each attempt to revise and rearticulate elements of a nation state’s social contract, operating on an urban level: 1) Channelling migrant labor into on-demand domestic work; 2) Coordinating civil society’s “altruistic surplus” to deliver social care; and 3) Promoting “home-sharing” as a way to finance the rising costs of social reproduction.

Conclusion

We need a different scientific perspective to understand the profound digital transformations accelerated by the COVID crisis. Science still uses an androcentric lens, which fails to consider the reality of women and the diversity in the 21st century’s societies. This special issue has provided an overview of the analysis of one of the more profound transformations of this century, the transition from the fabric to the digital platforms, and analysed how far the gender perspective has been adopted. The next steps could be, beyond reading this special issue, to connect and expand the different gender approaches identified here for a holistic and integrated equalitarian theory of the platform economy. This could be a valuable resource for science—in order to increase our understanding of the PE—and for society—so as to ensure the adoption and promotion of a platform economy aligned with gender equality and human rights more generally.

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References

- Ackerly, B. A., & True, J. (2019). *Doing feminist research in political and social science* (2nd edition). Macmillan International.
- Algar, R. (2007). *Collaborative consumption*. Oxygen Consulting.
- Ambujam, N. K., & Venkatalakshmi, K. (2009). The function of information and technology in empowerment of women. *2009 2nd IEEE International Conference on Computer Science and Information Technology*, 385–387. <https://doi.org/10.1109/ICCSIT.2009.5234705>

Ansip, A. (2016). Working to get more European women into digital and ICT careers. *EU Monitor*. https://www.parlementairemonitor.nl/9353000/1/j9vvij5epmj1ey0/vk3mm44lcozn?ctx=vhyzn0vt5cvu&tab=1&start_tab0=40

Asiedu, C. (2012). Information communication technologies for gender and development in Africa: The case for radio and technological blending. *International Communication Gazette*, 74(3), 240–257. <https://doi.org/10.1177/1748048511432606>

Bath, C. (2014). Searching for methodology: Feminist technology design in computer science. *Gender in Science and Technology*, 57–78.

Bauwens, M., & Kostakis, V. (2014). From the Communism of Capital to Capital for the Commons: Towards an Open Co-operativism. *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society*, 12(1), 356–361. <https://doi.org/10.31269/triplec.v12i1.561>

Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom* (p. 515). Yale University Press.

Botsman, R., & Rogers, R. (2010). *What's mine is yours: The rise of collaborative consumption* (1st ed). Harper Business.

Broussard, M. (2018). *Artificial unintelligence: How computers misunderstand the world*. The MIT Press.

Bucher, T., & Helmond, A. (2018). The Affordances of Social Media Platforms. In J. Burgess, A. Marwick, & T. Poell, *The SAGE Handbook of Social Media* (pp. 233–253). SAGE Publications Ltd. <https://doi.org/10.4135/9781473984066.n14>

Butler, J. (1990). Gender trouble, feminist theory, and psychoanalytic discourse. In L. McDowell & J. P. Sharp (Eds.), *Space, gender, knowledge: Feminist readings*. <https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1229165>

Carchio, C. (2019). Platform work as a chance for a more inclusive labour market. In V. Filli & F. Constantini (Eds.), *Legal Issues in the Digital Economy: The Impact of Disruptive Technologies in the Labour Market* (p. 73). Cambridge Scholars Publishing.

Castells, M. (1999). *Information technology, globalization and social development* (Report No. 114; UNRISD Discussion Paper). United Nations Research Institute For Social Development. [https://www.unrisd.org/80256b3c005bccf9/\(httpauxpages\)/f270e0c066f3de7780256b67005b728c/\\$file/dp114.pdf](https://www.unrisd.org/80256b3c005bccf9/(httpauxpages)/f270e0c066f3de7780256b67005b728c/$file/dp114.pdf)

Cockburn, C., & Ormrod, S. (1993). *Gender and technology in the making*. Sage.

Codagnone, C. (2016). Main findings: Rhetoric, motives, functioning, and impacts. In C. Codagnone, F. Abadie, & F. Biagi (Eds.), *The passions and the interests: Unpacking the Sharing Economy* (pp. 30–41). European Union.

Codagnone, C., & Martens, B. (2016). Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2783662>

Cohen, B., & Kietzmann, J. (2014). Ride On! Mobility Business Models for the Sharing Economy. *Organization & Environment*, 27(3), 279–296. <https://doi.org/10.1177/1086026614546199>

Coyle, D. (2016). Making the Most of Platforms: A Policy Research Agenda. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2857188>

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 8.

Davaki, K. (2018). *The underlying causes of the digital gender gap and possible solutions for enhanced digital inclusion of women and girls* (Report PE 604.940). European Parliament.

Davidson, N. M., & Infranca, J. J. (2016). The Sharing Economy as an Urban Phenomenon. *Yale Law & Policy Review*, 34(2), 215–279.

Davis, J. L., & Chouinard, J. B. (2016). Theorizing Affordances: From Request to Refuse. *Bulletin of Science, Technology & Society*, 36(4), 241–248. <https://doi.org/10.1177/0270467617714944>

De Groen, W. P., Maselli, I., & Fabo, B. (2016). *The Digital Market for Local Services: A one-night stand for workers? An example from the on-demand economy* (Special Report No. 133). Centre for European Policy Studies.

De Stefano, V. (2015). *The rise of the 'just-in-time workforce': On-demand work, crowd work and labour protection in the 'gig-economy'* (Report No. 71; Conditions of Work and Employment Series). International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---t_ravail/documents/publication/wcms_443267.pdf

D'Ignazio, C., & Klein, L. F. (2020). *Data feminism*. The MIT Press.

Dimond, J. P., Fiesler, C., & Bruckman, A. S. (2011). Domestic violence and information communication technologies. *Interacting with Computers*, 23(5), 413–421. <https://doi.org/10.1016/j.intcom.2011.04.006>

Drahokoupil, J., & Fabo, B. (2016). The Platform Economy and the Disruption of the Employment Relationship. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2809517>

Duffy, M. (2007). Doing the Dirty Work: Gender, Race, and Reproductive Labor in Historical Perspective. *Gender & Society*, 21(3), 313–336. <https://doi.org/10.1177/0891243207300764>

Edelman, B. G., & Luca, M. (2014). Digital Discrimination: The Case of Airbnb.com. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2377353>

European Commission. (2016). *Communication from the Commission to the Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Blueprint to Safeguard Europe's Water Resources*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2016%3A356%3AFIN>

European Commission. (2020). *A Union of Equality: Gender Equality Strategy 2020-2025*. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0152&from=EN>

European Commission, Brussels. (2016). *Flash Eurobarometer 438 (The Use of Collaborative Platforms)* Flash Eurobarometer 438 (The Use of Collaborative Platforms) (1.0.0) [Data set]. GESIS Data Archive. <https://doi.org/10.4232/1.12639>

European Commission. Joint Research Centre. (2020). *New evidence on platform workers in Europe.: Results from the second COLLEEM survey*. Publications Office. <https://data.europa.eu/doi/10.2760/459278>

European Commission. Joint Research Centre. Institute for Prospective Technological Studies. (2016a). *The future of work in the 'sharing economy'*. Publications Office. <https://data.europa.eu/doi/10.2791/431485>

- European Commission. Joint Research Centre. Institute for Prospective Technological Studies. (2016b). *The passions and the interests: Unpacking the 'sharing economy'*. Publications Office. <https://data.europa.eu/doi/10.2791/474555>
- European Institute for Gender Equality. (2020). *Gender equality index 2020: Key findings for the EU*. Publications Office. <https://data.europa.eu/doi/10.2839/341140>
- Faulkner, W. (2001). The technology question in feminism. *Women's Studies International Forum*, 24(1), 79–95. [https://doi.org/10.1016/S0277-5395\(00\)00166-7](https://doi.org/10.1016/S0277-5395(00)00166-7)
- Florianschütz, P. (2019, December 4). *A European framework for regulatory responses to the collaborative economy*. 137th plenary session presentation.
- Foong, E., Vincent, N., Hecht, B., & Gerber, E. M. (2018). Women (Still) Ask For Less: Gender Differences in Hourly Rate in an Online Labor Marketplace. *Proceedings of the ACM on Human-Computer Interaction*, 2(CSCW), 1–21. <https://doi.org/10.1145/3274322>
- Forde, C., Stuart, M., Joyce, S., Alberti, G., Hardy, K., Trappmann, V., Umney, C., & Carson, C. (2017). *The Social Protection of Workers in the Platform Economy*. [http://www.europarl.europa.eu/RegData/etudes/STUD/2017/614184/IPOL_STU\(2017\)614184_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2017/614184/IPOL_STU(2017)614184_EN.pdf)
- Fortunati, L. (2018). Immaterial Labor. In G. Ritzer (Ed.), *The Blackwell Encyclopedia of Sociology* (pp. 1–2). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781405165518.wbeos1128>
- Fotopoulou, A. (2016). Digital and networked by default? Women's organisations and the social imaginary of networked feminism. *New Media & Society*, 18(6), 989–1005. <https://doi.org/10.1177/1461444814552264>
- Fountain, J. E. (2000). Constructing the information society: Women, information technology, and design. *Technology in Society*, 22(1), 45–62. [https://doi.org/10.1016/S0160-791X\(99\)00036-6](https://doi.org/10.1016/S0160-791X(99)00036-6)
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach* (Nachdr.). Cambridge Univ. Press.
- Frenken, K., & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, 23, 3–10. <https://doi.org/10.1016/j.eist.2017.01.003>
- Fuster Morell, M., & Espelt, R. (2019). A Framework to Assess the Sustainability of Platform Economy: The Case of Barcelona Ecosystem. *Sustainability*, 11(22), 6450. <https://doi.org/10.3390/su11226450>
- Gansky, L. (2010). *The mesh: Why the future of business is sharing*. Portfolio Penguin.
- Graham, M., Woodcock, J., Heeks, R., Mungai, P., Van Belle, J.-P., du Toit, D., Fredman, S., Osiki, A., van der Spuy, A., & Silberman, S. M. (2020). The Fairwork Foundation: Strategies for improving platform work in a global context. *Geoforum*, 112, 100–103. <https://doi.org/10.1016/j.geoforum.2020.01.023>
- Grau-Sarabia, M., & Fuster-Morell, M. (2021). Gender approaches in the study of the digital economy: A systematic literature review. *Humanities and Social Sciences Communications*, 8(1), 201. <https://doi.org/10.1057/s41599-021-00875-x>
- Gray, M. L., & Suri, S. (2019). *Ghost work: How to stop Silicon Valley from building a new global underclass*. Houghton Mifflin Harcourt.
- Gregg, M. (2011). *Work's intimacy*. Polity Press.
- Gurumurthy, A. (2012). *The Big Deal about the Network Age: Political Economy Conversations from the*

CITIGEN Network. https://itforchange.net/sites/default/files/ITfC/Anita_thinkpiece_polecoCITIGEN_2012.pdf

Gurumurthy, A., & Chami, N. (2017). *A feminist action framework on development and digital technologies*. Association for Progressive Communication. <https://digital.fundacionceibal.edu.uy/jspui/handle/123456789/256>

Gurumurthy, Chami, & Thomas. (2016). Unpacking Digital India: A Feminist Commentary on Policy Agendas in the Digital Moment. *Journal of Information Policy*, 6, 371. <https://doi.org/10.5325/jinfo poli.6.2016.0371>

Haraway, D. (2006). A cyborg manifesto: Science, technology, and socialist-feminism in the late 20th century. In J. Weiss, J. Nolan, J. Hunsinger, & P. Trifonas (Eds.), *The international handbook of virtual learning environments* (pp. 117–158). Springer.

Hardt, M., & Negri, A. (2000). *Empire* (1. Harvard Univ. Press paperback ed., [Nachdr.]). Harvard Univ. Press.

Heinrichs, H. (2013). Sharing Economy: A Potential New Pathway to Sustainability. *GAIA - Ecological Perspectives for Science and Society*, 22(4), 228–231. <https://doi.org/10.14512/gaia.22.4.5>

Herbert, N. (2017). Impact of Student Engagement on First Year ICT Performance. *2017 International Conference on Computational Science and Computational Intelligence (CSCI)*, 1085–1090. <https://doi.org/10.1109/CSCI.2017.189>

Hong, S., & Lee, S. (2018). Adaptive governance and decentralization: Evidence from regulation of the sharing economy in multi-level governance. *Government Information Quarterly*, 35(2), 299–305. <https://doi.org/10.1016/j.giq.2017.08.002>

Huws, U. (2003). *The making of a cybertariat: Virtual work in a real world*. Monthly Review Press.

Huws, U. (2019a). *Labour in contemporary capitalism*. Springer Berlin Heidelberg.

Huws, U. (2019b). The Hassle of Housework: Digitalisation and the Commodification of Domestic Labour. *Feminist Review*, 123(1), 8–23. <https://doi.org/10.1177/0141778919879725>

Huws, U., Spencer, N. H., & Syrdal, D. S. (2018). Online, on call: The spread of digitally organised just-in-time working and its implications for standard employment models. *New Technology, Work and Employment*, 33(2), 113–129. <https://doi.org/10.1111/ntwe.12111>

Huws, U., Spencer, N., Syrdal, D. S., & Holts, K. (2018). Work in the European Gig Economy. *Foundation for European Progressive Studies*. https://www.feps-europe.eu/Assets/Publications/PostFiles/579_2.pdf

Ivana Pais & Giancarlo Provasi. (2015). Sharing Economy: A Step towards the Re-Embeddedness of the Economy? *Stato e mercato*, 3, 347–378. <https://doi.org/10.1425/81604>

Jarrett, K. (2015). *Feminism, labour and digital media: The digital housewife*. Routledge.

Joint Research Centre, Institute for Prospective Technological Studies, Biagi, F., Abadie, F., & Codagnone, C. (2016). *The passions and the interests: Unpacking the 'sharing economy'*. European Commission. <https://data.europa.eu/doi/10.2791/474555>

Kantola, J., & Lombardo, E. (2017). *Gender and the Economic Crisis in Europe: Politics, Institutions and Intersectionality*. Palgrave Macmillan.

Kee, J. sm. (2017). Imagine a Feminist Internet. *Development*, 60(1–2), 83–89. <https://doi.org/10.105>

7/s41301-017-0137-2

Kenney, M., Bearson, D., & Zysman, J. (2019). *The Platform Economy Matures: Pervasive Power, Private Regulation, and Dependent Entrepreneurs* (2019-11 Working Paper; Berkeley Roundtable on the International Economy). University of California Berkeley. https://brie.berkeley.edu/sites/default/files/platform_economy_matures_final.pdf

Kilhoffer, Z., De Groen, W. L., K., S., Hauben, I., H., W., W., G., Lhernould, E., P., J., & Robin-Olivier, S. (2019). Study to gather evidence on the working conditions of platform workers. *European Commission: Employment, Social Affairs & Inclusion*. <http://aei.pitt.edu/id/eprint/102657>

Langley, P., & Leyshon, A. (2017). Platform capitalism: The intermediation and capitalisation of digital economic circulation. *Finance and Society*, 3(1), 11–31. <https://doi.org/10.2218/finsoc.v3i1.1936>

Laukkanen, M., & Tura, N. (2020). The potential of sharing economy business models for sustainable value creation. *Journal of Cleaner Production*, 253, 120004. <https://doi.org/10.1016/j.jclepro.2020.120004>

Lee, M. (2011). A feminist political economic critique of the human development approach to new information and communication technologies. *International Communication Gazette*, 73(6), 524–538. <https://doi.org/10.1177/1748048511412289>

Llewellyn Evans, G. (2017). Disruptive technology and the board: The tip of the iceberg. *Economics and Business Review*, 3(1).

London, P. (2019). *Digital Nation: Funding The Digital Economy*. <https://www.empowerwomen.org/en/resources/documents/2019/05/digital-nation-funding-the-digital-economy>

Martin, C. J. (2016). The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics*, 121, 149–159. <https://doi.org/10.1016/j.ecolecon.2015.11.027>

Marwick, A. (2014). *How your data are being deeply mined*. The New York bReview of Books.

Massanari, A. (2015). *Participatory culture, community, and play*. Peter Lang Publishing.

Matrix, V. N. S. (1995). *Welcome to the world of ALL NEW GEN/VNS Matrix*. <https://vnsmatrix.net/publications/welcome-to-the-world-of-all-new-gen>

Mazzucato, M. (2016). From market fixing to market-creating: A new framework for innovation policy. *Industry and Innovation*, 23(2), 140–156. <https://doi.org/10.1080/13662716.2016.1146124>

Mirchandani, R. (2010). Multiculturalism and Social Cohesion: Potentials and Challenges of Diversity. *Contemporary Sociology: A Journal of Reviews*, 39(4), 476–477. <https://doi.org/10.1177/0094306110373238mm>

Mont, O., Palgan, Y. V., Bradley, K., & Zvolška, L. (2020). A decade of the sharing economy: Concepts, users, business and governance perspectives. *Journal of Cleaner Production*, 269, 122215. <https://doi.org/10.1016/j.jclepro.2020.122215>

Nagy, P., & Neff, G. (2015). Imagined Affordance: Reconstructing a Keyword for Communication Theory. *Social Media + Society*, 1(2), 205630511560338. <https://doi.org/10.1177/2056305115603385>

Nakamura, L. (2014). 'I WILL DO EVERYthing That Am Asked': Scambaiting, Digital Show-Space, and

the Racial Violence of Social Media. *Journal of Visual Culture*, 13(3), 257–274. <https://doi.org/10.1177/1470412914546845>

Nations, U. (2020). *Policy Brief: The Impact of COVID-19 on Women*. https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_updated.pdf

Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. New York University Press.

O.E.C.D. (2017). *Going Digital: The Future of Work for Women, Policy Brief on the Future of Work* (Policy Brief on the Future of Work) [Policy Brief]. O.E.C.D. <https://www.oecd.org/employment/Going-Digital-the-Future-of-Work-for-Women.pdf>

Overseas Development Institute. (2019). *Overseas Development Institute*. <https://odi.org/en/>

Palladino, A. (2017). Cities at the Crossroads in the Regulation of Sharing Economy. *Studia Regionalia Journal of the Polish Academy of Sciences: Committee for Spatial Economy and Regional Planning*, 52, 7–23. <https://doi.org/10.12657/studreg-52-01>

Piasna, A., & Drahokoupil, J. (2017). Gender inequalities in the new world of work. *Transfer: European Review of Labour and Research*, 23(3), 313–332. <https://doi.org/10.1177/1024258917713839>

Plant, S. (1997). *Zeros and ones: Digital women and the new technoculture*. Fourth Estate.

Powell, A., & Henry, N. (2017). *Sexual violence in a digital age*. Palgrave Macmillan.

Propel London. (n.d.). *Digital Nation: Funding The Digital Economy* (No. 2; Digital Nations). <https://www.empowerwomen.org/en/resources/documents/2019/05/digital-nation-funding-the-digital-economy?lang=en>

Ravanera, C. (2019). *Towards a more equitable gig economy* [Policy Brief]. The Institute for Gender and the Economy. <https://www.gendereconomy.org/equitable-gig-economy/>

Rodriguez, N., Fuster Morell, M., & Dimmons UOC. (2018). Public innovation in platform economy policies: Platforms, policy labs, and challenges. In M. Fuster Morell (Ed.), *Sharing Cities A worldwide cities overview on platform economy policies with a focus on Barcelona*. SEHEN. <https://www.gsef-net.org/sites/default/files/publication/Sharing%20Cities.pdf>

Rosner, D. (2018). *Critical fabulations: Reworking the methods and margins of design*. The MIT Press.

Rowntree, O. (2020). *The Mobile Gender Gap Report 2020* (GSMA Connected Women). <https://www.gsma.com/mobilefordevelopment/resources/mobile-gender-gap-report-2019/>

Rubery, J., & Fagan, C. (1995). *Occupational segregation of women and men in the European Community*. Publications Office.

Schoenbaum, N. (2016). Gender and the sharing Economy. *Fordham Urban Law Journal*, 43(4), 1023–1070.

Scholz, T. (2016). *Platform Cooperativism: Challenging the Corporate Sharing Economy* [Report]. Rosa Luxemburg Stiftung. http://www.rosalux-nyc.org/wp-content/files_mf/scholz_platformcoop_5.9.2016.pdf

Scholz, T., & Schneider, N. (Eds.). (2017). *Ours to Hack and to Own: The Rise of Platform Cooperativism, A New Vision for the Future of Work and a Fairer Internet*. OR Books. <https://doi.org/10.2307/j.ctv62hfq7>

Schor, J. (2014). *Debating the Sharing Economy* [Essay]. Great Transition Initiative. <http://greattransition.org/publication/debating-the-sharing-economy>

Schor, J. (2016). Debating the Sharing Economy. *Journal of Self-Governance and Management Economics*, 4(3), 7. <https://doi.org/10.22381/JSME4320161>

Schor, J. (2020). *After the gig: How the sharing economy got hijacked and how to win it back*. University of California Press.

Schor, J. B. (2017). Does the sharing economy increase inequality within the eighty percent?: Findings from a qualitative study of platform providers. *Cambridge Journal of Regions, Economy and Society*, 10(2), 263–279. <https://doi.org/10.1093/cjres/rsw047>

Schor, J. B., Fitzmaurice, C., Carfagna, L. B., Attwood-Charles, W., & Poteat, E. D. (2016). Paradoxes of openness and distinction in the sharing economy. *Poetics*, 54, 66–81. <https://doi.org/10.1016/j.poetic.2015.11.001>

Sharing Cities. (2018). *Sharing Cities Declaration*. Sharing Cities Action. <https://www.sharingcitiesaction.net/declaration/>

Sharmin, S. (2019). Bridging female entrepreneurs using ICT. *Proceedings of Asian CHI Symposium 2019: Emerging HCI Research Collection*, 90–97. <https://doi.org/10.1145/3309700.3338444>

Shaw, A. (2014). The Internet Is Full of Jerks, Because the World Is Full of Jerks: What Feminist Theory Teaches Us About the Internet. *Communication and Critical/Cultural Studies*, 11(3), 273–277. <https://doi.org/10.1080/14791420.2014.926245>

Singer, N. (2014, August 16). In the Sharing Economy, Workers Find Both Freedom and Uncertainty. *The New York Times*. <https://www.nytimes.com/2014/08/17/technology/in-the-sharing-economy-workers-find-both-freedom-and-uncertainty.html>

Smith, A. (2016). *Shared, Collaborative and On Demand: The New Digital Economy*. Pew Research Center. <https://www.pewresearch.org/internet/2016/05/19/the-new-digital-economy/>

Sostero, M., Milasi, S., Hurley, J., Fernandez-Macias, E., & Bisello, M. (2020). *Teleworkability and the COVID-19 crisis: A new digital divide?* European Commission. <https://www.econstor.eu/handle/10419/231337>

Sperber, S. (2021). Invisible women: Exposing data bias in a world designed for men. *Gender, Work & Organization*, 28(5), 1985–1989. <https://doi.org/10.1111/gwao.12649>

Srnicek, N. (2016). *Platform capitalism*. Polity Press.

Sundararajan, A. (2016). *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. The MIT Press.

Terranova, T. (2000). Free labor: Producing culture for the digital economy. *Social Text*, 18(2), 33–58. https://doi.org/10.1215/01642472-18-2_63-33

United Nation Population Fund. (2020). *COVID-19: Protecting sexual and reproductive health and rights, and promoting gender equality* [Technical Brief]. https://www.unfpa.org/sites/default/files/resourcement-pdf/COVID-19_A_Gender_Lens_Guidance_Note.pdf

United Nations. (2020). *Policy Brief: The Impact of COVID-19 on Women* [Policy Brief]. United Nations. https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_updated.pdf

- United Nations Conference on Trade and Development. (2019). *Digital economy report 2019: Value creation and capture: implications for developing countries*. United Nations.
- United Nations Development Programme. (2021). *The UNDP Gender Equality Strategy 2018-2021* [Report]. United Nations Development Programme. <https://www.undp.org/content/undp/en/home/librarypage/womens-empowerment/undp-gender-equality-strategy-2018-2021.html>
- van Doorn, N. (2017). Platform labor: On the gendered and racialized exploitation of low-income service work in the 'on-demand' economy. *Information, Communication & Society*, 20(6), 898–914. <https://doi.org/10.1080/1369118X.2017.1294194>
- van Doorn, N. (2018). The parameters of platform capitalism. *Krisis: Journal for Contemporary Philosophy*, 1, 103–107. <https://archive.krisis.eu/the-parameters-of-platform-capitalism/>
- Vercellone, C., Brancaccio, F., Giuliani, A., Puletti, F., Rocchi, G., & Vattimo, P. (2018). *DECODE Data-driven disruptive commons-based models*. <https://decodeproject.eu/publications/data-driven-disruptive-commons-based-models-0.html>
- VNS Matrix. (n.d.). Welcome to the world of ALL NEW GEN. *Frame-Work: The N E Double U Issue: Arts, Media and Technologies*. <https://vnsmatrix.net/publications/welcome-to-the-world-of-all-new-gen>
- Voytenko Palgan, Y., Mont, O., & Sulkakoski, S. (2021). Governing the sharing economy: Towards a comprehensive analytical framework of municipal governance. *Cities*, 108, 102994. <https://doi.org/10.1016/j.cities.2020.102994>
- Wajcman, J. (2004). *TechnoFeminism*. Polity.
- Wajcman, J. (2007). From women and technology to gendered technoscience. *Information, Communication & Society*, 10(3), 287–298. <https://doi.org/10.1080/13691180701409770>
- Wajcman, J. (2010). Feminist theories of technology. *Cambridge Journal of Economics*, 34(1), 143–152. <https://doi.org/10.1093/cje/ben057>
- Waldby, C., & Cooper, M. (2010). From reproductive work to regenerative labour: The female body and the stem cell industries. *Feminist Theory*, 11(1), 3–22. <https://doi.org/10.1177/1464700109355210>
- Walklate, S., Fitz-Gibbon, K., & McCulloch, J. (2021). *Towards a global femicide index: Counting the costs* (First issued in paperback 2021). Routledge.
- W.I.S.E. (2017). *Women in STEM workforce 2017*. <https://www.wisecampaign.org.uk/statistics/women-in-stem-workforce-2017/>
- World Bank Group. (2016). *World Development Report 2016: Digital Dividends* (World Development Report). <https://www.worldbank.org/en/publication/wdr2016>
- Wyatt, S. (2008). Feminism, Technology, and the Information Society: Learning from the past, imagining the future. *Information, Communication & Society*, 11(1), 111–130. <https://doi.org/10.1080/13691180701859065>
- Youngs, G. (2005). Ethics of access: Globalization, feminism and information society. *Journal of Global Ethics*, 1(1), 69–84. <https://doi.org/10.1080/17449620500103849>
- Youngs, G. (2015). *Digital Transformations of Transnational Feminism in Theory and Practice* (R. Baksh & W. Harcourt, Eds.). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199943494.013.34>

Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Profile books.

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