

Platform Ideologies: Ideological Production in Digital Intermediation Platforms and Structural Effectivity in the “Sharing Economy”

Television & New Media

1–20

© The Author(s) 2018

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/1527476418808029

journals.sagepub.com/home/tvn

Athina Karatzogianni¹  and Jacob Matthews²

Abstract

Drawing from three sets of literature (critical economy of platformization, labor organization, and digital activism), this article introduces an integrated framework to analyze ideological production in digital intermediation platforms, particularly in relation to the sharing economy. We analyze documents, fieldwork interviews from twenty-eight actors, and observation of events in Barcelona, Paris, and Berlin during 2015–2017. We find that there are three dominant ideological strands: “sharing economy,” “commons,” and “platform cooperativism,” within a spectrum that ranges from legitimizing neoliberalism and/or reasserting a reformist, more humane capitalism to more radical visions: cooperative society to commons-oriented production, and resisting privatization, through the recapturing of public space as commons. The actors we interviewed can be seen as part of an intermediate class, dependent on platforms for their survival, and who end up involuntary promoters of their own alienation and exploitation, consolidating the deterioration of the very digital labor conditions they seek to transform.

Keywords

sharing economy, digital activism, platform capitalism, ideological production, gig economy, alternative digital governance

¹University of Leicester, UK

²University of Paris VIII, Saint-Denis, France

Corresponding Author:

Athina Karatzogianni, University of Leicester, 132 New Walk, Bankfield, Leicester LE1 7JA, UK.

Email: athina.k@leicester.ac.uk

Introduction: Developing an Integrated Theoretical Framework for Ideological Production Analysis (IPA) on Platforms

An integrated theoretical framework for IPA is developed here to examine whether platform actors contribute to legitimizing, or competing effectively with capitalism as a mode of production. Digital intermediation platforms operate out of varieties of capitalism across vast-ranging national institutional frameworks, state-labor relations, re-regulations, privatizations, cross-class relations, and diverse political systems (Hancké et al. 2008; a phenomenon dubbed “platform capitalism” by Srnicek 2017). The digital economy seems to dance to the rhythm of two predatory forms of capitalist expansion: what Harman (2010) calls “zombie capitalism” and P. Graham (2006) calls “hypercapitalism” (see Karatzogianni and Matthews 2017). Connecting cognitive frames, social relations and organizational factors can elaborate on how the crisis of accumulation and hypercapitalist expansion affects socioeconomic structures within the context of digital intermediation platforms.

The proliferation of digital intermediation platforms occurs in diverse fields: cultural crowdfunding and crowdsourcing, content aggregation, advertising and marketing, online dating, car-pooling, ethical commerce, alternative finance, to name a few. Distribution, information, and transaction occur in multisided markets, capturing positive externalities produced by the interactions of a multitude of players, including the tech giants, which often, true to type, are not even producing contents, goods, or services of their own. As a result, the evolution of labor has also been extensively theorized: the differences between audience labor (Smythe 1977), cultural labor (Hesmondhalgh 2010), digital labor (Cardon and Casili 2015; Fuchs 2014; Peters and Bulut 2011; Scholz 2013), algorithmic labor, and platform labor (Andrejevic 2009; Comor 2010; van Doorn 2017). In short, the move from audience labor to digital labor to platform labor forces the subjects to move from viewers viewing and consuming advertising, to users/prosumers engaging in “produsage” (term coined by Bruns 2007) through playbour, consuming targeted advertising using them as products on social media sites, to workers selling their labor in the gig economy on platforms, while social protection becomes a thing of the past (see Gandini’s 2018 for a detailed formulation on the evolution of the scholarship). Platforms are no longer merely cultural intermediaries (Matthews and Smith Maguire 2014) but play on all tables: dead labor, intellectual labor, manual labor, audience, algorithmic and platform labor.

Activities regarding the organization of labor occurs on three levels (e.g., in cultural crowdfunding): within their own structures; filtering and editing contents, linking projects to external partners, often resorting to traditional forms of exploitation of cultural labor; and stimulating audience labor on external networks (Matthews 2017). Crowdfunding and crowdsourcing platforms are producers of ideological discourses, busy promoting their short-term agendas, producing the illusion of modified relations of production and of an inversion of the production cycle. Crucially, platforms use and ideologically justify soft algorithmic control (on Uber, see Rosenblat and Stark 2016; on the food delivery sector, see Shapiro 2017) to overcome the inherent spatial and

temporal barriers to supervision. Wood et al. (2018a) argue that this leads to exploitation in the form of low pay, overwork, sleep deprivation, and exhaustion, with workers organizing collectively to combat their current structural conditions, both by creating more platforms to do so, and finding refuge to traditional forms of labor organization (Johnston and Land-Kazlauskas 2018; Wood et al. 2018b).

In this respect, we argue that *ideological production is emerging within socio-technical systems and is affecting and being affected directly by those very same*. A study that supports this assertion is Ong and Cabañes's (2018) research on the motivations and strategies of a well organized and funded hierarchy of political operators in the Philippines, who maintain day jobs as advertising and public relations executives, computer programmers, and political administrative staff, but they recruit a team of anonymous freelance digital influencers and fake account operators to seed core campaign messages in online spaces and create "illusions of engagement" to inspire enthusiasm from real supporters. Among their motivation is a self-styled moral justification of "agent of social change" against dominant structures.

The paradox of the clashing rhetoric and reality of the "sharing economy" (Codagnone et al. 2018), defined simultaneously as part of capitalist production, but also an alternative to it, is complicated further by the fact that much contemporary research into the political economy of platformization relies on platforms' own data, and has been produced by platforms themselves, or in dependent collaboration with, due to the proprietary attitude platforms have about the data they collect. Meanwhile, the platform owners rely on future regulatory decisions, which are set to be fought in parliaments, in courts, and on the streets. Despite the obvious differentiation between large privately owned "gig economy" platforms and smaller cooperativist style community-oriented platforms and the various in-between modalities, the management of internal and external labor is not a mere exercise in producing value, as it not only affects structural conditions cutting across industrial sectors, but it also produces particular ideological and cultural discourses, currently involving the recuperation of the "commons," used as what Boltanski and Thévenot (2006) call a "moral justification register."

For the purpose of IPA on platforms, we explain key debates in the sharing economy from three sets of literature: critical economy of platformization, digital labor organization, and gig work, as well as digital activism scholarship. Drawing from these debates across diverse sets of scholarship provides us theoretically with the analytical tools to launch our enquiry. First, in respect to critical economy of platformization scholarship, we wanted to know whether there is a common language among platform players with regard to "the commons," "open," "collaborative," and so on, or an oscillation between different varieties/iterations of capitalism with a "sharing" "commons" "cooperativism" justification register. Second, in respect to the digital cultural economies literature, we were eager to see whether they are expanding ideological production beyond former culture industries and whether this is superficial or substantial. Third, in respect to the digital labor organization and gig work, we examined what are the new cultural forms of relations of production the participants advocate, what relations of production have allowed this product/service they have produced to exist, whether the participant's

answer simply served to legitimize their operations as ethical and/or politically radical, or whether they were actually engaged in redesigning real labor processes and in what ways. Fourth, in respect to digital activism scholarship, what kind of social relations do they legitimize, oppose, or resist; what forms of labor are the participants engaging in and how do they talk about their labor in terms of ideology (superstructural attributes) and structure (what are they potentially changing as actors in terms of economic value and cultural form?). Last, at the heart of our research questions was the aim to understand how participants articulate these two realms (ideology and structure) and how these interact in the participants' view of their work individually and within their organization, to verify whether Garnham's (1979) hypothesis is confirmed, that is, that the more autonomous a cultural form is with regard to the social form and the relations of production themselves, the less effective it is.

In what follows, we demonstrate how an integrated framework stemming from the three sets of literature points to our research questions. Then, we explain the methodological approach, from which we launch three analytical sections, each examining one core ideological strand stemming from "sharing economy," "commons," and "platform cooperativism" discourses, supported by fieldwork interviews, observation, and document-based evidence. We conclude with core findings and openings for further investigation.

Cross-fertilization of Three Sets of Scholarship for the Purpose of IPA on Platforms

In the first analytical section, we probe deeper both into the ideological production and the aggressive strategies of intermediary players operating within what Kenney and Zysman (2016) identify as privately generated platform-based "ecosystems," companies that fundamentally "are not delivering technology to their customers and clients—they use technology to deliver labour to them" (Smith and Leberstein 2015, 3). In turn, Berg (2016, 18) points out that platforms are not regulated by governments, but "this does not mean that they are not regulated, or that it is a free exchange of services between independent parties." Rather, the platforms regulate the market. In fact, the platforms have a position "like that of the government." The context of these platform wars is the following dystopia, whereby the

bargaining power of workers is undermined by the size and scope of the global market for labour; the anonymity that the digital medium affords is a double-edged sword, facilitating some types of economic inclusion, but also allowing employers to discriminate at will; disintermediation is occurring in some instances, but the combination of the existence of a large pool of people willing to work for extremely low wages and the effects of the importance of rating and ranking systems, is also encouraging enterprising individuals to create highly mediated chains. (M. Graham et al. 2017, 16)

What's more, we know from the iLabour index developed by Kässi and Lehdonvirta (2016) that despite the fact that "it is the information technology industry in each country that is currently making use of online labour," "physical location of the

contractors affects the contractors' earnings outcomes through the outside options in local labour markets faced by the contractors" (Kässi et al. 2016, 6). Workers are also integrated within virtual production networks, and show that "while virtual product is embedded within networks and territories at various spatial scales, it is nevertheless, simultaneously marked by high levels of societal disembeddedness" (Wood et al. 2016, 8). Lehdonvirta (2016, 14) points to the tension between placelessness and organizational identity, "where the means that are used to delocalize work—deskilling, codification, black boxing, algorithmic management—also undermine organizational identities." As De Stefano (2016, 10) points out, "the possibility of being easily terminated via a simple deactivation or exclusion from a platform or app may magnify the fear of retaliation that can be associated to nonstandard forms of work, in particular temporary ones." In a similar vein is the pessimism of Valenduc and Vendramin (2016, 41, cited in Degryse 2016) who feel it is hard to see a future for traditional working relationships in a world where digital platforms act as labor market intermediaries, but "possible lines of action are taking shape in the form of new trade union models, both on and offline." Benson et al. (2015, 23) view traditional labor unions and professional associations used for coordinating collective withdrawal of trade to discipline employers giving way to "the rise of new institutions that facilitate information sharing [and] may be taking up some of this role."

Accordingly, in the second and third analytical sections, we investigate ideological production of alternatives, commons, and platform cooperativism respectively in terms of digital labor resistance and new possible lines of action. Here, the "commons," for instance, see Le Crosnier's (2015) work on the "biens communs" and Fuster Morell's (2011) theorization of Catalan "procomuns," are relevant in the European context we investigated, and it is a too common ideological product in the actors we interviewed in Barcelona, Paris, and Berlin. Besides the commons, there is considerable parallel influence from Scholz and Schneider's (2017) efforts under the banner of "platform cooperativism." This is an emerging network of cooperative developers, entrepreneurs, labor organizers, and scholars developing an economic "ecosystem" that seeks to align the ownership and governance of enterprises with the people whose lives are most affected by them. This represents a radical critique of the existing online economy, but it is also a field of experimentation for alternative forms of ownership design. Scholz (2016) looks to cooperative structures and the call for collective decision-making, conflict resolution, consensus building, and the managing of shares and funds in a transparent manner. He cites convincing tools that have emerged, such as *Loomio*, *Backfeed*, *D-CENT*, and *Consensus*. In the summer of 2018, Scholtz's worker solidarity attracted a million dollars funding from Google to develop a platform cooperativism kit (The New School 2018).

As all sharing economy scholars tend to point out, actions through these platforms tend to suffer from some of the typical problems of online activism, such as the obvious co-optation or crackdown by government or corporate actors, effects of surveillance, oligopoly and corporatization, reproduction of hierarchical and exclusionary systems and discourses, affective polarization, flash in the pan mobilizations, and the issue of sustainability of movements, to name but a few. Here, we draw from the

strands made in the scholarship on digital activism (Benkler 2006; Bennett 2004; Brevini et al. 2013; Castells 2000; Chadwick 2006; Dahlberg and Siapera 2007; Diani and McAdam 2003; Gerbaudo 2014; Karatzogianni 2006, 2015; McCaughey and Ayers 2003; Milan 2013; Rheingold 1994; Taylor and Jordan 2004; Trottier and Fuchs 2014; Van de Donk et al. 2004). Particularly for our analyses, we are taking into account recent contributions made by Dolata (2017), Schrape (2017), and Dolata and Schrape (2016, 9), and their concept of advanced technical sociality:

the institutionalization of the collective can today no longer be represented as a purely social but only as a socio-technical process, understood as the systematic interweaving of social and technical organization and structuring services the interplay of which, however, varies greatly from case to case.

The third set of literature we draw from is broader digital political economy, in the areas of Internet governance and oligopoly (Benkler 2006; Castells 2000; Jenkins 2006; Lessig 1999; Loader 1998; Scholz 2013; Smyrniotis 2018; Terranova [2000] 2013) and critical analyses of culture industries in relation to the “collaborative economy” (Bouquillion and Matthews 2010; Matthews 2017; Nixon 2014, 2017; Pais et al. 2018). A significant element of this theoretical subset is its concern for the questions of labor organization and relations of production within the traditional culture industries, and that of their evolution at the current intersection of these industries with digital intermediation platforms. Beyond that, important insights have been provided by scholars such as Arvidsson (2018, 289), who argues that the sharing economy can be empirically understood as “instances of peer production attempting to ‘come to market’ via the use of a common ‘sharing fiction,’” whereby “we can conceptualize differentials in economic power within the sharing economy in terms of the work that goes into the reproduction of this sharing fiction and the ability to capitalize on it in terms of price differentials.” In relation to the innovation versus social justice debate in platformization politics (see Dencik et al. 2016), the promise of “objective governance” through appeals to the magic of algorithms (search, coordination, and transaction cost reduction) has so far failed to deliver increased employment and enhanced productivity, while new labor laws are radicalizing workers across the globe, struggling against unsustainable capital accumulation relied on unicorn notions of an environmentally conscious circular economy.

Method: In-depth Interviews, Participant Observation, Secondary Document Analysis

To get more theoretical leverage, we draw empirical attention to the rhetorical foundations of the “sharing economy” and the effect of ideological variants on the formations of diverse models, organizations, and modes of production in the network economy, by analyzing the views of platform actors we interviewed in Barcelona, Paris, and Berlin between November 2015 and February 2017. This included twenty-five trips in total between two researchers observing five international practitioner events

(Procommuns, Transmediale, Ouishare, P2PValue, Cultura Viva), several protest events (Nuit Debut Paris, Nit Dempeus Barcelona, several antilabor law protests Paris), and the organization of three expert workshops at the Open University in Barcelona (June 2016), at Paris 8 University (April 2016), and at the University of Leicester (December 2016).

We interviewed twenty-eight actors from varied institutional settings, from platforms representatives (such as Uber, Airbnb, and crowdfunding sites), sharing economy watchdogs, to platform cooperativists, public players, commons-oriented alternative governance groups, and digital activists and artists. The study was a joint investigation, “Foundations, discourses and limits of the collaborative economy: an exploratory research,” bringing together and extending two projects: Karatzogianni’s economic social research council (ESRC) project “The Common Good: Ethics and Rights in Cybersecurity” (project between University of Leicester and University of Hull) and Matthews’ research on the “collaborative economy” within the Collab research group at CEMTI (Le Centre d’études sur les médias, les technologies et l’internationalisation, CEMTI, (Paris 8 University). During data collection, we explained to the participants the purpose of the research and the interview process, and their right to withdraw at any time. The interviews were semistructured, participants ranged between the ages of twenty-five and sixty, and all had higher education qualifications (see more detailed description in the table of participants below).

Table 1. Table of Participants.

	Participant	Nature of participation	Date and location of interview
1	Participant 1	Smart city consultant	January 2016, Barcelona
2	Participant 2	Collaborative ecosystem Actor	January 2016, Barcelona
3	Participant 3	Tech-access activist	February 2016, Berlin
4	Participant 4	Digital artist/activist	February 2016, Berlin
5	Participant 5	Digital artist/activist	February 2016, Berlin
6	Participant 6	Architect/activist	February 2016, Berlin
7	Participant 7	Hacker/activist	February 2016, Berlin
8	Participant 8	Tech consultant	February 2016, Berlin
9	Participant 9	Securitization expert	February 2016, Berlin
10	Participant 10	Commons crowdfunding platform manager	March 2016, Barcelona
11	Participant 11	Digital activism expert	April 2016, Paris
12	Participant 12	Commons activist	April 2016, Paris
13	Participant 13	Open food business actor	April 2016, Paris

(continued)

Table 1. (continued)

	Participant	Nature of participation	Date and location of interview
14	Participant 14	NGOs actor	April 2016, Paris
15	Participant 15	Tech developer	April 2016, Paris
16	Participant 16	Tech developer	April 2016, Paris
17	Participant 17	Digital game developer, documentary, activist	April 2016, Paris
18	Participant 18	Movement activist media expertise	June 2016, Barcelona
19	Participant 19	Movement activist International comm	June 2016, Barcelona
20	Participant 20	Tech activist	June 2016, Barcelona
21	Participant 21	Tech activist	June 2016, Barcelona
22	Participant 22	Tech activist	June 2016, Barcelona
23	Participant 23	Competition Authority officer	November 2016, Barcelona
24	Participant 24	Competition authority officer	November 2016, Barcelona
25	Participant 25	Competition authority officer	November 2016, Barcelona
26	Participant 26	Public policy representative, Uber	November 2016, teleconferencing
27	Participant 27	Public policy representative, Airbnb	November 2016, Barcelona
28	Participant 28	Platform cooperativism activist	February 2017, teleconferencing

“Sometimes It’s Too Ideological”: The Challenge of Collaborative Players to Steer the “Conversation”

We begin our analysis with a public policy spokesperson representing Uber in Spain (Participant 26, November 2016), who opted to join Uber, claiming that it is “probably the sexiest company right now in the world but also one of the most challenging ones.” He views his role as a public policy spokesperson, as representing “what we contribute to society and to consumers how we can help cities change mobility in the twenty-first century.” Uber arrived in Spain in 2014 with a purely peer-to-peer model, which was challenged by Spanish courts. Uber operates in Madrid working with professional drivers providing the technology service, but not in Barcelona, where the company instead launched a pilot project for delivery business. He explained that part of his role is to translate to the media that “we are working with licenses not p2p—we can provide more flexible and efficient way of doing things.” There is an issue of adapting the Uber model to Spanish law: “For an unknown reason, we noticed a higher demand for

licenses in Madrid than in Barcelona. For the time being, the number of licenses in Barcelona is too low to launch a product with the minimum quality and standard.” The regulation problem is a critical one and at other points in the interview, he is at pains to explain this and the frustration for a new “sharing economy” player dealing with regulations that are not fit for purpose. He views the recent period as very unstable from a political perspective, particularly with regard to implementing policy changes in favor of Uber. With license attribution being in the hands of local authorities, but the legal framework shaped at a national level, in Madrid, he sees radical political players (such as Barcelona mayor Ada Colau) as not being conducive to the start of what he calls “a conversation.”

There is significant political opposition and pressure in Barcelona against Uber, and we press him about his thoughts on protests, labor resistance, and media controversies: “Yes, you have city with a lot of demand for this service, a city that tries to position itself as an innovative place in Spain and Europe, but in the same time, the regulation tries to close the possibilities for new services likes ours.” He declares that that pressure from incumbents is high and that pressure has been exerted to cancel events where Uber was invited. When we question him on the strategies implemented to oppose this, in the media for instance, he answers, “Basically, it’s all about explaining what we can bring to society and show how we can do it, what kind of contribution we can provide. The only way to make sure something is going to change is to get a lot of people into it.”

The “conversation” with political players and public authorities, as well as allegedly outdated regulations are also burning issues for the Airbnb public policy representative for the Iberic peninsula (Participant 27, November 2016):

What we have found challenging since we started is that Catalan regional regulations have been designed in a way that corresponds more to regular, not particularly progressive development, of old professional tourism regulations and which are applied to the new rule of the “prosumer,” this citizen who becomes both customer and producer.

The old-fashioned approach to tourism and the electoral calendar have not been useful, he argues. The “conversation” has become more complicated with tourism as a hot topic during elections. He claims,

The conversation with the city officials in other cities is taking place in a longer perspective, in a more relaxed environment, where the policy makers can develop the agenda and work together, identifying the kind of users’ model experiences we want to promote together, whereas in Barcelona, from the very beginning, it has been very difficult from a purely political point of view. Definitely, these political balances are preventing innovation, by not allowing a reasonable relaxed playing field for policy makers, officials, or ourselves.

The Airbnb representative understands the dominant players in Barcelona as three big groups that are, first, the main telecom operators and large corporate groups; second, a powerful start-up community; and third, movements promoted by the city hall:

cooperatives, social economy, commons players. He believes that city funding of these new players is more relevant than the funding of the start-up community: “They have their own lives, their own apps: they don’t depend at all on public funding.” We questioned his opinions regarding opposition from left-wing political players and, in particular, representatives of the commons movement, and in that respect, whether he sees himself as part of the collaborative economy:

We’ve . . . noticed that, at times, the left-wing movements in Barcelona don’t reflect on the positive impact that the sharing economy has for the little guy, for families, for middle-class people who really have an opportunity to get an extra for themselves. *Sometimes it’s just too ideological.* Here in Barcelona, unless the sharing economy is based on the pro-commons movement or the cooperative movement, it doesn’t exist; we close the door, we don’t want to listen anything about that and it becomes so ideological as well and so reluctant to innovation in a broader perspective.

With the regulation issue for newcomers in the “sharing economy” in Barcelona identified as a core discussion point, we interviewed three officers at the Catalan Competition Authority (Participants 23, 24, 25, November 2016) to investigate further their approaches and recommendations in relation to these players. This is a publicly funded antitrust body covering two fields: competition law and promotion of competition. The authority studies firms in terms of their undertakings and examines regulation from the municipality, regional, and national governments but are only responsible for Catalonia (the Spanish competition authority being in charge of broader cases and issues and also answering to the EU). The “sharing economy” cases they have engaged with regarded both legal aspects and the promotion of free trade. We interviewed three officials, and their criticism echoes the concerns raised by both Uber and Airbnb representatives: previous regulations are not fit for these new players. An officer we interviewed from this unit suggests that a lot of innovation is needed to change regulations (Participant 23).

Here, we asked about a specific episode when Barcelona mayor Ada Colau used her powers to temporarily restrict the tourism market and review its development (the municipality ceased delivering new licenses for rooms within the city center and for nonsustainable accommodation in the periphery). At this time, the Competition Authority published a report making recommendations based on transferable licenses and openly criticizing the move: “By not giving any more licenses for four years, you are not allowing anyone entering the market, so in a way, authorization itself becomes an asset” (Participant 25). When asked whether they are frustrated with the local government, the director general replied, most diplomatically, “We are waiting; there is no frustration; we understand things go slowly. There is a working commission for the sharing economy; they are analyzing how the regulation should be modified; we are happy about that. It could work faster but ok” (Participant 24). When we pushed to understand more of the ideological tenets of their organization (i.e., if they see themselves as politically neutral, as a public service, etc), the response was, “The more companies we have on the market, the better it is, because the prices are lower, we

have a better quality, more innovation.” We put forward to them that if their default position is free competition, this is already an ideological position, to which we got the astounding answer: “Yes” (Participant 23). In relation to dominant sharing economy actors and governmental regulation, ideological production draws heavily from a pervasive neo-liberal position “the free-hand of the market takes care of itself” and “get enough people on your network, everything is going to be ok.” In the next section, we investigate the “commons” ideological spectrum as one of the competing ideological productions.

Against, With, and Beyond State and Capital: Commons Discourses, Multifarious and Paradoxical

The notion of commons and commons-oriented production was “spontaneously” present in more than two thirds of the interviews we conducted, and we focused on this specific element of ideological production in the discourses of all our interviewees. The first illustration of this comes from the interview we had with a representative of Goteo, a Barcelona-based crowdfunding platform (which happens to be promoted by the municipality), at “Cultura Viva,” an event we attended in March 2016. Goteo claims to be dedicated to providing funding for projects that are both commons-oriented, socially inclusive, and sustainable. We interviewed a platform manager for Goteo (Participant 10, March 2016), who explained this key condition for obtaining funding via their platform:

To get the funding you have to be committed to open up and commonise your outputs for society to use, where you open up your outputs and offer them for the community to develop further create derivative work from [them]. The idea is that if you commonise your sources, you are preventing privatization because you are making them for the community to use. . . .

Their online platform is represented as such a tool, promoting the values of the commons, by supporting organizations and individuals who develop projects for the benefit of specific communities.

We interviewed a Goteo user (Participant 17, April 2016), a digital game artist/activist who raised funds for the production of a documentary film illustrating the implementation of wireless mesh networks in rural communities in northern Greece, and how this also contributed to the development of more or less autonomous production processes (notably in the fields of agriculture and crafts). He affirms, “We thought that it was a good occasion to launch not only that crowdfunding [campaign] for the documentary but . . . in general . . . the idea of crowdfunding for Greek social movements.” It is worth noting that he considers that his own experience of crowdfunding a documentary using Goteo can be transferred to the entirety of “Greek social movements,” and that web-platform-based collection of funds (and labor) represents a remedy against the exhaustion of social and political groups having previously relied on traditional fund-raising via physical donation requests and organization of events. He

mentions the capital control measures instigated by the European Central Bank and the International Monetary Fund in June 2015, and points to a paradox: “Although, the Greeks couldn’t use their debit cards directly, they could use Paypal.” Later, he declares, “In general, people that are doing the crowdfunding organizations, campaigns, and platforms are not all of them, but there is a spirit of what is called techno-optimism. This techno-optimist spirit means that, with the right tools and the right knowledge on networking connections, we can . . . solve problems. We realized that if the international financial elites want to act on a country, on a network, on a system and take decisions on the financial level, then any kind of platform reaches its limits.” Indeed, the Goteo team had not faced the problem of capital controls before. Regarding this, he argues, “There is need of political organization to put pressure, as nothing can go on, if there is not a political body that functions off the cloud, and doesn’t depend on the cloud, knowing how to apply pressure to power structures” (Participant 17).

This experienced activist and crowdfunding user goes on to express what he considers as one of the key problems with crowdfunding: “Collaborative economy projects . . . are more and more re-appropriated by private institutions not only as methods and as crowds, as money finally, but also as linguistic, semantic structures. For instance, . . . three days ago, I received an email from a big, private cultural organization in Athens [which is] very aggressive, aggressive to public space. I mean that they are doing a crowdfunding campaign to finance one of their projects. And they use the same language, the same vocabulary that we used for our crowdfunding campaign. It could be even “copy-paste.” I don’t mean by that they copy-paste me or our campaign. But they copy-paste the movement the same way that Syriza in government copy-pasted the slogans [used on] Syntagma Square five years ago” (Participant 17).

A commons activist we interviewed in Paris in April 2016 (Participant 12), during the Nuit Debout mobilizations at Place de République, understands the commons, not only as collective action but also as resource: “You have to act for the commons, but the common pool resource might be something you build, but it can also be something that is global and universal, but you have to transform it from public to common. Something that nobody owns [is] universal; it becomes common when people try to come together to defend it.” He seizes the example of Parisian mayor Anne Hidalgo’s condemnation of Nuit Debout allegedly “privatizing the public space” by their occupation of Place de la République; “in fact, they are not privatizing, they are transforming the public domain, the public space, into a commons, by their activity in the commons.” He goes on to ask: “How can we have a new partnership between the state and the commons?” In the section that follows, we conduct an IPA on the analytical set of platform cooperativism, as the third ideological strand under examination.

And in the Name of Platform Cooperativism

We interviewed a collaborative ecosystem actor, who also acts as representative for Ouishare, in Barcelona, in January 2016 (Participant, 2). Evoking the avatars of Barcelona’s “collaborative” scene, he mentioned a specific group of Airbnb hosts that were planning to split from the mainstream lodging platform:

They are thinking by themselves on creating a cooperative in order to do the invoicing in a legal way and so on, so you also see that at the end the peers can coordinate themselves, . . . you see this counter power because well organized peers can have a similar power that the platform can have because a platform without the peers is nothing.

Almost half of our interviewees “spontaneously” spoke of online cooperatives and platform cooperativism. One prime example is Participant 28, who created his first online cooperative in 2003, and then went on to create organization X, which claims to be an “open global cooperative that organizes itself through the Internet outside the boundaries and controls of nation-states.” Moreover, “Organisaion X aims to issue an alternative global economic system based on cooperation, ethic, solidarity, and north-south redistribution and justice in economic relations.” When asked to define “cooperative values,” he stated,

Solidarity, mutual support, openness, to include new people and influence them to be consensual, participative, and so there are many user circles connected to movements. It’s also connected to open source, free hardware, all the digital movements related to the commons. It’s about putting together many values to create something really equal, really fair and open and able to not just solve the problem, but consider the whole thing as an inter-connected ecosystem From my point of view . . . it’s just an application of the traditional cooperatives, but becoming digital and getting the capacities for people to cooperate on the platform. From my point of view, the platform, the digital spaces are more and more important, but for me it’s not enough, because just a handful of cooperatives cannot fight in a capitalist society, so I think this platform should be part of an ecosystem in a very interconnected way.

Recognizing both the shortcomings of the online cooperativist movement and the immensity of the task lying ahead of him, he nonetheless suggested that the network he had set up was not simply about solving issues related to democratic participation and ownership, but more fundamentally to the building of a new economy in a post-capitalist society. Here, the participant is hopeful that the present working of the digital economy under the hypercapitalism/zombie-capitalism double tempo in our introduction will eventually provide for Drucker’s prediction of “post-capitalist society,” where citizens do not destroy but overcome capitalism (Drucker 1993).

To understand this optimism, one should of course bear in mind that Catalonia, where a significant number of our interviews took place, has been historically marked by cooperativism in its anarchist and libertarian forms, ever since the second half of the nineteenth century and in particular during the Spanish revolution of the late 1930s. In this respect, it was interesting to observe the somewhat condescending appreciation of what Participant 2, dubbed the “traditional” cooperative movement, whose presence is strong within the radical left-wing coalition currently ruling Barcelona: “Cooperativism has been very strong in this region for many, many decades, but in a very traditional form. These people are still attached to this very traditional form of low tech paper-based big meetings with big consensus and so on, and they are now a little bit in conflict with the technology.” Nonetheless, this interviewee stated that part

of his “mission” was to reconcile what he claims to be two currents of cooperativism: “Each of the groups can learn from the other. So the capitalists can learn how to have a better governance and better value distribution from cooperatives, and cooperatives can learn from the capitalists how to scale and how to have impact.” Hence, “when I go to a cooperative movement I’m the capitalist. When I’m on the OuiShare movement I’m a little bit the cooperativist” (Participant 2, January 2016).

Conclusion

The drive toward platformization has gained significant impetus over the past decade. It does, however, remain a contradictory process, giving rise to significant resistance from both manual and intellectual labor, however poorly organized this remains as yet. As an opening remark, we acknowledge that although our study provides some insight, it does not allow to fully validate Garnham’s hypothesis of a higher effectivity of less autonomous ideological forms. It does, however, offer support for this proposition and expands it, in at least three respects.

First, we note the importance of ideological production for the players we interviewed. One can argue that this is their main activity, as well as setting up and running instruments for transaction and organization of labor. One key element we find in all discourses is the imprecision and confusion of the ideological forms produced and in particular forms (models and terms) used to describe relations of production. Simultaneously, all these platforms are at least partly dependent on commodity exchange; labor remains commodified, and none of our interviewees propose yet of any form of coherent plan to effectively transform relations of production. In fact, the ideological interchangeability displayed by these actors has an objective basis in material production, and we can see from our interviews that they are in a position of relative dominance, in comparison to the wider mass of network and platform users, and in particular to manual laborers whose activity is organized via these “tools.” Dolata interestingly writes, “The activists and participants of this type of movement are recruited from the pool of well-educated, dissatisfied, and online-savvy young people of the urban middle class. Their self-understanding is characterized by a deep skepticism of the classic forms of organizing and the propagation of informal, non-hierarchical and non-ideological structures” (Dolata 2017, 19). Indeed, the dissatisfaction with “what they did before” is palpable in many interviews, yet one might wish to critically question the assertion that such players are “well-educated” considering that contemporary university’s function “as the training ground for cognitive capitalism’s immaterial labourers” (Dowling 2011, 195). Furthermore, this proposal could be improved by substituting “deep skepticism” for “deep ignorance” (of the classic forms of organizing), and replacing “the propagation of informal, non-hierarchical and non-ideological structures” by “the propagation of an ideological vision of informal, non-hierarchical structures.”

Second, these players are also heavily involved in setting up new socio-technical apparatuses, which are both what they talk about, what they “agitate” for, and what allows them to capture rent—however scarce—from processes of exploitation of

labor. They are, from a material point of view, dependent on these apparatuses/platforms to survive in their current condition. Setting up, running platforms, and spending a large proportion of one's labor time in agitation is paramount for this individual survival, but it serves a goal that is much wider than simply allowing either individual, or even that of wider social groups ("commons-oriented digital activists"; "the collaborative ecosystem"): our hypothesis is that these players are in a sense inadvertently (in Marx's own term "involuntary promotion") serving what Nixon calls "communicative capital." Nixon (2017) talks of a class relationship and, therefore, of class struggle between capitalists ("communicative" or belonging to other factions) and labor (whether "audience" labor or traditional forms of labor, cultural, digital, platform or otherwise, see previous discussion in literature review).

Nevertheless, Nixon's sharp antagonism misses the intermediary nature of these actors, which adhere more to Ernst Fischer's explanation of Marx's (1996, 81 cites Marx, 1959, *Capital*, III, 862–63) "middle and intermediate strata," obliterating lines of demarcation, or a stand still type of theoretical crystallization, Gabel (1975) would deem of a generally justificatory nature. Gabel's conception entails, "false consciousness and ideology are two aspects of the reificational rejection of the dialectic: false consciousness as a diffused state of mind (*Wahnstimmung* type), ideology as its theoretical crystallization of a generally justificatory nature (derivation)" (p. 22). Along this line, Alain Bihl (1989) talks of a third, intermediary class "between" capital and labor, or between capitalists and the working class, which he calls "capitalist *encadrement* class" and mobilizing both classical marxist theory and Bourdieu's (1986) analytical framework, set out to consider class according to four linked criteria (composition and quantity of income, position with regard to relations of production, social and cultural practices, in both professional/productive or private/"non-productive" contexts, habitus/class consciousness). It is important to take into account the polysemy of the notion of *encadrement*, the French meaning used here corresponding in English to management and supervision (the "cadre" is the "executive," that is, an individual with senior managerial responsibility), but also to the action/activity of framing, as in ideological engineering and coordination. Obviously, this opens up a new area of enquiry, which is precisely where this research had led us: the "sharing economy," "commons," and "platform coopertivism" agitators, albeit with notable exceptions, appear to be spearheads of this *encadrement* class, spreading the word among other members of their class, consolidating deterioration of labor conditions for the working class, yet with some unavoidable "collateral damage" within their own group.

Declaration of Conflicting Interests

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

Funding

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

ORCID iD

Athina Karatzogianni  <https://orcid.org/0000-0002-6161-4423>

References

- Andrejevic, Mark. 2009. "Exploiting YouTube: Contradictions of User-generated Labor." In *The YouTube Reader*, edited by Pelle Snickars and Patrick Vonderau, 406–24. Stockholm: National Library of Sweden.
- Arvidsson, Adam. 2018. "Value and Virtue in the Sharing Economy." *The Sociological Review* 66 (2): 289–301.
- Benkler, Yochai. 2006. *The Wealth of Networks*. New Haven: Yale University Press.
- Bennett, W. Lance. 2004. "Communicating Global Activism." In *Cyberprotest: New Media, Citizens and Social Movements*, edited by Wim Van de Donk, Brian Loader, Paul Nixon, and Dieter Rucht, 109–28. London: Routledge.
- Benson, Alan, Aaron Sojourner, and Akhmed Umyarov. 2015. "Can Reputation Discipline the Gig Economy? Experimental Evidence from an Online Labor Market." IZA Discussion Paper No. 9501. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2696299.
- Berg, Janine. 2016. "Income Security in the on-demand Economy: Findings and Policy Lessons from a Survey of Crowdworkers." *Comparative Labor Law & Policy Journal* 37 (3). <http://ssrn.com/abstract=2740940>.
- Bihr, Alain. 1989. *Entre Bourgeoisie et Proletariat: L'encadrement Capitaliste, Logiques sociales*. Paris: L'Harmattan.
- Boltanski, Luc, and Laurent Thévenot. 2006. *On Justification: Economies of Worth*. Translated by Catharine Porter. Princeton: Princeton University Press.
- Bouquillion, Philippe, and Jacob Matthews. 2010. *Le Web Collaboratif, Mutations des Industries de la Culture et de la Communication*. Grenoble: Pug.
- Bourdieu, Pierre. 1986. "The Forms of Capital." Translated by Richard Nice. In *The Handbook of Theory Research for the Sociology of Education*, edited by John F. Richardson, 241–58. New York: Greenwood Press.
- Benedetta, Brevini, Arne Hintz, and Patrick McCurdy, eds. 2013. *Beyond Wikileaks: Implications for the Future of Communications, Journalism and Society*. New York: Palgrave Macmillan.
- Bruns, Axel. 2007. "Prodsusage: Towards a Broader Framework for User-led Content Creation." In *Proceedings Creativity & Cognition 6*. Washington, DC. <http://eprints.qut.edu.au/6623/1/6623.pdf>.
- Cardon, Dominique, and Antonio Casili. 2015. *Qu'est-ce que le digital labor?* Paris: Editions de l'INA.
- Castells, Manuel. 2000. *The Rise of the Network Society*. Vol. 1 of *The Information Age: Economy, Society and Culture*, 2nd ed. Oxford: Blackwell.
- Chadwick, Andrew. 2006. *Internet Politics: States, Citizens, and New Communication Technologies*. Oxford: Oxford University Press.
- Codagnone, Cristiano, Athina Karatzogianni, and Jacob Matthews. 2018. *Platform Economics: Rhetoric and Reality in the Sharing Economy*. Bingley: Emerald.
- Comor, Edward. 2010. "Digital Prosumption and Alienation." *Ephemera* 10 (3/4): 439–54.
- Dahlberg, Lincoln, and Eugenia Siapera. 2007. *Radical Politics and the Internet*. Basingstoke: Palgrave Macmillan.
- Degryse, Christophe. 2016. "Digitalisation of the Economy and Its Impact on Labour Markets." Working Paper 2016.02. European Trade Union Institute, Brussels.

- Dencik, Lina, Arne Hintz, and Jonathan Cable. 2016. "Towards Data Justice? The Ambiguity of Anti-surveillance Resistance in Political Activism." *Big Data & Society* 3(2): 1–12. doi:10.1177/2053951716679678.
- De Stefano, Valerio. 2016. "The Rise of the 'Just-in-time Workforce': On-demand Work, Crowdwork and Labour Protection in the 'Gig-economy.'" Conditions of Work and Employment Series No. 71. International Labour Office, Inclusive Labour Markets, Labour Relations and Working Conditions Branch, Geneva.
- Diani, Mario, and Doug McAdam. 2003. *Social Movements and Networks: Relational Approaches to Collective Action*. Oxford: Oxford University Press.
- Dolata, Ulrich. 2017. "Social Movements and the Internet: The Sociotechnical Constitution of Collective Action." SOI Discussion Paper No. 2017-02. Stuttgarter Beiträge zur Organisations-und Innovationsforschung. <https://www.econstor.eu/handle/10419/156395>.
- Dolata, Ulrich, and Jan-Felix Schrape. 2016. "Masses, Crowds, Communities, Movements. Collective Action in the Internet Age." *Social Movement Studies* 15 (1): 1–18.
- Dowling, Emma. 2011. "Challenging the Critical Subject: Pedagogies of Cognitive Capitalism." In *Cognitive Capitalism, Education, and Digital Labor*, edited by Michael A. Peters and Ergin Bulut, 170–195. New York: Peter Lang.
- Drucker, Peter. 1993. *The Post-capitalist Society*. Oxford: Butterworth-Heinemann.
- Fischer, Ernest. 1996. *How to Read Karl Marx*. New York: Monthly Review Press.
- Fuchs, Christian. 2014. *Digital Labour and Karl Marx*. London: Routledge.
- Fuster Morell, Mayo. 2011. "¿La participación como ecosistema? comunidades de creación online parra la construcción de bienes públicos digitales." In *En Democracia radical: entre vínculos y utopias*, edited by Angel Calle Collado, 129–48. Icaria: Barcelona.
- Gabel, Josef. 1975. *False Consciousness: An Essay on Reification*. Translated by Margaret A. Thomson and Introduction by Kenneth A. Thomson. New York: Harper Touchbooks.
- Gandini, A. 2018. "Platform Labour: From Digital Labour to Labour Publics." Paper presented at "Platform Swindles Platform Struggles" seminar series, Paris, April 20.
- Garnham, Nick. 1979. "Contribution to a Political Economy of Mass-communication." *Media, Culture & Society* 1 (2): 123–46.
- Gerbaudo, Paulo. 2014. "Populism 2.0: Social Media Activism, the Generic Internet User and Interactive Direct Democracy." In *Social Media, Politics and the State: Protests, Revolutions, Riots, Crime and Policing in the Age of Facebook, Twitter and YouTube*, edited by Daniel Trottier and Christian Fuchs, 67–87. London: Routledge.
- Graham, Mark, Isis Hjorth, and Vili Lehdonvirta. 2017. "Digital Labour and Development Impacts of Global Digital Labour Platforms and the Gig Economy on Worker Livelihoods." *Transfer: European Review of Labour and Research* 28:135–62.
- Graham, Phil. 2006. *Hypercapitalism: New Media, Language and Social Perceptions of Value*. New York: Peter Lang.
- Hancké, Bob, Martin Rhodes, and Mark Thatcher. 2008. "Beyond Varieties of Capitalism." In *Debating Varieties of Capitalism*, edited by Bob Hancké, 273–300. Oxford: Oxford University Press.
- Harman, Chris. 2010. *Zombie Capitalism: Global Crisis and the Relevance of Marx*. Chicago: Haymarket.
- Hesmondhalgh, David. 2010. "User-generated Content, Free Labour and the Cultural Industries." *Ephemera* 10 (3/4): 267–84.
- Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

- Johnston, Hannah, and Chris Land-Kazlauskas. 2018. "Organizing on-demand: Representation, Voice, and Collective Bargaining in the Gig Economy." *Conditions of Work and Employment Series No. 94*, International Labour Office, Geneva. https://www.ilo.org/travail/whatwedo/publications/WCMS_624286/lang-en/index.htm.
- Karatzogianni, Athina. 2006. *The Politics of Cyberconflict*. London: Routledge.
- Karatzogianni, Athina. 2015. *Firebrand Waves of Digital Activism 1994–2014: The Rise and Spread of Hacktivism and Cyberconflict*. Basingstoke: Palgrave Macmillan.
- Karatzogianni, Athina, and Jacob Matthews. 2017. "Evil Intermediation Platforms." In the series "Evil Infrastructures" *Theorizing the Contemporary*, Edited by Christopher Kelty, April 28. <https://culanth.org/fieldsights/1110-evil-intermediation-platforms>
- Kässi, Otto, Lehdonvirta, Vili, Graham, Mark, Barnard, Helena and Hjorth, Isis. 2016. "Not a Lot of People Know Where It Is": Liabilities of Origin in Online Contract Work. presented at Collective Intelligence 2016 (NYU, New York, USA 1-3 June 2016). <https://ora.ox.ac.uk/objects/uuid:8f0b225b-e6d6-4539-a6f2-0b30d8de488a>
- Kässi, Otto, and Vili Lehdonvirta. 2016. "Online Labour Index: Measuring the Online Gig Economy for Policy and Research." Paper presented at Internet, Politics and Policy, Oxford, September 22–23. <http://ilabour.oii.ox.ac.uk/online-labour-index/>.
- Kenney, Martin, and John Zysman. 2016. "What is the Future of Work? Understanding the Platform Economy and Computation-intensive Automation." Berkeley Roundtable on the International Economy. Proto-paper prepared for Radcliffe Institute, Conference on Work and Welfare in the Platform Economy. <https://brie.berkeley.edu/sites/default/files/brie-wp-2016-9.pdf>.
- Le Crosnier, Hervé. 2015. *En communs: une introduction aux communs de la connaissance*. coll. « Blogollection ». Caen, France: C&F.
- Lehdonvirta, Vili. 2016. "Algorithms That Divide and Unite: Delocalization, Identity, and Collective Action in 'Microwork.'" In *Space, Place and Global Digital Work*, edited by Jorg Flecker. London: Palgrave-Macmillan.
- Lessig, Lawrence. 1999. "Code Is Law", *Code and Other Laws of Cyberspace*. London: Basic Books.
- Loader, Brian, ed. 1998. *Cyberspace Divide: Equality, Agency and Policy in the Information Society*. Routledge: London.
- Marx, Carl. 1959. *Capital III*. Moscow: Foreign Languages Publishing House.
- Matthews, Jacob. 2017. "Beyond 'Collaborative Economy' Discourse: Present, Past and Potential of Intermediation Platforms." In *Collaborative Production in the Creative Industries*, edited by James Graham and Alessandro Gandini, 33–50. London: University of Westminster Press.
- Matthews, Julian, and Jennifer Smith Maguire. 2014. *The Cultural Intermediaries Reader*. London: Sage.
- McCaughey, Martha, and Michael Ayers. 2003. *Cyberactivism: Online Activism in Theory and Practice*. New York: Routledge.
- Milan, Stefania. 2013. *Social Movements and Their Technologies: Wiring Social Change*. New York: Palgrave MacMillan.
- Nixon, Brice. 2014. "Toward a Political Economy of 'Audience Labour' in the Digital Era." *Triple C* 12 (2): 713–34.
- Nixon, Brice. 2017. "Critical Communication Policy Research and the Attention Economy: From Digital Labor Theory to Digital Class Struggle." *International Journal of Communication* 11:Feature 4697–701.

- Ong, Jonathan, and Jace Cabañes. 2018. "Architects of Networked Disinformation: Behind the Scenes of Troll Accounts and Fake News Production in the Philippines." <http://new-tontechfordev.com/wp-content/uploads/2018/02/ARCHITECTS-OF-NETWORKED-DISINFORMATION-FULL-REPORT.pdf>.
- Pais, Ivana, Alessandro Gandini, and Davide Luca Arcidiacono. 2018. *Unboxing the Sharing Economy: Opportunities and Risks of the Era of Collaboration*. Sociological Review Press. London: Sage.
- Peters, Michael A., and Ergin Bulut, eds. 2011. *Cognitive Capitalism, Education, and Digital Labor*. New York: Peter Lang.
- Rheingold, Howard. 1994. *The Virtual Community: Surfing the Internet*. London: Minerva.
- Rosenblat, Alex, and Luke Stark. 2016. "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers." *International Journal of Communication* 10:3758–84.
- Scholz, Trebor, ed. 2013. *Digital Labor: The Internet as Playground and Factory*. New York: Routledge.
- Scholz, Trebor. 2016. "Platform Cooperativism: Challenging the Corporate Sharing Economy." Rosa Luxemburg Stiftung. www.rosalux-nyc.org/wp-content/files_mf/scholz_platform-coop_5.9.2016.pdf.
- Scholz, Trebor, and Nathan Schneider. 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. <http://www.orbooks.com>.
- Schrape, Jan-Felix. 2017. Open Source Projects as Incubators of Innovation: From Niche Phenomenon to Integral Part of the Software Industry. SOI Discussion Paper No. 2017-03. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2977352.
- Shapiro, Aaron. 2017. "Between Autonomy and Control: Strategies of Arbitrage in the 'on-demand' Economy." *New Media & Society* 20 (8): 2954–71.
- Smith, Rebecca, and Sarah Leberstein. 2015. "Rights on Demand: Ensuring Workspace Standards and Worker Security in the on-demand Economy." National Employment Law Project. www.nelp.org.
- Smyrniaios, Nikos. 2018. *The Internet Oligopoly: The Corporate Takeover of Our Digital World*. Bingley: Emerald.
- Smythe, Dallas Walker. 1977. "Communications: Blindspot of Western Marxism." *CTheory* 1 (3): 1–27.
- Srnicek, Nick. 2017. *Platform Capitalism*. Cambridge: Polity Press.
- Taylor, Paul, and Tim Jordan. 2004. *Hacktivism and Cyberwars: Rebels with a Cause?* London: Routledge.
- Terranova, Tiziana. (2000) 2013. "Free Labor." In *Digital Labor: The Internet as Playground and Factory*, edited by Trebor Scholz, 33–57. New York: Routledge.
- The New School. 2018. "The Platform Cooperativism Consortium (PPC) at the New School Receives \$1,000,000 Google.Org Grant." <https://www.newschool.edu/pressroom/pressreleases/2018/treborscholz.htm>.
- Trottier, Daniel, and Christian Fuchs, eds. 2014. *Social Media, Politics and the State: Protests, Revolutions, Riots, Crime and Policing in the Age of Facebook, Twitter and YouTube*. London: Routledge.
- Valenduc, Gérard, and Patricia Vendramin. 2016. "Work in the Digital Economy: Sorting the Old from the New." Working paper 2016.03. European Trade Union Institute. <https://www.etui.org/Publications2/Working-Papers/Work-in-the-digital-economy-sorting-the-old-from-the-new>.

- Van de Donk, Wim, Brian Loader, Paul G. Nixon, and Dieter Rucht, eds. 2004. *Cyberprotest: New Media, Citizens and Social Movements*. London: Routledge.
- van Doorn, Niels. 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.
- Wood, Alex J., Mark Graham, and Vili Lehdonvirta. 2016. "Virtual Production Networks: Fixing Commodification and Disembeddedness." The Internet, Policy & Politics Conference: Oxford Internet Institute, University of Oxford, September 22.
- Wood, Alex J., Mark Graham, Vili Lehdonvirta, and I. Hjorth. 2018a. "Good Gig, Bad Big: Autonomy and Algorithmic Control in the Global Gig Economy." *Work, Employment and Society*. Published electronically August 8, 2018. doi:10.1177/0950017018785616.
- Wood, Alex J., Vili Lehdonvirta, and Mark Graham. 2018b. "Workers of the Internet Unite? Online Freelancer Organisation among Remote Gig Economy Workers in Six Asian and African Countries." *New Technology, Work and Employment* 33 (2): 95–112.

Author Biographies

Athina Karatzogianni is an associate professor in media and communication at the University of Leicester and researches the use of digital technologies by emerging sociopolitical and economic formations, social movements, protest, and insurgency groups.

Jacob Matthews is a professor in information and communication sciences at the Université Paris 8 and Director of the Cemti research lab. His research now primarily focuses on the political economy of the Internet and digital intermediation platforms.