

A POLITICAL  
ECONOMY  
OF  
Justice

EDITED BY

Danielle Allen,  
Yochai Benkler,  
Leah Downey,  
Rebecca Henderson,  
& Josh Simons

The University of Chicago Press, Chicago 60637

The University of Chicago Press, Ltd., London

© 2022 by The University of Chicago

All rights reserved. No part of this book may be used or reproduced in any manner whatsoever without written permission, except in the case of brief quotations in critical articles and reviews. For more information, contact the University of Chicago Press, 1427 E. 60th St., Chicago, IL 60637.

Published 2022

Printed in the United States of America

31 30 29 28 27 26 25 24 23 22 1 2 3 4 5

ISBN-13: 978-0-226-81842-9 (cloth)

ISBN-13: 978-0-226-81844-3 (paper)

ISBN-13: 978-0-226-81843-6 (e-book)

DOI: <https://doi.org/10.7208/chicago/9780226818436.001.0001>

Library of Congress Cataloging-in-Publication Data

Names: Allen, Danielle S., 1971– editor.

Title: A political economy of justice / edited by Danielle Allen [and four others]

Description: First edition. | Chicago : University of Chicago Press, 2022. | Includes bibliographical references and index.

Identifiers: LCCN 2021047902 | ISBN 9780226818429 (cloth) | ISBN 9780226818443 (paperback) | ISBN 9780226818436 (ebook)

Subjects LCSH: Social justice—Economic aspects—United States. | Capitalism—United States.

Classification: LCC HN90.S6 P65 2022 | DDC 305.50973—dc23

LC record available at <https://lcn.loc.gov/2021047902>

Ⓢ This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

# 10 *The Just and Democratic Platform? Possibilities of Platform Cooperativism*

JULIET B. SCHOR AND SAMANTHA EDDY

## **Introduction**

The Great Recession shone a bright light on structural problems that had been accumulating in the global economy for years: the acceleration of extreme inequality in the household distributions of income and wealth, weak demand, hidden unemployment, unsustainable consumer debt, and growing imbalances between rural and urban areas. At the same time, the climate crisis intensified as the international community proved unable to control emissions and engineer the turnaround required to avoid runaway climate chaos. The failure of national governments to solve these economic and ecological challenges, coupled with a decades-long right-wing attack on the state, resulted in widespread pessimism about the possibility and efficacy of political action, particularly in the United States. This proved to be fertile ground for optimism about a variety of market-based solutions. One of those solutions came to be known as the “sharing economy.” It emerged with the Great Recession and promised a new way of organizing economic activity. It would be smaller-scale, more personal, and much more efficient. Power would not be concentrated in the hands of a few. It represented a way to deploy new technology in the service of human needs. Indeed, founders and ordinary participants claimed it could be the solution to multiple problems facing capitalist societies: inequality and exclusion, stagnant incomes, climate chaos, and social disconnection (Schor 2014, 2020). The central vehicle for realizing these goals was online person-to-person exchange made newly feasible by innovations in digital technology (Benkler 2006).

The core idea is that small-scale, personal economic activity becomes viable as a result of digital tools, matching algorithms, and crowdsourced reputational data. These features overcome the long-standing drawbacks of peer-to-peer or person-to-person markets, such as costly search and risky exchanges.

Consumers reap benefits and individual providers can control their work lives in new and empowering ways (Castillo, Knoepfle, and Weyl 2018; Einav, Farro-nato, and Levin 2016; Horton and Zeckhauser 2016; Schor 2020; Sundararajan 2016). In particular, the “sharing economy” offered the possibility of giving workers control over their schedules, total hours of work, and the labor process itself. The promise is that individuals can do it themselves by participating in this emergent, humane market (Fitzmaurice et al 2020).

Not everyone believed in the promise of the “sharing economy.” There has been widespread skepticism about some platform companies, particularly Uber, which has the largest labor force by a big margin. Some argued that the sharing sector represented the emergence of a hyper-predatory regime of labor control (Hill 2015; Rosenblat 2018; Scholz 2016b). Others foresaw a new frontier in the commodification and corporatization of everyday life and the destruction of urban quality of life (Morozov 2013; Slee 2015; see also the chapter by Stears in this book). A decade after its founding, many in the US have written off the sharing economy as a malignant force degrading workers and neighborhoods. Others still see potential in the technologies and peer-to-peer structure. The experiences of some European countries, which have subjected platforms to more stringent regulation, suggest that policies and impacts are not predetermined by economics or technology (Rahman and Thelen 2019; Söderqvist 2017; Thelen 2018). Since 2018, regulatory activity protecting residents and workers has increased in the US, particularly in ride-hailing and accommodation. And after years of unsuccessful legal efforts to reclassify platform workers from independent contractors to employees (Collier, Dubal, and Carter 2017), pioneering legislation to convert providers to employees has been enacted, although this fight is ongoing. It is possible that after a decade of regulatory arbitrage and nullification by the firms (Acevedo 2016; Calo and Rosenblat 2017; Collier, Dubal, and Carter 2018; Rahman 2016), the power of platforms is being reined in. If so, workers and urban residents will likely benefit.

But this familiar turn to regulation, welcome as it will be, may not exploit the more transformative possibilities of the new technologies used by platforms in the sharing economy (Benkler 2004, 2006, 2013; Schor 2010). That may require a less traditional approach. In particular, the peer-to-peer (P2P) structure enabled by technology may not only make transactions more efficient, it may also do the same for democratic governance. This is the contention of a small but growing movement for platform cooperativism (Scholz 2014, 2016a; Scholz and Schneider 2016). Platform cooperatives borrow some of the features of worker cooperatives, in particular worker ownership and governance. But because platforms typically operate differently than conven-

tional firms, they also offer new opportunities and challenges. Platform co-ops raise the possibility that P2P marketplaces can support a new enterprise form that is capable of achieving greater economic justice and democracy than conventional firms.

Platform cooperatives are best understood as one type of firm within a larger, more pluralist economy. This vision counters the conceit of twentieth-century economic theory that the capitalist firm is optimal and that economies should evolve toward a singular business form. Rather, it sees platform cooperatives as one type in a diverse ecosystem of ownership and governance arrangements that include small and large-scale commons, trusts, varied financial arrangements (public banks, crowdsourcing, credit cooperatives), small and owner-run businesses, nonprofits, networked enterprises, and others (Alperovitz 2011; Benkler 2006; Ostrom 1990; Piore and Sabel 2000).

This chapter draws on findings from our research on the sharing economy conducted in the sociology department of Boston College from 2011 to 2018. The research covered 12 cases of for-profit and nonprofit entities, including the first academic study of a platform cooperative. Our cases are Airbnb, Turo, TaskRabbit, Lyft and Uber, Postmates and Favor, a timebank, a food swap, a makerspace, Stocksy (the platform co-op), and an open education case. We did interviews, hundreds of hours of ethnography, web scraping, and quantitative analysis. Our database contains roughly 325 interviews. Details on our methods and findings are available on our project website,<sup>1</sup> and a summary of our work is contained in Schor (2020). This chapter begins with a short history of the sharing economy, discusses the labor outcomes on for-profit platforms, and then turns to a discussion of the not-for-profit cases, as they are relevant for platform cooperatives, and our research on Stocksy, one of the earliest and most well-established platform cooperatives.

### **“Sharing Economy” Practices: Goods, Space, and Labor Services**

There are three main subsegments within the sharing economy: goods, space, and gig labor services, although this division is somewhat arbitrary, given that all exchanges take place in space and require both labor and capital.<sup>2</sup> The precursors of today’s sharing economy are eBay and Craigslist, two peer-to-peer markets that were established in 1995 and familiarized users with the P2P structure (Schor and Fitzmaurice 2015). In addition, eBay pioneered the use of a crowdsourced ratings and reputation system, a feature integral to nearly all the commercial platforms and that many of its former employees went on to employ as founders of sharing economy sites (Stein 2015). The pairing of the for-profit eBay with the not-for-profit Craigslist is also notable,

as it mirrors the mixed composition of the sector in its original incarnation. Both also began as marketplaces for used goods, responding to the surfeit of imported consumer items available at historically low prices (Schor 2010). By creating online markets for used mass-market goods, these platforms transformed used-goods exchanges, which had previously operated as informal, low-value markets. Digital technology made these trades more convenient, and the reputation system helped build trust among transactors, a key factor that has historically limited secondhand markets. The size of this market is difficult to estimate. However, in terms of participation on the provider side, it is the largest of the three subsections of the sharing sector. In 2016, an estimated 18 percent of Americans earned money by online selling (and 14 percent of those sold used goods), in comparison to 8 percent who earned income from gig labor tasks, such as digital work, ride-hailing, and cleaning (Pew Research Center 2016). There are now many sites organizing P2P exchange, particularly in the apparel sector, where the development of fast fashion resulted in the acceleration of the cycle of acquisition and discard. General exchange sites have also proliferated, employing a range of exchange practices. The largest, Freecycle, uses a gift model and stresses reciprocal giving (Aptekar 2016). Other sites, such as Freegle (a Freecycle offshoot), do not discourage income-based asymmetry with affluent donors and low-income receivers (Martin, Upham, and Budd 2015). Some platforms organize P2P short-term rental of durable goods, such as cars, camping gear, photography equipment, tools, apparel, and household items that are used intermittently. These platforms also operate with a range of exchange practices, from the purely commercial to nonmonetized forms such as tool and toy libraries.

The second category is space-sharing. Here the originator is Couchsurfing, which was started in 1999 and uses a gift exchange model for hosting travelers. Like successor sites such as Airbnb, Couchsurfing uses crowdsourced reputational data to build trust among potential hosts and guests. It has a mission to build connection among people across the world, and research shows that has been successful building friendships, although the strength of induced social ties declines with frequency of use (Parigi and State 2014; Parigi et al. 2013). Airbnb, a rental model that grew explosively, came to dominate this subsegment. Other space-sharing sites offer storage, parking, offices, kitchens, and land. These are frequently termed *capital platforms* (Farrell and Greig 2016) because the bulk of income earned in this sector is from a capital “good” (i.e., the space). Makerspaces, a rapidly growing offering in both for- and not-for-profit versions, combine space and tools. Airbnb is a salient example of a broader trend seen on some of the commercial capital platforms—it began with a P2P structure but evolved toward business-to-

consumer (B2C) transactions (i.e., commercial operators renting multiple units). Recent regulatory actions and enforcement may now be reversing this trend, although there is uncertainty about whether these measures will be successful (Schor 2020).

The third subsegment is labor services, also known as the gig or on-demand economy. This is a diverse segment, including ride-hailing and delivery, caring labor, housecleaning, and errands or “handyperson” odd jobs.<sup>3</sup> Uber reports an estimated 3.9 drivers globally, with perhaps one million in the United States. Care.com, the largest platform for caring labor, reports 13.9 million caregivers as of March 2019.<sup>4</sup> There are also not-for-profits in this segment. Timebanks organize multilateral barter exchange on the principle that each provider’s time is equally valued. Other examples include repair cafes and food exchanges (swaps, surplus redistribution, food preparation).

The diversity of business organization, exchange model, user type and structure, and mix of capital and labor has contributed to terminological and analytic ambiguity and controversy (Frenken and Schor 2017; Schor and Attwood-Charles 2017). Figures 10.1 and 10.2 categorize entities according to their profit-status, user structure (P2P versus B2C), skill level, and mix of capital and labor. Other relevant dimensions include the form of exchange (monetary, barter, gift, loan), medium of exchange (some sites create their own currencies), whether the work is done offline or online, and whether the customers are individuals or businesses.

The earliest term for the sector was “collaborative consumption” (Botsman and Rogers 2010), which focused on arrangements that increased the utilization of existing assets and included sharing space (e.g., accommodations and

		STRUCTURE	
		<i>Peer-to-Peer</i>	<i>Business-to-Consumer</i>
PROFIT ORIENTATION	<i>For-profit</i>	Airbnb Turo NeighborGoods	Zipcar Techshop WeWork
	<i>Not-for-Profit</i>	Couchsurfing (until 2011)	Community Makerspaces

**Figure 10.1.** Capital platforms.

		<i>High Skill</i>	<i>Low Skill</i>
PROFIT ORIENTATION	<i>For-profit</i>	Care.com Upwork Stocksy TimeRepublik	Uber, Lyft Postmates
	<i>Not-for-Profit</i>		Timebanks

**Figure 10.2.** Labor platforms.

offices) and goods (e.g., car rentals, household items). Some analysts reserve the term “sharing economy” for this type of exchange, whether monetized or not, because it involves shared use of the asset across time (Frenken and Schor 2017). However, others argue that if a rental fee is charged, the practice is not sharing because it is done for monetary gain (Belk 2007). In practice, the term has been used indiscriminately and incoherently to encompass nearly all platforms that use matching algorithms (Schor and Attwood-Charles 2017). As some platforms became increasingly predatory toward their workers, the use of the word “sharing” became less defensible and declined in favor of terms such as the gig and on-demand economy, for labor platforms, and the platform economy (Kenney and Zysman 2016) for the entire sector. However, those terms are both broader (including B2B and digital labor, as well as social media and retail sites) and narrower (excluding nonprofits). The term “sharing economy” has traditionally been used to refer to both for-profit and not-for-profit consumer-oriented P2P entities of the three types discussed above (goods, space, and labor). Because that is the segment that we have focused on in our research, that is the term employed here. However, it is important to note that describing commercial entities such as Airbnb or Uber as “sharing” companies can serve to obscure their antisocial practices.

### **A Disruptive Innovation**

Platform technology has been hailed as a disruptive innovation that will yield welfare for producers and consumers in these multisided markets (Rochet and Tirole 2003), as well as additional common good claims.<sup>5</sup> There is



widespread agreement that these firms have been disruptive, but observers differ in their analysis of why. Some argue that political economy factors account for the success of the major platforms, in particular the ability to ignore regulations and to misclassify workers as independent contractors and other factors related to market and political power (Calo and Rosenblat 2017; Collier, Dubal, and Carter 2017; Dubal 2017; Rahman and Thelen 2019; Vallas 2019; van Doorn 2017). However, the viability of platforms in countries where they have conformed to regulations suggests that this is not the whole story (Rahman and Thelen 2019; Söderqvist 2017; Thelen 2018).

The alternate approach focuses on the novel technological features of platforms. Most important is that these technologies render peer-to-peer markets more efficient and therefore more feasible. Three aspects of the technology are salient. First, platforms reduce the transaction costs associated with exchanges by organizing electronic payments and insurance, mobilizing GPS technology, and facilitating easy entry and exit of suppliers. This reduces setup and financial outlays for sellers to engage in income-generating activity. Second, algorithms make efficient matches between buyers and sellers and reduce search, a previously costly activity in P2P markets on account of the heterogeneity of sellers. And third, the platforms gather crowdsourced reputational information to create trust among strangers, which enables a key feature of multisided markets—namely, that they enable “stranger sharing” (Schor 2014). (The classic contribution on new forms of sharing is Benkler [2004], who uses the term social sharing.) Historically, stranger sharing has been limited on account of the risks of transacting with unknown others. The presence of both brokers and other intermediaries and trusted brands can be understood partly as ways to mitigate the risks associated with exchanges among unknowns. Crowdsourced reputational data has the potential to perform a similar function and increases willingness to transact with strangers.<sup>6</sup> The combination of these three factors results in lower barriers to entry and enhanced viability for single-person producers, as simple economic analysis can show (Einav, Farronato, and Levin 2016). Some economists have even gone as far as to predict that it heralds the “end of employment” (Sundararajan 2016) although that seems unlikely given that the efficiencies of the technology are less relevant for complex production processes that require extensive coordination. However, platform technology is well suited to services, which currently employ a majority of the US labor force. Thus, the question arises: Can these digital innovations be an enabling factor for a substantial sector of the economy to be organized as independent entities with substantive control over their conditions of production?

The hope that platform technology will result in viable, nonpredatory

peer-to-peer markets runs counter to the view that technology markets have a tendency toward monopoly (Dube et al. 2018; Kahn 2017). Dominant firms such as Google, Facebook, and Amazon are considered to be beneficiaries of network effects (i.e., a cost structure that declines with additional users). In a monopolistic market, the platform can engage in predation and manipulation of users, thereby undermining the possibility for viable independent production (Calo and Rosenblat 2017; Rahman 2016). This is less of an issue in the sharing sector than in online tech markets. There are some genuine network effects—for example, on lodging sites. However, many of the services on offer (ride-hail, delivery, caring labor) are local (Horan 2016), which curtails network effects. Furthermore, these markets differ from Facebook and Google because those firms are selling their own products. Sharing platforms are intermediaries among independent producers and consumers. (Amazon is a hybrid in this respect.) Even if the platform is large, if it can facilitate an ecosystem of small or independent producers and if it is democratically owned and/or governed, it can serve their needs.

### **Labor Outcomes on For-Profit Platforms**

One decade in, have platforms met the promises of the sharing economy discourse? For consumers, there has been clear benefit, especially in ride-hail, lodging, and delivery, through lower prices and increased supply. For workers, the picture is mixed, although it is difficult to quantify outcomes because of a lack of data from the platforms and the casualness of this type of employment. The literature is plagued by Uber-centricity, and while ride-hail does comprise a large segment, it is unique in a number of ways (Schor et al. 2020; Ticona and Mateescu 2018). The research is especially limited on higher-skilled providers and caring labor, despite the latter being the largest category of earners in the sector (Ticona, Mateescu, and Rosenblat 2018). Furthermore, conditions in this sector change rapidly, as platforms can easily alter compensation, incentives, rules, and terms of service, and many do so frequently. However, some conclusions are possible. We address three main areas: wages and compensation, autonomy and labor process, and governance/voice in the firm.

With respect to wages and compensation, the picture is mixed, with marked differences across skill level and between capital and labor platforms. In general, the relatively high wages of the early years have been reduced as more providers join platforms. However, on a number of platforms, earnings are comparatively good. For example, on TaskRabbit, the platform we have studied, hourly wages remain high and workers are generally satisfied (Schor

et al. 2020). Similarly, we have found that earners on “capital” platforms such as Airbnb are earning substantial sums and express high levels of satisfaction; see also Farrell, Greig, and Hamoudi (2018). By contrast, in ride-hail there is accumulating evidence of a race to the bottom, as the dominant platforms squeeze drivers’ earnings (Horan 2016) and exert more control (Rosenblat 2018). Studies of some of the nation’s largest cities reveal that full-time ride-hail work is common, and earnings after expenses are often below the hourly minimum wage (Parrott and Reich 2018; UCLA Institute for Research on Labor and Employment 2018). Bank account data reveals a 53 percent collapse in monthly driver earnings between 2014 and 2018 (Farrell, Greig, and Hamoudi 2018). Journalistic accounts and qualitative research have documented deteriorating conditions, with drivers sleeping in their cars, going deeper into debt, and expressing tremendous frustration with the growing share of revenue being extracted by the platforms (Robinson 2017; Streitfeld 2019). Delivery work appears to be on a similar trajectory, with declining income for workers and growing evidence of discontent. We have found that platform outcomes are much better for supplemental earners than for those attempting to make full-time livelihoods (Schor et al. 2020). Across platforms, supplemental earners have safer conditions, greater job satisfaction, and often higher hourly wages than those who are dependent on their platform earnings to pay their basic expenses.

On questions of autonomy, control over schedules, and conditions of work, there is also mixed evidence. The opportunity to work without a boss and with control over one’s own schedule and conditions of work has been a major attraction for many platform earners. For supplemental earners, those aspects of the experience are mostly realized and highly appreciated. On the other hand, dependent workers lose flexibility, and while they continue to appreciate the lack of a “boss,” in the most predatory sectors (e.g., ride-hail and delivery), they are more subject to “algorithmic control” (Rosenblat and Stark 2016) and the discipline of the market (Schor et al. 2020). Dependent workers are more compelled to conform to demand-based schedules that maximize their earnings, and on the lower-wage platforms they must work very long hours. Thus, they lose a good deal of the flexibility of short and personalized hours. However, except among the most exploited dependent earners, autonomy remains a positive feature of platform work. There are additional downsides to dependent work such as a higher likelihood of accepting jobs that pose risk, either to personal safety or in terms of the financial payoff (Ladegaard, Ravenelle, and Schor 2022; Ravenelle 2019; Rosenblat 2018). We find that supplemental earners are more likely to disregard ratings and flout company rules in order to ensure their safety or do the work as they

prefer. Dependent workers describe more desperation and precarity, even if they prefer platform work to other options.

Finally, on the question of governance and voice, we also find variation over time and across platforms. In the early years, and especially outside of ride-hail, many earners felt heard and part of a community. That has changed as platforms have attempted to grow and increase revenue. On larger platforms that provide little “customer service” for earners (such as Uber), workers have voiced strong frustration with the lack of support and the absence of voice. Indeed, some platforms have become notorious for failing to consider earners’ situations and experiences. For example, a three-day strike by Instacart delivery workers in the fall of 2019 was quickly met by the company with a pay cut. While some platforms articulate a discourse of “partnership” with earners, there are almost no formal mechanisms in the sector for effective voice. This is central to what platform cooperatives can offer, as we discuss below.

### **Race and Class Inequality**

The discourse of disruption associated with the emergence of the sector suggested that sharing platforms would undermine long-standing inequalities of race and class by providing open access with low barriers to entry. Economists Samuel Fraiberger and Arun Sundararajan (2017) argued that low-income households would benefit disproportionately from the opportunity to rent out assets. However, a growing body of research suggests that racial and class inequality is reproduced on platforms (Ticona and Mateescu 2018; van Doorn 2017). While there is some evidence of reduced barriers (e.g., there are more women ride-hail drivers than taxi operators), most studies find discriminatory behavior by race. We find that the platform sector is reproducing a hierarchy of outcomes based on skill and capital that parallels the legacy labor market. A study of TaskRabbit found that the algorithm is less likely to recommend Black Taskers (Hannák et al. 2017), perhaps because they receive lower ratings. Another study of TaskRabbit in Chicago found that low-income residents were disproportionately unlikely to be earning on the platform and that Blacks, and especially Black men, received lower ratings (Thebault-Spieker, Terveen, and Hecht 2015). In our analysis of outcomes on Airbnb across 10 US markets, we find that while residents of neighborhoods with more non-white households are more likely to list their properties, their outcomes are worse on nearly all dimensions than counterparts in areas with higher white populations. Hosts get lower prices for their listings, book less frequently, and receive lower ratings (Cansoy 2018; Cansoy and Schor 2019).

The platforms have also been characterized by “opportunity hoarding” with respect to education and employment status (Schor 2017). From the beginning they have attracted earners with high education levels. Because the kinds of activities done on sharing platforms (driving, cleaning, handy-person, errands) have traditionally been done by people without college educations, this represents a crowding-out effect by educational credential. While there has also been an expansion of demand for these services, in ride-hail and lodging traditional taxi drivers and hotel cleaners seem to have lost out (Dubal 2017; Zervas, Proserpio, and Byers 2014). Hoarding by employment status occurs because of the prevalence of platform earners who hold other full-time jobs (Schor et al. 2020).

While the dystopian fears of some critics are likely overblown, the optimistic accounts of the early days are also inaccurate. The track record of platforms on issues of work and income suggests that while they have been vital for some participants to earn extra money, they are failing as a new source of full-time livelihood. The question of whether the downward trajectory experienced by ride-hail drivers will be replicated on other platforms is also still unanswered. It is also worth noting that platforms have taken advantage of their political clout both to evade existing regulations and restructure the regulatory environments in which they operate (Calo and Rosenblat 2017; Collier, Dubal, and Carter 2018; Rahman 2016; Stemler, Perry, and Haugh 2019; Thelen 2018). While the bulk of the regulatory change has benefited the platforms at the expense of legacy industries and worker protections, more recently that has been changing, with the institution of minimum wage guarantees (in the case of New York City ride-hail drivers), data-sharing requirements, and stricter enforcement of limitations on short-term rentals. However, while regulatory action is to be welcomed, it is unlikely to fundamentally change the political economy of the sector. Large platforms will remain dominant and will mainly operate in their own interests. A deeper transformation of power will require new enterprise structures. In the early days of the sharing economy, there was considerable enthusiasm and hope that nonprofits were a dynamic form with a compelling economic model and the ability to scale rapidly. Let us turn now to those experiences.

### **Are Nonprofits the Alternative?**

In each of the three subsegments of the “sharing economy,” there are non-commercial entities engaged in similar activities to the commercial companies.<sup>7</sup> The nonprofits also promised many of the benefits that were expected to flow from platform technology: the expansion of P2P exchange, putting

idle capacity to use, safe stranger exchange, and meeting needs the market was failing to address. While the activities of the nonprofit segment have not resulted in the negative externalities (e.g., congestion, rising rents) associated with a number of the for-profit companies, in the United States they have largely failed to scale and many have failed altogether.<sup>8</sup> Given that many of these sites used similar technology to their commercialized comparators, albeit in simpler, lower-cost versions, this divergence in trajectory needs explanation. In our research we have identified two factors to account for the slow development of this sector: a lack of instrumental value for users, and practices of social exclusion (Attwood-Charles and Schor 2019; Fitzmaurice and Schor 2018; Fitzmaurice et al. 2020; Schor et al. 2016).

All the nonprofit sites were founded to promote social benefits. These include reducing inequality and bridging social class (timebanks, surplus food redistribution, goods gifting), lower carbon and eco-footprints (used-goods loaning and exchange sites, repair efforts, most food-related efforts), and building community (nearly all). Yet many have failed or grown slowly despite their appealing missions.<sup>9</sup> Among our cases, the swap failed altogether (Fitzmaurice and Schor 2018), the timebank had limited trading volume (Dubois, Schor, and Carfagna 2014), and the makerspace was successful but highly socially and culturally exclusionary (Attwood-Charles 2017; Attwood-Charles and Schor 2019). In the first two cases, many participants joined because of ideological commitment to mission and values, but they were not motivated to make trades because they had no need for the goods and services on offer. Some timebank members treated it like a charity activity, accumulating hours for services they performed with no desire to spend them. Food-swap participants left events with their own offerings. The lack of instrumental value for users has also been found in case studies of other nonprofits. Bellotti and colleagues explained low trading volume in a California timebank by a mismatch between ideologically and instrumentally oriented participants (Bellotti et al. 2015, 2014). A study of a Finnish goods and service exchange site for university students found that while they appreciated the goals of the site it offered limited utility (Suhonen et al. 2010). A study of neighborhood initiatives in the UK designed to create innovative, nonmonetized markets had similar findings (Light and Miskelly 2015).<sup>10</sup> A US national survey of sharing practices found that fewer than one-third of respondents indicated they were interested in engaging in higher levels of sharing of tools and household items.<sup>11</sup> This is likely due in part to the low cost of durable goods in the US (Schor 2010, ch. 2) in comparison to the time and inconvenience of P2P trading.

In some cases, the structure of the market is responsible for low activity.

This was especially the case in the timebank. A key principle of timebanks is that every person's time is valued equally. While this is an ideologically appealing attraction that members frequently referenced as a motive for joining, in practice they are reluctant to price their own specialized skills at the wage level associated with generalized skills such as driving, child care, or household help. Furthermore, many members failed to offer the valuable skills they had (legal advice, coding) in preference to their amateur avocations. These practices reduced trading volume and the objective of bridging social class.

Socially exclusionary practices in these sites also contributed to the absence of instrumental value. One example is that critiques of capitalism, which were common, included a critical attitude toward money itself. Exchanges in gift, barter, or alternative currencies were sacralized, in contrast to the profanity of trades in legal tender.<sup>12</sup> Some members of the timebank we studied aimed to live in what one termed a "de-monied" state. At the makerspace we found that trades (for help) took place using both money and beer. The former was used for "profane" trades between high-status makers and ordinary participants; the latter was the "sacred" medium of choice among an exclusionary elite of highly-skilled makers (Attwood-Charles and Schor 2019). More generally, the critique of money is evidence of the class privilege of participants on these sites, as their comfortable lifestyles made this rejection possible (Bourdieu 1984). By conflating the medium of exchange with the social relations of exchange, many nonprofit sites failed to attract participants who had urgent needs for income, in contrast to the for-profit platforms that offered easy opportunities for earning.

We also found evidence of widespread practices of social exclusion across our sites, which were highly skewed by class and race. The sites were all racially segregated, with very few or zero African Americans and Latinx participants. There was also strong gender segregation across and, in the case of the makerspace, within the site. Education levels were not merely high but stratospheric. The most extreme case was the timebank where all respondents had a BA degree, more than half had a master's level degree, and more than half had at least one parent with a graduate degree. The high cultural capital of participants led to a variety of snobbish and distinguishing practices, such as the rejection of trading partners on account of bad grammar or unprofessional profiles, or in the food swap for failure to adhere to new foodie tastes (Carfagna et al. 2014; Johnston and Baumann 2007; Fitzmaurice and Schor 2018). At the makerspace, cultural capital took the form of extreme "distancing from necessity," with exotic, impractical, and idiosyncratic creations. Functional making and repair (valuable to income-constrained

households) was largely invisible and clearly devalued (Attwood-Charles and Schor 2019).

While the relative lack of instrumental value has inhibited the growth of the nonprofits, they do have a strong asset that a number of the for-profit platforms have largely forfeited—credible claims to deliver multiple common good benefits. The desire for fair economic outcomes, sustainable ecological impact, and more social connection is widespread among the population, especially among younger generations. We found this was not only the case with respondents in our nonprofit sites, but participants on commercialized platforms expressed the hope that their activities would contribute to these goals (Fitzmaurice et al. 2020). Despite their “hostile worlds” (Zelizer 2000) view of the relation between the market and nonmarket society, they were optimistic that sharing platforms were capable of constructing an alternative, more humane, and sustainable market. This suggests the possibilities of hybrid models, which have genuine commitments to the common good outcomes but which also offer instrumental value to users. Potential examples include TimeRepublic, a for-profit online timebank with its own (time) currency that has been able to attract large numbers of users,<sup>13</sup> and the first decade-plus of Etsy, an online marketplace for handmade goods that operated as a B corporation with a small fee and a commitment to social benefit.<sup>14</sup> The lesson of these examples, however, is that in both instances, the need to meet investors’ profit expectations led to a reorientation toward financial goals. That tension has led to a movement for a new digital form, the platform cooperative, which operates in the interest of its user-owners rather than investors.

### **Platform Cooperativism**

The failures of the for-profit platforms to deliver good outcomes to workers on the three dimensions we identified above (compensation, autonomy, and voice), in combination with the lack of growth in the nonprofit sector, have resulted in the emergence of a movement for platform cooperatives. They are a subset of the larger class of worker cooperatives that date from the early nineteenth century in England. While this is still a new form, the innovations associated with platform technology may help to solve long-standing questions about cooperatives.

In the literature there are two broad classes of questions and research about the cooperative form—economic performance and democratic governance. Key economic questions are the cooperative’s relative performance on productivity, employment, and wages in comparison to conventionally man-



aged firms. There is now quite a bit of evidence to conclude that employee-owned and governed firms are economically sustainable and that they return more economic value to workers, reduce turnover, and motivate work effort (Blasi, Freeman, and Kruse 2017; Cheney et al. 2014; Pencavel 2013). While there may be differences between conventional and cooperative firms in terms of rates of innovation, how employment responds to reduced demand, and other economic outcomes, the cooperative form is clearly viable. The biggest economic challenge to the scaling of this model remains one that was identified decades ago: access to capital (Gintis 1989). If this problem were solved, it is likely that the cooperative sector could grow and prosper. Indeed, that seems to be occurring in many places in the world (Cheney et al. 2014). One challenge is what researchers have termed “degeneration,” or the decline of worker ownership and devolution to a conventional setup in which owners hire workers (Cheney et al. 2014; Pencavel 2013). One explanation is the “iron law of oligarchy,” in which an owner-elite comes to dominate.

A related set of questions involves the extent of democratic participation. There is less literature on this issue, although ensuring robust participation by workers and maintaining democratic control over elected management are ongoing challenges. One argument is that robust democracy is difficult when participatory firms are embedded in larger societies that have few democratic structures (Varman and Chakrabarti 2004). A second issue is a potential trade-off between democracy and efficiency, which has been noted in some cooperatives (Ng and Ng 2009). However, there is also evidence in the literature of “regeneration,” when enterprises revitalize their governance mechanisms and practice (Cheney et al. 2014). How might platform cooperatives fare on these issues?

The platform cooperative is an online enterprise that is owned and governed by those who work on it (Scholz 2014, 2016a; Schneider 2018; Chase 2015).<sup>15</sup> This form harnesses the benefits of the technology with a structure that is oriented to fair treatment and self-determination for producers. If governance is robust, it can also create social ties and even solidarity. Platform cooperatives have the potential to overcome some of the weaknesses of both the for-profit and nonprofit forms as discussed earlier. With respect to the former, they deliver a larger fraction of the revenue to the workers and are more likely to institute rules and policies that a majority of workers consider fair and equitable. For example, algorithmic management is less problematic if workers help develop the algorithms and the software remains accountable to worker-owners. Democratic governance also allows members to reject clients or projects they are ethically opposed to, an issue that has become a particular flashpoint at tech companies (Fang 2019; Shaban 2018).

At the same time, if the cooperative is successful it can deliver valuable instrumental benefits to members.

In conventional economic theory, the ownership and governance of the platform should be largely irrelevant. Capital receives only the reward that it earns through its contribution to the value of the product. Labor earns the same. Optimal policies are generally assumed to be attributable primarily by the requirements of technology.<sup>16</sup> Of course, the conventional economic perspective is obviated in cases where markets are not perfectly competitive and capital can extract more than its marginal product, which is true of many segments of the sharing economy. Indeed, most advocates of platform cooperatives depart from the conventional economic wisdom and believe that the owners of capital typically have power that they exert over workers. If so, worker ownership should result in meaningful differences in outcomes. Of particular importance is the fact that algorithms and crowdsourced reputational information can take over management functions such as vetting and ensuring the quality and character of providers, and some of the value from these tasks can be retained by worker-owners. This is particularly important in care work, cleaning, and other personal services with high-risk potential so that agencies are able to capture a large fraction of the product. These occupations are ideal for the platform cooperative form (Schor 2014).

To date, there are relatively few platform cooperatives in operation, particularly in the US.<sup>17</sup> Large international examples include SMart, a freelancers co-op in Europe with 35,000 members,<sup>18</sup> and Fairmondo, a German retail cooperative selling ethical and sustainable products, which has 2000 members.<sup>19</sup> In the United States, there are small sharing economy cooperatives of taxi drivers and housecleaners currently operating, with health care cooperatives in formation.<sup>20</sup> The literature on platform cooperatives is small (Benkler 2016; Fedosov et al. 2019; Jackson and Kuehn 2016; Lampinen, Huotari, and Cheshire 2015; Schneider 2018; Scholz and Schneider 2016). Our team did what we believe to be the first case study of a platform cooperative—a stock photography company called Stocksy United (Sulakshana, Eddy, and Schor 2018). At 1000 members, it is the largest and most well-established North American producer-owned platform cooperative currently in operation. (In contrast to our other cases, it is not a “sharing economy” company because its customers are mainly businesses. One difference is that they do not use a public reputation system and there is no direct contact between the artists and the customers. However, at the time we were undertaking our research, there were no other viable options to study.)

Stocksy was founded by Bruce Livingstone and Brianna Wettlaufer, two owners of a stock photo platform that they sold to Getty, the industry leader.

The acquisition resulted in artists' dissatisfaction with pay and policies under the new regime. The former owners then decided to organize a new cooperative to foster creativity, provide higher returns to artists, and enable democratic governance. Founded in 2012, Stocksy is a multistakeholder<sup>21</sup> co-op in which the staff and a governing board<sup>22</sup> also hold shares. The biggest obstacle to establishing cooperatives, financing, was not relevant, as the founders offered a \$1.3 million loan from the proceeds of the original sale. Stocksy also began with high levels of industry-specific knowledge and expertise and a proven track record. While it is impossible to know how much that mattered, it seems obvious that it did.

By most metrics, Stocksy has been extremely successful. It has robust revenues and was able to repay its loan and begin profit-sharing in its second year. It has carved out a lucrative market niche with a unique positioning in the industry—as a boutique shop with a distinctive aesthetic style. We found that members report high levels of satisfaction. The cooperative structure attracted highly talented and successful artists who ordinarily will not sell in the low-prestige stock portion of the industry. Members did not complain about exploitation or unfair treatment. Artists receive 50 percent of one-time sales, in comparison to the 15 percent industry standard, and 75 percent for extended licenses (versus 45 percent). Some take advantage of the community aspects of the site, getting support from the online forum and, in some cases, meeting up with other Stocksy members.

Stocksy differs from most platforms because membership is by application and has been subject to limits. It has been extremely competitive to join, with a 6 percent initial acceptance rate, which rose to 10 percent. Demand to participate is a good metric for how well the cooperative is serving its members' interests. Total membership was capped at 1000 and expansion has been controversial. However, management would like to grow, and after a few proposals to add artists were rejected by members, they found a compromise that is enabling modest annual growth, with accountability to membership. More generally, balancing provider supply and consumer demand is a key question for platform cooperatives. Capping membership may reduce the flexibility to choose hours and schedules, but it also allows the cooperative to maintain a good balance between supply and demand. By contrast, freelancer cooperatives such as SMart do not maintain membership limits.

In our research we found that members were mostly satisfied with governance. Communication occurs in an online forum, which is also the mechanism for taking decisions. Approximately 200 to 300 of the 1000 members participate. Members come from 65 countries (spanning many time zones) and speak different languages, therefore it is not possible to hold conven-

tional real-time meetings and decisions must be made by nonsynchronous participation. It is our impression that nonparticipation does not stem from dissatisfaction, but either low overall involvement with the platform and a general satisfaction with decisions and operational practices.

The success of Stocksy is especially impressive in view of a dynamic that we find endemic to most platforms in the sharing space: diversity of participant orientations. As we found in our other case studies, there is variation in the extent to which earners rely on platforms for income, with the coexistence of supplemental and dependent earners. This range is found on the labor and capital platforms we studied and has been found on marketplaces such as Etsy (2013) and digital platforms Upwork and Amazon Mechanical Turk (Caraway 2010; Gray and Suri 2019; Popiel 2017). In Stocksy, the distinction manifests itself between professionals and what are called hobbyists (or more derogatorily by the former, “mom-tographers”). The high quality of smartphone cameras has allowed participation with low investment in equipment—an example of the low barriers to entry that characterize many sharing platforms. On Stocksy, a second axis of differentiation is between those with an artistic versus a commercial orientation, which does not overlap fully with the professional/hobbyist divide. In our research, we found some low-level tension among these groups.

Another issue, also common to the platforms noted above, is that Stocksy is a winner-take-all market. In 2016, 87 of the 1000 members earned 66.2 percent of the total royalties. Among those 87, the top nine contributors earned 26.5 percent.<sup>23</sup> Stocksy’s perhaps uniquely extreme concentration is due to a number of factors. One is the presence of highly talented artists, who are attracted by the cooperative setup. The second is the diversity noted previously, and specifically the presence of a small number of highly commercially oriented producers who invest considerable sums on shoots (up to \$20,000 for one shoot) and submit large portfolios alongside hobbyists who rarely submit. This “challenge of individual contribution” is especially an issue with online co-ops because conventional worker co-ops are more likely to make collaborative products. Online, individual contribution is the norm, members are competing against each other, and scarce skills can earn rents. Where the skill distribution is more equal, such as in driving, delivery, care, and homework, earnings distributions are more equal, driven more by hours worked than hourly remuneration. Those cooperatives may also set fixed rates or narrow hourly wage ranges. For Stocksy, the replicability of each photograph means a few very popular images can yield high earnings.

Stocksy is an instructive example for advocates of the platform cooperatives, however, it is also in many ways a best case. Its founders had deep

experience in the industry and ample financing. It also carved out an upscale, profitable niche in a competitive market. Cheney and colleagues (2014) note that to be successful in global markets, cooperatives may now need to not merely respond to markets, but may have to create and lead them. Stocksy is a successful example of doing just this.

Furthermore, it did not face issues that are central for consumer-oriented service labor cooperatives (e.g., ride-hail, cleaning, and caring labor), such the “tyranny of the market,” when consumers are not willing to pay living wages or there is a sharp trade-off between prices and demand. For a discussion of this kinds of dilemmas, see Sandoval (2019). Stocksy artists were generally insulated from these economic dilemmas.<sup>24</sup>

### **Envisioning a Pluralist Economy**

It is too early to know whether cooperatives will become widespread. However, if they do, they may prove to be an important innovation in the platform ecosystem that can protect workers against exploitative employers and provide the opportunity for self-determination. The costs of the basic technology are in decline, and there are efforts underway to create open-source toolkits that will make establishing a platform cooperative relatively easy. For providers, platform cooperatives are likely better than monopolistic companies. However, they are not a panacea. Their ability to shape the larger labor market in which they operate is limited except in the case of substantial monopsonist power or cross-industry collaboration among cooperatives. However, that type of price setting is likely illegal. This suggests that platform cooperativism, even in its most successful incarnation, can only be one component of a system-wide restructuring that is capable of producing economic democracy and justice. Furthermore, platform cooperatives have little inherent advantage over for-profits on issues of ecological and carbon sustainability. To deliver those outcomes, this enterprise structure must be paired with a robust regulatory regime that internalizes key externalities and an expanding culture of solidarity and ecological responsibility.

In our view, platform cooperatives should be seen as one, albeit important, type of enterprise form in a hybrid or pluralist economy (Alperovitz 2011; Benkler 2006; see also Rodrik and Sabel’s chapter in this book). Cooperatives, both offline and online, address working conditions and help to create democratic workplaces. But other forms of economic organization are also feasible and desirable. Municipally-owned platforms are a close cousin that may be well suited to certain kinds of services. More conventional options include small businesses and self-employment. Resources held in common by

local and regional communities are another important form that has become increasingly popular. Some of these may function as not-for-profits. Land and housing trusts are another building block of a new hybridized economic ecosystem. The global community must also find a structure for managing the atmospheric commons sustainably. We do not yet know what that will be. What we do know is that there is now growing excitement and energy around various alternative forms of economic organization. If these forms expand, they hold the possibility for creating a more democratic and just economy.

## Notes

This chapter was prepared for the workshop on Political Economy and Justice, Edmond J. Safra Center for Ethics, Harvard University, June 24–26, 2019. We would like to thank the members of our research team—William Attwood-Charles, Mehmet Cansoy, Luka Carfagna, Connor Fitzmaurice, Isak Ladegaard, and Robert Wengronowitz—for collaboration on the research discussed in this chapter. We are also indebted to colleagues in the MacArthur Research Network on Digital Media and Learning and members of the Political Economy and Justice Working Group, who provided very useful feedback and inspiration. Thanks are especially due to the organizers, Danielle Allen, Yochai Benkler, and Rebecca Henderson. Generous funding for this research was provided by the MacArthur Foundation.

1. Connected Consumption and Connected Economy (<https://www.bc.edu/bc-web/schools/mcas/departments/sociology/connected.html>).
2. For example, ride-hailing services require a car, used-goods exchange requires cleaning and shipping materials, and accommodation rentals require the labor of cleaning and hosting. However, the mix of capital and labor across these three segments varies considerably.
3. Another segment of the gig economy is online, digital labor contracted through platforms such as Amazon Mechanical Turk. This type of work is typically not included in the “sharing economy,” although it is considered gig or platform work (Gray and Suri 2019; Irani 2015).
4. Statistic on Uber drivers at <https://www.uber.com/newsroom/company-info/>. For more information on Care.com, see “Company Overview,” <https://www.care.com/company-overview>.
5. The discourse associated with the sector also focused on two other types of claims: social and ecological. The social claim linked the P2P structure to the creation of ties among transactors and to a widely perceived sense of disconnection within society. The ecological claim argued that the development of used-goods markets and the more intensive use of “capacity” would reduce the demand for new goods, thereby lowering ecological and carbon footprints. The ecological claim is particularly dubious given that sharing

- services reduced prices considerably and the two largest platforms are in transport and travel (Schor 2020).
6. This is a potential result in part because public reputation systems suffer from ratings bias and may not be very effective in excluding malfeasants (Cansoy 2018). It seems likely that the small number of problematic exchanges in the early days of the sector was less a function of a robust rating system than the absence of ill-intentioned actors on the sites. Over time, the largest platforms seem to have attracted more problematic actors.
  7. In the used-goods sector, Freecycle, Yerdle, and other sites were organized using practices other than conventional cash trading (e.g., gift, platform-specific currency). The counterparts to monetized rental platforms are tool and toy libraries that have free loans. In space-sharing, examples include Couchsurfing, Landshare, and co-working offices. In the labor services segment, timebanks and child care co-ops are alternatives to TaskRabbit and similar sites.
  8. Efforts to establish cooperative, commons, and collaborative initiatives seem to have been more successful in Europe, particularly in those areas with a long tradition of this type of activity (Bauwens and Onzia 2017; Morell 2018).
  9. For example, the Repair Café movement (<https://repaircafe.org/en/visit/>), which is supported by a European Foundation and offers a replicable model, has only about 100 listed sites in the US in comparison to more than 1500 in Europe.
  10. Another factor undermining instrumental value is that some of the new sharing entities attempted to create networks of reciprocity in areas where informal economies were already operating, but which were invisible because the innovators were not members of the relevant communities (Light and Miskelly 2015).
  11. Survey results are available at “New American Dream Poll 2014,” *New Dream*, <https://newdream.org/resources/poll-2014>.
  12. Many participants and organizations held a “hostile worlds” (Zelizer 2000) view of the relationship between market and nonmarket activity. This anti-monetary stance is also found in anarchist and left initiatives.
  13. On TimeRepublik, see <https://timerepublik.com/>. In 2017 the company pivoted toward a B2B orientation: <https://www.startupticker.ch/en/news/january-2017/the-leading-banking-group-in-italy-to-test-the-b2b-timerepublik-platform>
  14. David Gelles, “Inside the Revolution at Etsy,” *New York Times*, November 25, 2017, <https://www.nytimes.com/2017/11/25/business/etsy-josh-silverman.html>.
  15. Benkler’s contributions (Benkler 2004, 2006) were formative.
  16. Worker preferences can also play a role in policies such as working hours or worker autonomy. Standard theory suggests that if there are significant differences in preferences, workers will sort into firms that reflect those differences.

17. Schneider (2018) maintains a list of platform cooperatives at his site entitled Internet of Ownership (<http://ioo.coop/>); a Google sheet is available at <https://docs.google.com/spreadsheets/d/1RQTMhPJVVdmE7YeopliwYhvj46kgvVJQnn11EPGwzeY/edit#gid=674927682>. See also the Platform Cooperativism Consortium: <https://platform.coop/>.
18. See Smartcoop in Europe (<https://smart.coop/>). A hybrid cooperative that has its own currency is the Brazilian Fora do Eixo (<http://foradoeixo.org.br/>), which is a network of musicians, artists, producers, and venues with 200 collectives and 2000 employees.
19. See Fairmondo (<https://www.fairmondo.de/>).
20. Co-ops have already formed: see Up & Go (<https://www.upandgo.coop/>), Green Taxi Cooperative (<http://greentaxico-op.com/>), and Shift (<https://www.shift.coop>). NursesCan Cooperative is discussed in Nithin Coca, "Nurses Join Forces with Labor Union to Launch Health Care Platform Cooperative," *Truthout*, September 4, 2017, <https://truthout.org/articles/nurses-join-forces-with-labor-union-to-launch-health-care-platform-cooperative/>.
21. Some cooperatives are structured so that multiple stakeholders have ownership and voting rights. See Chase (2015) for an argument for this form.
22. The board also has the possibility of vetoing proposals that have passed the membership.
23. Management not only gave us these numbers, they also permitted us to publicize them. The contrast with for-profit platforms is striking.
24. They did face cultural tyrannies, in the form of customers' biases. Buyers hold a "neo-imperialist aesthetic," with preferences for pictures of affluent, white Westerners. Artists felt they needed to comply in order to be successful.

## References

- Acevedo, Deepa Das. 2016. "Regulating Employment Relationships in the Sharing Economy." *Employment Rights and Employment Policy Journal* 20:1–35.
- Alperovitz, Gar. 2011. *America beyond Capitalism: Reclaiming Our Wealth, Our Liberty, and Our Democracy*. Boston: Democracy Collaborative Press/Dollars and Sense.
- Aptekar, Sofya. 2016. "Gifts among Strangers: The Social Organization of Freecycle Giving." *Social Problems* 63, no. 2 (May): 266–83.
- Attwood-Charles, William. 2017. "Work in Post-Bureaucratic Environments." Unpublished paper, Boston College.
- Attwood-Charles, William, and Juliet B. Schor. 2019. "Distinction at Work: Status Practices in a Community Production Environment." Unpublished paper, Boston College.
- Bauwens, Michael, and Yurek Onzia. 2017. "A Commons Transition Plan for the City of Ghent." *Commons Transition*, September 8.
- Belk, Russell. 2007. "Why Not Share Rather than Own?" *The ANNALS of the American Academy of Political and Social Science* 611, no. 1 (May): 126–40.



- Bellotti, Victoria, Alexander Ambard, Daniel Turner, Christina Gossmann, Kamila Demkova, and John M. Carroll. 2015. "A Muddle of Models of Motivation for Using Peer-to-Peer Economy Systems." In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems—CHI '15*, 1085–94. Seoul: ACM Press.
- Bellotti, Victoria M. E., Sara Cambridge, Karen Hoy, Patrick C. Shih, Lisa Renery Handalian, Kyungsik Han, and John M. Carroll. 2014. "Towards Community-Centered Support for Peer-to-Peer Service Exchange: Rethinking the Time-banking Metaphor." In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems—CHI '14*, 2975–84. New York: ACM Press.
- Benkler, Yochai. 2004. "Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production." *Yale Law Journal* 114, no. 2 (November): 273–358.
- . 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT: Yale University Press.
- . 2013. "Practical Anarchism Peer Mutualism, Market Power, and the Fallible State." *Politics & Society* 41:213–51.
- . 2016. "The Realism of Cooperativism." In *Ours to Hack and to Own: The Rise of Platform Cooperativism, a New Vision for the Future of Work and A Fairer Internet*, edited by T. Scholz and N. Schneider, 91–95. New York: OR Books.
- Blasi, Joseph R., Richard B. Freeman, and Douglas L. Kruse. 2017. "Evidence: What the US Research Shows about Worker Ownership." In *Oxford University Press Handbook of Mutual, Co-Operative and Co-Owned Business*, edited by J. Michie, J. R. Blasi, and C. Borzaga, 211–26. Oxford: Oxford University Press.
- Botsman, Rachel, and Roo Rogers. 2010. *What's Mine Is Yours: The Rise of Collaborative Consumption*. New York: Harper Business.
- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.
- Calo, Ryan, and Alex Rosenblat. 2017. "The Taking Economy: Uber, Information, and Power." *Columbia Law Review* 117:1623–90.
- Cansoy, Mehmet. 2018. "'Sharing' in Unequal Spaces: Short-Term Rentals and the Reproduction of Urban Inequalities." PhD diss., Boston College.
- Cansoy, Mehmet, and Juliet B. Schor. 2019. "Who Gets to Share in the 'Sharing Economy': Understanding the Patterns of Participation and Exchange in Airbnb." Unpublished paper, Boston College.
- Caraway, Brett. 2010. "Online Labour Markets: An Inquiry into oDesk Providers." *Work Organisation, Labour & Globalisation* 4, no. 2 (Autumn): 111–25.
- Carfagna, L. B., E. A. Dubois, C. Fitzmaurice, M. Y. Ouimette, Juliet B. Schor, M. Willis, and T. Laidley. 2014. "An Emerging Eco-Habitus: The Reconfiguration of High Cultural Capital Practices among Ethical Consumers." *Journal of Consumer Culture* 14, no. 2 (July): 158–78.
- Castillo, Juan Camilo, Dan Knoepfle, and E. Glen Weyl. 2018. "Surge Pricing Solves the Wild Goose Chase." [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2890666](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2890666).

- Chase, Robin. 2015. *Peers Inc: How People and Platforms Are Inventing the Collaborative Economy and Reinventing Capitalism*. New York: Headline/PublicAffairs.
- Cheney, George, Iñaki Santa Cruz, Ana Maria Peredo, and Elías Nazareno. 2014. "Worker Cooperatives as an Organizational Alternative: Challenges, Achievements and Promise in Business Governance and Ownership." *Organization* 21, no. 5 (September): 591–603.
- Collier, Ruth Berins, V. B. Dubal, and Christopher Carter. 2017. "Labor Platforms and Gig Work: The Failure to Regulate." Institute for Research on Labor and Employment (IRLE) Working Paper 106-17.
- Collier, Ruth Berins, V. B. Dubal, and Christopher L. Carter. 2018. "Disrupting Regulation, Regulating Disruption: The Politics of Uber in the United States." *Perspectives on Politics* 16, no. 4 (December): 919–37.
- Dubal, V. B. 2017. "The Drive to Precarity: A Political History of Work, Regulation, and Labor Advocacy in San Francisco's Taxi and Uber Economies." *Berkeley Journal of Employment and Labor Law* 38:73–135.
- Dube, Arindrajit, Jeff Jacobs, Suresh Naidu, and Siddharth Suri. 2018. *Monopsony in Online Labor Markets*. NBER Working Paper 24416.
- Dubois, Emilie, Juliet B. Schor, and Lindsey Carfagna. 2014. "New Cultures of Connection in a Boston Time Bank." In *Sustainable Lifestyles and the Quest for Plentitude: Case Studies of the New Economy*, edited by J. B. Schor and C. J. Thompson, 95–124. New Haven, CT: Yale University Press.
- Einav, Liran, Chiara Farronato, and Jonathan Levin. 2016. "Peer-to-Peer Markets." *Annual Review of Economics* 8:615–35.
- Etsy. 2013. *Redefining Entrepreneurship: Etsy Sellers' Economic Impact*. New York: Etsy.
- Fang, Lee. 2019. "Google Hired Gig Economy Workers to Improve Artificial Intelligence in Controversial Drone-Targeting Project." *The Intercept*, February 4.
- Farrell, Diana, and Fiona Greig. 2016. *Paychecks, Paydays, and the Online Platform Economy: Big Data on Income Volatility*. JPMorgan Chase & Co. Institute.
- Farrell, Diana, Fiona Greig, and Amar Hamoudi. 2018. *The Online Platform Economy in 2018: Drivers, Workers, Sellers, and Lessors*. JPMorgan Chase & Co. Institute.
- Fedosov, Anton, Airi Lampinen, Tawanna R. Dillahunt, Ann Light, and Coye Cheshire. 2019. "Cooperativism and Human-Computer Interaction." In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems—CHI '19*, 1–4. Glasgow: ACM Press.
- Fitzmaurice, Connor, Isak Ladegaard, William Attwood-Charles, Mehmet Cansoy, Lindsey B. Carfagna, Juliet B. Schor, and Robert Wengronowitz. 2020. "Domesticating the Market: Moral Exchange and the Sharing Economy." *Socio-Economic Review* 18(1): 81–102.
- Fitzmaurice, Connor, and Juliet B. Schor. 2018. "Homemade Matters: Logics of Exclusion in a Failed Food Swap." *Social Problems* 66:144–61.
- Fraiberger, Samuel P., and Arun Sundararajan. 2017. "Peer-to-Peer Rental Markets in the Sharing Economy." NYU Stern School of Business Research Paper.
- Frenken, Koen, and Juliet B. Schor. 2017. "Putting the Sharing Economy into Perspective." *Environmental Innovation and Societal Transitions* 23 (June): 3–10.

- Gintis, Herbert. 1989. "Financial Markets and the Political Structure of the Enterprise." *Journal of Economic Behavior & Organization* 11, no. 3 (May): 311–22.
- Gray, Mary L., and Siddharth Suri. 2019. *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*. Boston: Houghton Mifflin.
- Hannák, Anikó, Claudia Wagner, David Garcia, Alan Mislove, Markus Strohmaier, and Christo Wilson. 2017. "Bias in Online Freelance Marketplaces: Evidence from TaskRabbit and Fiverr." In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing—CSCW '17*, 1914–33. New York: ACM Press.
- Hill, Steven. 2015. *Raw Deal: How the "Uber Economy" and Runaway Capitalism Are Screwing American Workers*. New York: St. Martin's Press.
- Horan, Hubert. 2016. "Can Uber Ever Deliver? Part One." *Naked Capitalism*, November 30. <https://www.nakedcapitalism.com/2016/11/can-uber-ever-deliver-part-one-understanding-ubers-bleak-operating-economics.html>.
- Horton, John J., and Richard J. Zeckhauser. 2016. "Owning, Using and Renting: Some Simple Economics of the 'Sharing Economy.'" NBER Working Paper 22029.
- Irani, Lilly. 2015. "The Cultural Work of Microwork." *New Media & Society* 17:720–739.
- Jackson, Sam K., and Kathleen M. Kuehn. 2016. "Open Source, Social Activism and 'Necessary Trade-Offs' in the Digital Enclosure: A Case Study of Platform Cooperative, Loomio.Org." *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 14, no. 2.
- Johnston, Josée, and Shyon Baumann. 2007. "Democracy versus Distinction: A Study of Omnivorousness in Gourmet Food Writing." *American Journal of Sociology* 113, no. 1 (July): 165–204.
- Kahn, Lina M. 2017. "Amazon's Antitrust Paradox." *Yale Law Journal* 126, no. 3 (January): 710–805.
- Kenney, Martin, and John Zysman. 2016. "The Rise of the Platform Economy." *Issues in Science and Technology* 32, no. 3 (Spring): 61–69.
- Ladegaard, Isak, Alexandra Ravenelle, and Juliet B. Schor. 2022. "'God is Protecting Me . . . and I Have Mace': Defensive Labor in Precarious Workplaces." *British Journal of Criminology*, forthcoming.
- Lampinen, Airi, Kai Huotari, and Coye Cheshire. 2015. "Challenges to Participation in the Sharing Economy: The Case of Local Online Peer-to-Peer Exchange in a Single Parents' Network." *Interaction Design and Architecture(s): Special Issue on Peer-to-Peer Exchange and the Sharing Economy* 24:16–32.
- Light, Ann, and Clodagh Miskelly. 2015. "Sharing Economy vs. Sharing Cultures? Designing for Social, Economic and Environmental Good." *Interaction Design and Architecture(s): Special Issue on Peer-to-Peer Exchange and the Sharing Economy* 24:49–62.
- Martin, Chris J., Paul Upham, and Leslie Budd. 2015. "Commercial Orientation in Grassroots Social Innovation: Insights from the Sharing Economy." *Ecological Economics* 118:240–51.
- Morell, Mayo Fuster, ed. 2018. *Sharing Cities: A Worldwide Cities Overview on Platform*

- Economy Policies with a Focus on Barcelona*. Barcelona: Universitat Oberta de Catalunya.
- Morozov, Evgeny. 2013. "The 'Sharing Economy' Undermines Workers' Rights." *Financial Times*, October 14.
- Ng, Catherine W., and Evelyn Ng. 2009. "Balancing the Democracy Dilemmas: Experiences of Three Women Workers' Cooperatives in Hong Kong." *Economic and Industrial Democracy* 30, no. 2 (May): 182–206.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Parigi, Paolo, and Bogdan State. 2014. "Disenchanted the World: The Impact of Technology on Relationships." *Social Informatics* 8851:166–82.
- Parigi, Paolo, Bogdan State, Diana Dakhllallah, Rense Corten, and Karen Cook. 2013. "A Community of Strangers: The Dis-Embedding of Social Ties." *PLoS ONE* 8, no. 7 (July): e67388.
- Parrott, James A., and Michael Reich. 2018. *An Earnings Standard for New York City's App-Based Drivers*. New York: The New School, Center for New York City Affairs.
- Pencavel, John. 2013. "Worker Cooperatives and Democratic Governance." In *Handbook of Economic Organization: Integrating Economic and Organization Theory*, edited by A. Grandori, 462–80. Cheltenham, UK: Edward Elgar.
- Pew Research Center. 2016. *Gig Work, Online Selling and Home Sharing*.
- Piore, Michael J., and Charles F. Sabel. 2000. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.
- Popiel, Pawel. 2017. "'Boundaryless' in the Creative Economy: Assessing Freelancing on Upwork." *Critical Studies in Media Communication* 34, no. 3:1–14.
- Rahman, K. Sabeel. 2016. "The Shape of Things to Come: The On-Demand Economy and the Normative Stakes of Regulating 21st-Century Capitalism." *European Journal of Risk Regulation* 7, no. 4 (January): 652–63.
- Rahman, K. Sabeel, and Kathleen Thelen. 2019. "The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism." *Politics & Society*: 177–204.
- Ravenelle, Alexandra J. 2019. *Hustle and Gig: Struggling and Surviving in the Sharing Economy*. Berkeley: University of California Press.
- Robinson, H. C. 2017. "Making a Digital Working Class: Uber Drivers in Boston, 2016–2017." PhD diss., MIT.
- Rochet, Jean-Charles, and Jean Tirole. 2003. "Platform Competition in Two-Sided Markets." *Journal of the European Economic Association* 1, no. 4 (June): 990–1029.
- Rosenblat, Alex. 2018. *Uberland: How Algorithms Are Re-Writing the Rules of Work*. Berkeley: University of California Press.
- 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.
- Sandoval, Marisol. 2019. "Entrepreneurial Activism? Platform Cooperativism between Subversion and Co-Optation." *Critical Sociology* 46:801–17.

- Schneider, Nathan. 2018. "An Internet of Ownership: Democratic Design for the Online Economy." *Sociological Review* 66:320–40.
- Scholz, Trebor. 2014. "Platform Cooperativism vs. the Sharing Economy." *Medium*, December 5. <https://medium.com/@trebors/platform-cooperativism-vs-the-sharing-economy-2ea737fb5ad>.
- . 2016a. *Platform Cooperativism: Challenging the Corporate Sharing Economy*. New York: Rosa Luxemburg Stiftung.
- . 2016b. *Überworked and Underpaid: How Workers Are Disrupting the Digital Economy*. Cambridge: Polity Press.
- Scholz, Trebor, and Nathan Schneider, eds. 2016. *Ours to Hack and to Own: The Rise of Platform Cooperativism, a New Vision for the Future of Work and a Fairer Internet*. New York: OR Books.
- Schor, Juliet B. 2010. *Plenitude: The New Economics of True Wealth*. New York: Penguin Press.
- . 2014. "Debating the Sharing Economy." *Great Transition Initiative*, October.
- . 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* 10:263–79.
- . 2020. *After the Gig: How the Sharing Economy Got Hijacked and How to Win It Back*. Berkeley: University of California Press.
- Schor, Juliet B., and William Attwood-Charles. 2017. "The Sharing Economy: Labor, Inequality and Sociability on for-Profit Platforms." *Sociology Compass* 11:1–16.
- Schor, Juliet B., William Attwood-Charles, Mehmet Cansoy, Isak Ladegaard, and Robert Wengronowitz. 2020. "Dependence and Precarity in the Platform Economy." *Theory and Society* 49:833–61.
- Schor, Juliet B., and Connor J. Fitzmaurice. 2015. "Collaborating and Connecting: The Emergence of the Sharing Economy." In *Handbook of Research on Sustainable Consumption*, edited by L. A. Reisch and J. Thøgersen, 410–25. Cheltenham, UK: Edward Elgar.
- Schor, Juliet B., Connor Fitzmaurice, William Attwood-Charles, Lindsey B. Carfagna, and Emilie Dubois Poteat. 2016. "Paradoxes of Openness and Distinction in the Sharing Economy." *Poetics* 54:66–81.
- Shaban, Hamza. 2018. "Amazon Employees Demand Company Cut Ties with ICE." *Washington Post*, June 22.
- Slee, Tom. 2015. *What's Yours Is Mine: Against the Sharing Economy*. New York: OR Books.
- Söderqvist, Fredrik. 2017. "A Nordic Approach to Regulating Intermediary Online Labour Platforms." *Transfer: European Review of Labour and Research* 23:349–52.
- Stein, Joel. 2015. "Baby, You Can Drive My Car, and Do My Errands, and Rent My Stuff . . ." *Time*, January 29.
- Stemler, Abbey, Joshua E. Perry, and Todd Haugh. 2019. "The Code of the Platform." *Georgia Law Review* 54, no. 2 (March 2020):1–55.

- Streitfeld, David. 2019. "He Has Driven for Uber since 2012. He Makes about \$40,000 a Year." *New York Times*, April 12.
- Suhonen, Emmi, Airi Lampinen, Coye Cheshire, and Judd Antin. 2010. "Everyday Favors: A Case Study of a Local Online Gift Exchange System." In *Proceedings of the 16th ACM International Conference on Supporting Group Work*, 11–20. New York: ACM Press.
- Sulakshana, Elana, Samantha Eddy, and Juliet B. Schor. 2018. "Democratic Governance in the Sharing Economy: A Case Study of a Platform Cooperative, Stocksy United." Unpublished paper, Boston College.
- Sundararajan, Arun. 2016. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. Cambridge, MA: MIT Press.
- Thebault-Spieker, Jacob, Loren G. Terveen, and Brent Hecht. 2015. "Avoiding the South Side and the Suburbs: The Geography of Mobile Crowdsourcing Markets." In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work and Social Computing—CSCW '15*, 265–75. New York: ACM Press.
- Thelen, Kathleen. 2018. "Regulating Uber: The Politics of the Platform Economy in Europe and the United States." *Perspectives on Politics* 16, no. 4 (November): 938–53.
- Ticona, Julia, and Alexandra Mateescu. 2018. "Trusted Strangers: Carework Platforms' Cultural Entrepreneurship in the On-Demand Economy." *New Media & Society* 20, no. 11 (November): 4384–404.
- Ticona, Julia, Alexandra Mateescu, and Alex Rosenblat. 2018. "Beyond Disruption: How Tech Shapes Labor across Domestic Work and Ride-Hailing." *Data & Society*, June 27.
- UCLA Institute for Research on Labor and Employment. 2018. *More than a Gig: A Survey of Ridehailing Drivers in Los Angeles*. Los Angeles: UCLA.
- Vallas, Stephen P. 2019. "Platform Capitalism: What's at Stake for Workers?" *New Labor Forum* 28, no. 1 (January): 48–59.
- 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* 20:898–914.
- Varman, Rahul, and Manali Chakrabarti. 2004. "Contradictions of Democracy in a Workers' Cooperative." *Organization Studies* 25, no. 2 (February): 183–208.
- Zelizer, Viviana A. 2000. "The Purchase of Intimacy." *Law & Social Inquiry* 25, no. 3 (Summer): 817–48.
- Zervas, Georgios, Davide Proserpio, and John Byers. 2014. "The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry." Boston University School of Management Research Paper No. 2013-16. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2366898#](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366898#).