Introduction

The Problem of Work

As long as capitalism has existed, it has had a problem with work. Laboring can be degrading, arduous, and dangerous. Wages may not be sufficient to live on. At other times the work itself is boring, and alienation sets in. Sometimes work disappears, as in the 1930s, or in the artificially intelligent future that some envision. Jobs take too many hours. The nine-to-five is a grind. The boss is a jerk.

I've spent much of my professional life studying these issues. When the financial system crashed in 2008, a powerful idea emerged from the rubble: digital technology could solve the problem of work. This is not because machines will replace people but because algorithms and crowdsourced information can make bosses redundant. Software can reorganize economic activity into a person-to-person structure. This empowers individuals to take control of their lives. Vast swathes of the economy, especially in services, are ripe for this transformation. This vision came to be called "the sharing economy."

I became intrigued by the possibilities of sharing while writing a book—*Plenitude: The New Economics of True Wealth*—during the crash. I advocated for a world in which people worked less for companies—a lot less. They'd do more for themselves and use technology to make their labor more satisfying and productive. So when I finished the book, I gathered a team of researchers, and we began studying the "sharing economy." It didn't have a name yet, but it had captured our imagination. As it turned out, we weren't the only ones who were excited about it. Eventually, many people would look to sharing as an alternative to corporate-dominated capitalism. This was especially true of the young adults who were becoming economically independent just as the global system collapsed. They were hopeful that sharing would not just solve the problem of work but would also cure social disconnection, inequality, and environmental degradation.

You will know by now that things haven't turned out exactly as expected. The big platforms—Uber, Lyft, and Airbnb—have been exposed for paying poverty wages, destabilizing urban neighborhoods, and accelerating carbon emissions. Many argue that rather than ushering in an alternative, these companies are intensifying the worst features of global capitalism. The critics blame platform founders and venture capitalists for corrupting a good idea. And there's plenty of evidence to support that charge. But curiously, faith in the positive possibilities of digital sharing got its start in Silicon Valley, among just those people. They believed their technology would automatically yield decent work and good social relations.

Although things haven't turned out as predicted, the Silicon Valley discourse was right about one thing. Technological innovation and cultural change *have* put a person-to-person economy, with its solution to the problem of work, within reach. That's the view we started with, and after a decade of research we still believe in it. We discovered that achieving the potential of platforms requires specific conditions. They won't be met if today's corporate elites are in control. But they can be. I wrote this book to explain how things went wrong and how we can make them right.

Work under Capitalism

A central question facing our economic system is whether it can provide ordinary people decently paid, meaningful work with reasonable freedom. During the twentieth century it mostly did not. For African Americans the dehumanization of enslavement persisted for decades in most occupations, especially sharecropping and domestic service. In the early decades, for all workers, manufacturing labor was unsafe and poorly paid. Hours were long. In the 1930s the paramount problem became mass unemployment, which spread around the world. A quarter of the labor force was out of work in the United States. People became desperate for any kind of paying job. The post-WWII era prosperity in the West, and the U.S. in particular, resulted in a different kind of problem. White-collar "Organization Men" chafed under the conformist corporate culture.[1] By the late 1960s, alienation had spread to the factory floor. Consumerist lifestyles fueled by high wages proved unable to overcome widespread dissatisfaction. Detroit's autoworkers became the most visible symbols of this period of labor unrest.[2] At the same time, suburban homemakers were also trapped by meaningless domesticity.[3] Psychologists and sociologists got busy trying to provide "quality of work life." But before they figured things out, workplaces changed. Employers abandoned the stability of the postwar period. Beginning in the 1980s, they ushered in a regime of precarious, insecure employment. People once again became grateful for any steady paycheck. Throughout the century, addressing one problem of work under capitalism resulted in another. The job security that solved unemployment led to meaninglessness. When unions achieved high wages, employers outsourced. And when the Great Recession hit, the problems surfaced together: unemployment, inadequate pay, alienation, and precarity.

That's the point at which the sharing economy was born.[4] It promised a new kind of work experience. First and foremost, it offered freedom—the chance to control one's destiny. No boss. Work when you want, as you want. Estrangement, discipline, and overwork would vanish. In the early days the pay was generous. The platforms took care of finding customers and electronic payments. It was turnkey self-determination. As a bonus, it foretold social and environmental benefits. Devon, a self-described Jamerican (Jamaican American) from a diverse inner suburb of Los Angeles, was totally on board when we interviewed him in 2013.

A New Way to Work

Devon had a career as a national tour manager for global brands, such as Nike and PlayStation, that market themselves at sporting events. The work allowed him to travel, which he loved, and to take time off when he wanted to. Devon was curious, generous, and culturally open. He was into Capoeira, making movies, wrestling, volunteering, nutrition, and professional tutoring. When we interviewed him, he was on a break from touring and had started earning on TaskRabbit, an errands site. He quickly became the number-one-ranked tasker in Los Angeles. He was handy and enjoyed helping others. Part of his success, he believed, was because he'd grown up poor, which led him to develop a lot of skills: "Jamaicans have, like, a hundred jobs. And I'm not far from that stereotype. . . . If you look at my TaskRabbit profile, I'm in a lot of the categories."

Devon also rented on Zipcar and used Couchsurfing, a site that arranged lodging between individuals, without payment. When he heard about Airbnb, he began hosting on that platform, too, figuring he'd make some money doing what he'd been doing for free and really enjoyed. He was also in the middle of building a gadget to test soil moisture and water his plants while he was on the road, using an open-source Arduino digital controller. He was excited about doing it himself rather than buying off the shelf or paying a lot for a custom system. He likened his Airbnb and TaskRabbit work to this "little project": "I'm now having more control over what I'm doing, and not needing to have the other burdens that come with accepting a benefit [i.e., a job] from somebody else." Devon was enthusiastic when we asked if he planned to do more peer-to-peer activity in the future.

When the sharing economy launched, it was heralded with what we call the "idealist discourse"—a rhetoric that framed platforms as bringing economic, social, and environmental benefits. Devon's desire to earn while still retaining "control"—of his schedule, work process, and life—was a key motivator, as it is for many participants. But there were other pluses too. Airbnb seemed like a way to "experience the world without leaving your home." He'd recently hosted a couple of Belgian guys for a few weeks and became friendly with them. TaskRabbit also had social aspects. Given that "Los Angeles is one of the most segregated cities there are," he likened the work to a "microlevel" version of international travel, with strangers' homes being like other countries. He loved getting to meet people and see places he wouldn't otherwise have access to. Devon is also into permaculture and deep-green thinking. Advocates argued that sharing spare rooms, cars, and possessions reduces new purchasing and avoids carbon pollution and resource use. They predicted a revolution from an "ownership" to an "access" society.

Yes, the money mattered to Devon. He was temporarily substituting TaskRabbit for his usual job, and it was paying the rent. But he wasn't mercenary about his participation. He let his new Belgian friends know they could stay with him free on Couchsurfing. He was more excited about the possibility of changing the world, which he thought sharing was already doing: "Things are going full-circle. In the beginning we used to do everything for ourselves and we were very hospitable towards each other. And then . . . corporations started moving in . . . and everyone went there . . . and now [due to corruption] people started being anticorporation. People are going back to helping each other again because it's easier, especially with the advent of the internet. . . . So here we are." For Devon, sharing was an alternative to capitalism. "We don't need these big companies. Even though there are companies in the background that host these sharing things, on the front . . . it doesn't feel like that to the average consumer."

A decade in, tens of millions have earned on platforms. Hundreds of millions have stayed at Airbnbs, gotten into Ubers and Lyfts, and hired labor from apps.[5] Many share Devon's optimism. But there's an opposing view, which focuses on the companies Devon minimized as in the "background," unnoticed by the average person. They are seen as profit-hungry predators, using the idealist discourse as a fig leaf. Airbnb has commercialized, with unlicensed "ghost" hotels taking over neighborhoods and driving up rents. Companies have become notorious for mistreating workers and offering substandard wages. Even more ominously, some contend that the use of algorithms to control workers has become an alienating, almost totalitarian, nightmare. These criticisms have been present from the beginning but are gaining credibility, given mounting worker and popular discontent. As some of the earliest researchers to study the sharing economy we have plenty of evidence to support both points of view. We will introduce you to over-the-moon earners and customers, as well as struggling workers who describe themselves as "wage slaves," their situations as "scary." But the point of this book is not to stake out the empirical middle ground between the boosters and the critics. It's to show that the future that Devon foretold really is possible.

Devon's conversation focused on cultural change, perhaps because as a technically savvy type he took the technology for granted. But the digital tools matter. The platforms use algorithms and maps to match buyers and sellers, collect customer ratings to ensure quality, and offer electronic payment systems. These practices solve the problems of trust, search time, and quality that have long plagued person-to-person markets, what I've called "stranger sharing."[6] They make it feasible to cede significant authority back to individuals. In fact, the platforms already have stepped back from orchestrating the labor process in important ways. That's the control that Devon delighted in having gained. And the fact that he and others can work for themselves raises an existential question for the companies. Is the most revolutionary thing about the algorithms not their ability to control workers, as many have argued, but to make management obsolete? Could owners have invented a pathway to their own extinction? To see how we came to ask these questions, let's step back a bit, to revisit the early days of the sector and see what went wrong.

The Promise of Sharing

The idea of sharing emerged from the financial collapse. That debacle caused a loss of faith in work, the economy, and the political system, especially among the young people whose futures it put in jeopardy. By 2011 a majority of eighteen- to twenty-nine-year-olds surveyed said they preferred socialism to capitalism.[7] Protests erupted around the world, including the Occupy movement in the U.S. They targeted the elites who were fueling extreme inequality. Given widespread skepticism of state-based solutions, sharing seemed a viable alternative. Leah, a special education teacher, yoga instructor, and Airbnb host and guest, explicitly linked the growth of the sharing economy to this agitation: "The whole Occupy Wall Street movement, and people identifying as being the 99 percent and not wanting to just support that 1 percent. And I think the shared economy is a way where we can get around being dependent on the 1 percent to produce everything and give us all of our media, and all of our food, and all of our oil. So I think there is some unrest that's kind of boiling up. And I think that that partially feeds it." Part of the attraction of sharing was to build a better world. And part was that the labor market was failing young people. Tyler, an aspiring musician and student who turned to TaskRabbit to make ends meet, bemoaned how difficult it was to secure a job. "Graduating with a piece of paper that said you did college doesn't really mean the same thing as it did ten years ago."

For-profit platforms were not the only sharing entities that were remaking work. There was also an upsurge of community initiatives that aimed to transform economic relations, build connections, and reduce eco-footprints. Socially motivated young people joined time banks, food and clothing swaps, and tool libraries. Repair collectives held pop-up events where they fixed appliances to save people money and obviate new purchasing. Communal batch cooking helped give "mamas" a break. These efforts offered ways to access goods and services with little or no money, via barter, loaning, gifting, and secondhand markets. Here, too, freedom was important. If people had less need for cash, they could reclaim their time and engage in socially productive work.

Most accounts of the sharing economy ignore these community initiatives. Some observers cynically think they have nothing in common with the commercial players. Others don't see enough scale to warrant attention. But the nonprofits have been integral to the sharing community and its discourse from the beginning. The proliferation of modes of exchange they are pioneering has contributed to a blurring of the line between the two groups. Olio is a food-waste app that uses a donation model, but it's a for-profit. So is TimeRepublik, a no-cash time bank. For many, the hybrid nature of the sector has been crucial to believing that a progressive transformation is under way.[8]

Before long, sharing platforms were reaching beyond social-change activists into mainstream America, attracting people like Bev—a thirty-year-old, married white woman with an MA in education. Platform work offered her the chance to leave an insecure employment situation, pursue her personal dream, and do good in the process. Bev had been working at a family-support organization when the recession hit and her hours were cut back. Looking to replace the lost income, she "stumbled" on TaskRabbit. It proved to be "empowering" on a personal level and "perfect" for its flexibility. She earned a good hourly wage—eighteen dollars was the lowest she would accept—and loved the variety of "cool tasks" and "really interesting people" she met. Customer support from the platform was great. Before too long, Bev decided to quit her regular job and start her own business. She'd grown tired of the nine-to-five lifestyle, and "knowing [she] had TaskRabbit to fall back on" allowed her to follow her "passion"—making jewelry. She loved being creative and working with her hands.

Bev's experience was similar to many of our interviewees. The money ranged from good to excellent, they loved the control over scheduling and the fact that they didn't have a boss, and they believed that the platforms had their backs. Many talked about the social and environmental benefits of the work. Their stories resonated with much of what the platforms promised: good earnings, flexibility, and the chance to be an entrepreneur. The public vibe was similarly upbeat. Sure, there were sporadic protests from taxi drivers, but as Uber cofounder Travis Kalanick rightly recognized, Taxi is the industry everyone loved to hate.[9] Sharing was cool.

Ten years later, there are still plenty of people who love the platforms, especially consumers and those with valuable assets to rent. But the gauzy optimism of Devon and Bev has been tempered by the ways companies have prioritized growth and profitability. When we reinterviewed Bev two years later, we found that despite being one of the earliest and best workers, she'd been "suspended" for failing to accept enough jobs. The company had changed its system in ways that pumped up sales and took away autonomy from the "rabbits." (Mercifully, they did rename them "taskers.") Bev downgraded her rating of the platform from an eight to a three. "I don't feel that they value individual rabbits the way they used to." Earners on lower-wage platforms also began registering their distress, as companies cut wages and overhired. The experience of Abigail, a gig worker juggling multiple jobs, suggested the chance to remake work might be slipping away.

Abigail was a twenty-eight-year-old white woman, originally from New Hampshire. She's a free spirit, who'd spent much of her twenties backpacking, hiking, even living in a van. She returned to Boston because her family needed her. Like many, she was attracted to the promise of work-life freedom that the platforms offered. But Abigail was struggling financially as she combined sporadic gigs (dog training, catering) with delivery apps DoorDash and Postmates. "No one here is making a living wage off of this app [Postmates] as far as I'm defining it. If you know you can work between thirty and forty hours a week and pay a really modest rent and put gas in your car and eat, that would be making a living wage. Working sixty hours a week is not making a living wage if you have to do that just to meet your basic expenses and you're not saving money." The problem, she noted, is "no savings, no safety net, nothing. There's no job security with these, which does sort of suck in a way." Edward, another Postmates courier, explained the dilemma: "You can have a great week or you can have a slow week. . . . You dedicate ten hours a day of your time, and you get two orders, and you make twenty-five dollars." As the decade progressed, that $2.50 an hour sat uneasily next to the millions and billions being made by platform owners and investors. "We're getting pocket change thrown at us . . . compared to how much money these people are making off of it," observed Abigail. And as unsustainable as her situation was, the stories coming from ride-hail were worse. Uber became notorious for luring drivers with false promises of earnings,[10] repeatedly squeezing pay, and deactivating workers.[11] Newspaper articles about drivers sleeping in their cars, working seventy to eighty hours a week, and earning below minimum wage became common.[12] While proponents of the platforms, such as economist Arun Sundararajan, had optimistically predicted "an end to employment,"[13] some companies seemed to be turning people into serfs.

Abigail's reference to the bottom of the pyramid highlights our finding that there's a hierarchy of platforms in terms of satisfaction, wages, and working conditions. Airbnb is at the top; Uber and Postmates are at the bottom. Discussions of "the sharing economy" often lump all platforms together or assume Uber is representative of the whole sector. Because we studied so many platforms, we saw these distinctions. But we discovered another divide, even among earners on the same platform. It's whether or not they rely on the platform to pay for basic expenses. Devon and Bev, who had good experiences, had diverse income sources and didn't need the money to live. Abigail and Edward, who are trying to eke out a living on the apps, were struggling. This analysis has been key to our understanding of the pitfalls and possibilities of platform work.

By 2018 other cracks were appearing in the facade of the idealist discourse. The "revolution" in goods sharing turned out to be a bust.[14] Studies of Uber and Lyft show that they cause congestion, increase air and carbon pollution, and pull people off public transportation.[15] These findings put the lie to the sector's green promises. Short-term rentals are contributing to gentrification, as they lead to reductions in the supply of rental housing, rising rents, and tourist takeover of central neighborhoods.[16] The platforms also raise privacy concerns. Uber execs were caught spying on critical journalists whose whereabouts they could track through their app.[17] And there's evidence that rather than leveling social differences, platforms are reinforcing them. Profile pictures enable Airbnb hosts to refuse accommodation to people of color, without fear of repercussion. #AirBnbWhileBlack surfaced widespread evidence of racial refusal.

The ambitions of community-based start-ups to solve the problems identified by the idealist discourse have mostly gone unfulfilled, especially in the United States. None has scaled like the big platforms. Many have folded. Others are viable, but we find they are reproducing aspects of the conventional economy they were hoping to escape, including race, class, and gender exclusion. By the end of the first decade, New York City, San Francisco, the state of California, and government entities around the world began passing laws to rein in companies, especially in ride-hailing and lodging. And as they did, they fed controversies that have accompanied the sector since its earliest days.

Debating the Sharing Economy

There are already a number of books on the sharing economy. They fall into two camps—supportive and critical. The former are mainly written by industry participants, economists, and management scholars. Titles include Rachel Botsman and Roo Rogers's paean to access over ownership *(What's Mine Is Yours),* Gansky's broader take on digital innovation *(The Mesh),* and Robin Chase's *Peers, Inc.* Arun Sundararajan's *The Sharing Economy* is in this group and provides a valuable overview of the basic economics of platforms.[18] While these accounts include some discussion of potential problems and remedies, they welcome the growth of the sector and make their case largely with examples and anecdotes.

Books in the second group are written mainly by sociologists, journalists, and activists.[19] They paint Dickensian pictures of the degradation of work and the growing power of the companies. Trebor Scholz *(Uberworked and Underpaid)* looks broadly at digital labor and argues that workers are being subjected to escalating levels of insecurity and "crowd-fleecing." Steven Hill's *Raw Deal* ties platforms to a larger shift to a "freelancer society" in which workers bear all the risk and owners amass unprecedented wealth. *Gigged,* by journalist Sarah Kessler, also focuses on precarity but ultimately provides a more hopeful view with her description of a platform that opted to employ, rather than contract for, its workers. Like Scholz, Nick Srnicek *(Platform Capitalism)* situates platforms within the larger tech sector and argues that a monopolistic, rapacious "platform capitalism" is on its way. These contributions make the argument for reversing concentrated private ownership of platform capital and restructuring the economy from the bottom up.

Two recent books provide excellent, deeply researched, ethnographic accounts of the platform labor experience—Alex Rosenblat's *Uberland* and Alexandrea Ravenelle's *Hustle and Gig.* Ravenelle studied workers on four platforms and focuses mainly on the precariousness of these arrangements; the core of Rosenblat's analysis is Uber's use of algorithmic control. I engage with their findings in chapter 2. There are also books that offer alternatives—Nathan Schneider's *Everything for Everybody,* Duncan McLaren and Julian Agyeman's *Sharing Cities,* and Scholz and Schneider's *Ours to Hack and Own.* My discussion in chapter 6 owes a great deal to them. The contribution that is probably closest in spirit to this book is Tom Slee's *What's Yours Is Mine.* It's a smart and prescient account of both Airbnb and Uber. While Slee's critiques may be more biting than ours, we both believe that the ideals of sharing can be realized in a more democratic society.

How is this book different? With the exceptions of Ravenelle and Rosenblat, the aforementioned accounts are not based on primary research. We also cover a wider terrain and have a less one-sided picture than most previous accounts. But the most important difference lies in our research findings—a novel explanation of what's unique about platform labor. That analysis provided the grounds for recognizing the democratic possibilities that platforms offer.

The Connected Consumption and Connected Economy Project

This book is based on seven years of data collection (2011–17) from the Connected Consumption and Connected Economy Project. We have done this work as a team. Core members are Will Attwood-Charles, Mehmet Cansoy, Lindsey "Luka" Carfagna, Connor Fitzmaurice, Isak Ladegaard, Robert Wengronowitz, and Samantha Eddy.[20] In some ways the trajectory of our research provides a genealogy of the sector. We started with nonprofits because we were interested in innovations that could dramatically change the experience of work. Our first case was a time bank, or task-bartering site. We added a food swap, a makerspace, and a study of people who were learning skills on platforms. As the for-profits scaled, we wanted to understand their attractions and how earners experienced working on them. Focusing on consumer services, we added Airbnb, TaskRabbit, and Turo (then called RelayRides, a peer-to-peer car rental site). We moved on to delivery (Postmates and Favor) and ride-hail (Uber and Lyft). For all these cases we mainly spoke to earners, but we also interviewed a small number of consumers. We did big data analysis on Airbnb. By this time it was 2016, and the idea of worker-owned platforms was gaining traction. Our final case was Stocksy United, a photography platform owned by the artists. Altogether, we've done thirteen cases.[21] We adopted a flexible research strategy that allowed us to parallel the growth of the sector, studying new issues as they arose.

We have done 309 formal interviews with 278 respondents across all our cases. At the nonprofits we logged hundreds of hours of ethnographic observation. We've had meetings with platform founders and employees. We've attended onboarding sessions for apps. Luka and Connor did actual trades, including two years of preparing homemade foods for a swap. Will took a class in woodworking at the makerspace and “hung out” there for a year and a half. Mehmet scraped and we later purchased large quantities of Airbnb data. I helped field the first national random sample poll on the sharing economy. We’ve attended multiple sharing economy conferences. Throughout the book we present this interview and ethnographic data. Where we do not provide notes citing other sources, the information comes from our own research. All quotes without accompanying notes are from our interviews.

Our quantitative analyses of Airbnb are national, but most of our interviews and all of the ethnography was done in the Boston area. Boston is a medium-sized city with a metro population just under five million. Compared to the country as a whole, it is average in terms of age and gender but has a high median household income (currently $85,691, about 1.4 times the national level) and a low poverty rate (9.6 percent). It’s also whiter (70 percent) and less African American and Latinx than the general U.S. population. Another key difference is that almost half (47.6 percent) of residents have a bachelor’s degree, 1.5 times more than the national average.[22] In 2006 the state of Massachusetts shifted to a health care system that insured almost everyone. It also has relatively generous assistance for people in financial need. While it suffered during the Great Recession, the presence of medical and educational institutions and the absence of a building boom spared it the severity of the downturn seen in other parts of the country.

What are the implications of our focus on one area? For qualitative data collection, knowledge of the study site is extremely valuable. Having one site also controls for factors unrelated to the platforms that vary across multiple locations. One place, however, is never representative of the whole. But is it close enough? We are confident Boston was a good choice because it avoids the extremes of San Francisco and New York—two other major places where it was possible to study sharing activity when we began. (Platforms rolled