STRIKE NOW!!

Aram Bartholl

This booklet unites a range of texts from different authors, artists, activists, researchers and gig workers, all of them with their very own expertise and focus in the field of gig economy. Thanks to all of them for being part of this small publication which accompanies the project "Strike Now!!".

As part of my ongoing research about Internet and society, I've been following the development of the so-called gig economy for the last few years. It is clear today that what started with the promise of 'sharing' - from 'sharing economy' - soon revealed itself as a very brutal approach to exploit a new generation of app-controlled workers around the world.

For the project "Strike Now!!" I initially started out with the idea of developing a 'strike app' to support the protests of bicycle delivery riders and other app-based workers. But the more I learned about the working conditions in the gig economy, the more it became clear there is no quick technological fix.

The whole topic is very complex. Venture capital fueled start-up companies come and go within short time cycles. They constantly move, look for loopholes and continuously change the conditions for everyone. It is hard to get a grip on these new app-based and isolated working conditions in pseudo self-employment with no health insurance or retirement payments. But world wide, workers, activists and unions have started to organize protests and strikes. Communication between those in isolated working conditions plays a very important role in improving the situation.

After more research, "Strike Now!" transformed into an exhibition including a panel discussion at panke.gallery in Wedding. It is an attempt to give insight into the current developments and to push the discussion to a wider audience during Berlin Art Week, September 2019. The panel members Joanna Bronowicka, Sebastian Schmieg and Akseli Aittomaki are each very much expert on the topic with their own background coming from different fields. Please check their contributions to this booklet as well.

Big thanks to everyone involved in this project! Thanks to pank.gallery for hosting.
Thanks to Stiftung Kunstfond for funding the project.

Aram Bartholl, 2019

Intro

Strike Now!! is a platform for discussion and exhibition about today's working conditions in the so called ‚gig economy'. The rise of service oriented Internet companies like Uber, Amazon and Deliveroo etc created massive amounts app based self employment under often harsh conditions.

Is this the new slavery of the post digital Internet commercial revolution? In which ways can workers counteract the algorithmic chains of start-up venture capital? With lectures, a panel and an exhibition Strike Now at panke.gallery will examine these and further questions.

A project by **Aram Bartholl**
Funded by **Stiftung Kunstfonds**

<table>
<tr><td>**A**</td><td>8-11</td><td>FAU Berlin</td><td>Labour Rights in Germany (for English Speakers)</td></tr>
<tr><td>**B**</td><td>13-17</td><td>Sebastian Schmieg</td><td>Humans As Software Extensions</td></tr>
<tr><td>**C**</td><td>18-19</td><td>James Stanier</td><td>The Gig Economy's Unhappy Middle Class</td></tr>
<tr><td>**D**</td><td>28-29</td><td>Joanna Bronowicka</td><td>Algorithms at Work</td></tr>
<tr><td>**E**</td><td>30-31</td><td>Akseli Aittomäki</td><td>Work in Progress</td></tr>
<tr><td>**F**</td><td>34-37</td><td>Julia Ticona</td><td>Inequality in the Gig Economy</td></tr>
<tr><td>**G**</td><td>38-40</td><td>Niels van Doorn</td><td>On the conditions of Possibility for Worker Organizing in platform-based Gig Economies</td></tr>
</table>

Strike Now!! · Wednesday, 11. September, 2019 – Sunday, 15. September, 2019 · 15:00-19:00 · panke.gallery

Thursday, 12. September	19:00 - XX:XX	**Opening**
Saturday, 14. September	16:00 - 19:00	**Panel Discussion**

This panel brings togther three different perspectives on how the so called gig economy impacts working conditions around the globe. The participants focus ranges from artistic analysis and applied political research in the field to active union related work on the ground.

with **Joanna Bronowicka, Sebastian Schmieg and Akseli Aittomäki, moderated by Aram Bartholl**

Sunday, 15. September	14:00 - 14:30	**Guided Tour**
Sunday, 15. September	14:30 - 19:00	**Finnisage**

Strike Now!! at panke.gallery is part of the official program of **Berlin Art Week 2019**

panke.gallery
Gerichtstraße 23, Hof V
13347 Berlin Wedding

Panke.gallery is an independent, non-commercial gallery that is located in a 60 square meter room at Panke Club in Wedding and is operated by panke.gallery e.V. The gallery focusses on engaging with digital network culture, its aesthetics and politics, and the historical examination of local aspects specific to Berlin, innovations, and iconic works and exhibits works of the young generation of Internet-based artists.

As a gallery located in a club, panke.gallery has the opportunity to build bridges between different social circles of Berlin popular culture and art, combining musical culture, the fine and performative and media arts. The gallery's curatorial concept of focusing on historical artistic works in dialogue with current works by young artists results in a gallery programme that joins artistic generations.

In addition, with its interdisciplinary concept panke.gallery brings together artists, entrepreneurs, students, hackers, and tourists. In talks, panels, and workshops that accompany the exhibitions, we address Berliners who actively explore questions of society's digitization of our society and are in search of exchanging ideas on the subject. We are seeking to promote the young generation of artists and to offer them a platform for presenting their works and to connect to the community that has already formed in the framework of the gallery's work. We are planning an independent space for the gallery where reconstructed internet art can be presented with their original hardware and software for research and artistic purposes over the long term.

Contents

Contents

Aram Bartholl's (1972, Bremen, Germany, University of the Arts Berlin, 2002) work creates an interplay between internet, culture and reality. How do our taken-for-granted communication channels influence us? Bartholl asks not just what humans are doing with media, but what media is doing with humans. Tensions between public and private, online and offline, techno-lust and everyday life are at the core of his work and his public interventions and installations, often entailing surprisingly physical manifestations of the digital world, challenge our concepts of reality and incorporeality.

https://arambartholl.com

Sebastian Schmieg is an artist who's work engages with the algorithmic circulation of images, texts and bodies within contexts that blur the boundaries between human and software, individual and crowd, or labor and leisure. At the centre of his practice are playful interventions into found systems that explore hidden – and often absurd – aspects behind the glossy interfaces of our networked society. Schmieg works in a wide range of media such as video, website, installation, artist book, custom software and lecture performance.

http://sebastianschmieg.com

Joanna Bronowicka is a sociologist and community organiser living in Berlin. She is researching the impact of technology on society at the European University Viadrina in Frankfurt (Oder). Until recently, she was the director of the Centre for Internet and Human Rights. Joanna has been fighting for rights of women, workers and migrants for over a decade. She is a member of Polish left-wing party Razem which has an active branch in Berlin.

https://www.joannabronowicka.eu

Akseli Aittomäki is a dance artist and experimental theater-maker. His works involve different productions, research and activism. His art practice ranges from experimental theater to contemporary dance and philosophically motivated performance works. Critics characterize his choreography productions as ‚essayistic'. Economic questions and political protest play an important role in his research. Aittomäki was a rider for Deliveroo for over two years. He was engaged in campaigns to improve the working conditions of the riders, such as protests, strikes, collaboration with media or providing help for workers after work accidents. Deliveroo pulling out of Germany is the moment for him to share his perspective.

http://massescape.net

Julia Ticona is an Assistant Professor at the University of Pennsylvania's Annenberg School for Communication. She holds a PhD in sociology from the University of Virginia, was a post-doc at the Data & Society Research Institute, and is a research fellow at the Institute for Advanced Studies in Culture. She co-authored the book Beyond Disruption which uses interviews with over 100 domestic and ridehailing platform workers in major U.S. cities to reveal how technology is reshaping the future of labor. While ridehail driving and other male-dominated sectors have been at the forefront in conversations about the future of work, the working lives of domestic workers like housecleaners and nannies usually aren't included.

http://www.juliaticona.com

James Stanier is a software engineer and writer based in Brighton, England. He is VP Engineering at Brandwatch and is currently working on a book on leading engineering teams, due to be published mid-2020 by The Pragmatic Bookshelf. He holds a Ph.D. in Computer Science from the University of Sussex. He runs the blog ‚The Engineering Manager' as a collection of thoughts, stories, and resources on the subject of engineering management. The site shines a spotlight on the human side of the technology industry.

https://medium.com/@jstanier

Niels van Doorn is the Principal Investigator of the Platform Labor research project (https://platformlabor.net). He is also an Assistant Professor of New Media and Digital Culture in the Department of Media Studies at the University of Amsterdam. Together with Professor Ellen Rutten, he is a founding member of the Digital Emotions research group at the Amsterdam School of Cultural Analysis (ASCA). His research is guided by two fundamental questions: how do people sustain themselves and each other in precarious circumstances?; and how does the notion of value emerge at the intersection of political and moral economies? His first book, Civic Intimacies, was published by Temple University Press in June 2019.

https://platformlabor.net

6

Foreigners' Section — FAU Berlin — Mozilla Firefox

berlin.fau.org/strukturen/foreigners

FAU — FREIE ARBEITERINNEN- UND ARBEITER-UNION BERLIN

berlin.fau.org | faub-kontakt@fau.org

Website durchsuchen — SUCHE

Aktuell | Über uns | FAQ | Kämpfe | Strukturen | Strategie | Materialien | Presse | Termine | Kontakt

Foreigners' Section

Organization for foreign workers

The section aims to provide an effective organizational platform for foreigners living in the German capital, as well as support and solidarity in labour rights and workplace struggles involving foreign residents plus essential advice on work and social rights legislation in Germany for non-German speakers.

Goals of the Foreigners' Section

The Section's long-term goal is to develop effective strategies to defend foreign workers' rights through collective organization in workplaces in Berlin as well as organizing information campaigns and actions to spread awareness amongst non-German speakers of German labour law and their rights in Germany. It offers foreigners a way to overcome their isolation and vulnerability in the face of abusive employment practices in Germany and the means to achieve concrete improvements in their working conditions. The section works on a number of levels; from providing practical support and legal advice on individual issues such as pay and contract disputes to organizing collective solidarity campaigns in labour struggles at companies employing foreign workers around Berlin. Members of the section are directly involved in organizing and coordinating these activities and are actively encouraged to get involved.

For example

Labour rights flyerAn example of a current campaign the section is involved in is the promotion and distribution of its "Labour Rights In Germany" flyer, handed out at workplace actions and translated into a number of languages including Turkish, Spanish, French, Italian, Polish, Greek, Swedish and Danish with other languages versions including Chinese and Arabic soon to be available (download here). The section also aims to hold regular events and info sessions throughout 2015 at its centre (FAU-Lokal).

Join!

The section is open to workers from any nationality who don't speak German as their native language, covers a wide range of sectors and industries and aims to share and build on the experiences and talents of people from a wide range of backgrounds and nationalities to form an effective, independent union section capable of successfully defending foreign worker's rights and living conditions. Its membership comes from a diverse range of countries and uses English as its working language with Spanish, Swedish, French, Italian, Polish, Russian, Turkish and Greek speakers among others also represented.

Contact info for the section

Mail: faub-aus@fau.org

Open meeting: Every 4th Tuesday of the month, 19:30.

Location: FAU office, Grüntaler Str. 24.

Die kämpferische Gewerkschaft

Die FAU Berlin ist eine unabhängige Basisgewerkschaft. Sie ist bundesweit in der Gewerkschaftsföderation FAU organisiert. Tretet bei, bringt euch ein, werdet aktiv.

Mitglied werden

#deliverunion

RIDERS UNITED
#DELIVERUNION
DELIVERUNION.FAU.ORG

Become a member

Einstieg und Beratung

Infoveranstaltung: FAU – Wie funktioniert das? Immer am 1. Freitag im Monat, 19.00 Uhr.

Offenes FAU-Lokal: Jeden Freitag, 17–20.00 Uhr.

Gewerkschaftliche Beratung: Immer am 2. und 4. Freitag im Monat, 17–18.00 Uhr. Anmeldungen bitte vorab per E-Mail an faub-beratung@fau.org.

MieterInnenberatung: Immer am 4. Montag im Monat, 18–19.00 Uhr. In Kooperation mit Rechtsanwältin Carola Handwerg.

Offene Beratung für Kollektivbetriebe: Siehe die Beratungs-Seite der union coop // föderation.

▸ Ausführliche Kontaktinfos

Alle Meldungen aus diesem Bereich

Deliveroo zieht sich zurück – Kämpfe gegen prekäre Arbeitsbedingungen gehen weiter

(13.08.2019)

Auch bei seinem Rückzug aus der BRD zeigt Deliveroo, dass die Entlohnung und soziale Absicherung seiner stark von Minderheiten geprägten Belegschaft... » Weiterlesen

„Riders Unite!" - Erfolgreiche #Deliverunion-Fahrraddemonstration

(22.06.2017)

Am Mittwoch, den 28. Juni 2017 protestierten die Fahrer_innen der Essenslieferdienste Foodora und Deliveroo mit einer großen #Deliverunion-Fahrraddemo... » Weiterlesen

Sklaverei im Knast: Wir lieben es nicht (08.11.2016)

Am Samstag, den 5. November, haben Mitglieder der FAU Berlin eine Transparent- und Flyeraktion vor einer McDonald's-Filiale durchgeführt. Die Aktion erfolgte... » Weiterlesen

„Da sind Sie überrascht, was?!" FAU Berlin erwirkt Honorarnachzahlung von der Crowdworking-Plattform Greatcontent

(12.08.2016)

„Lieben Sie auch den Fluss eines großartig geschriebenen Textes? Macht es Ihnen Spaß, den Prozess der Erstellung kreativen Contents zu begleiten und... » Weiterlesen

Erster Gütetermin im Fall Barist (26.04.2016)

Aktuelle Nachrichten

(Update) Arbeitskonflikt eines Kollegen mit der Geschäftsleitung im SO36   18.08.2019

Deliveroo zieht sich zurück – Kämpfe gegen prekäre Arbeitsbedingungen gehen weiter   13.08.2019

FAU Berlin unterstützt Klimastreik am 20.09.2019   08.08.2019

▸ Weitere Nachrichten...

Veranstaltungen / Termine

Gerichtstermin eines Bauarbeiters der Mall of Shame vor dem Bundesarbeitsgericht in Erfurt

16.10.2019, Bundesarbeitsgericht, Hugo-Preuß-Platz , 99084 Erfurt, Saal I
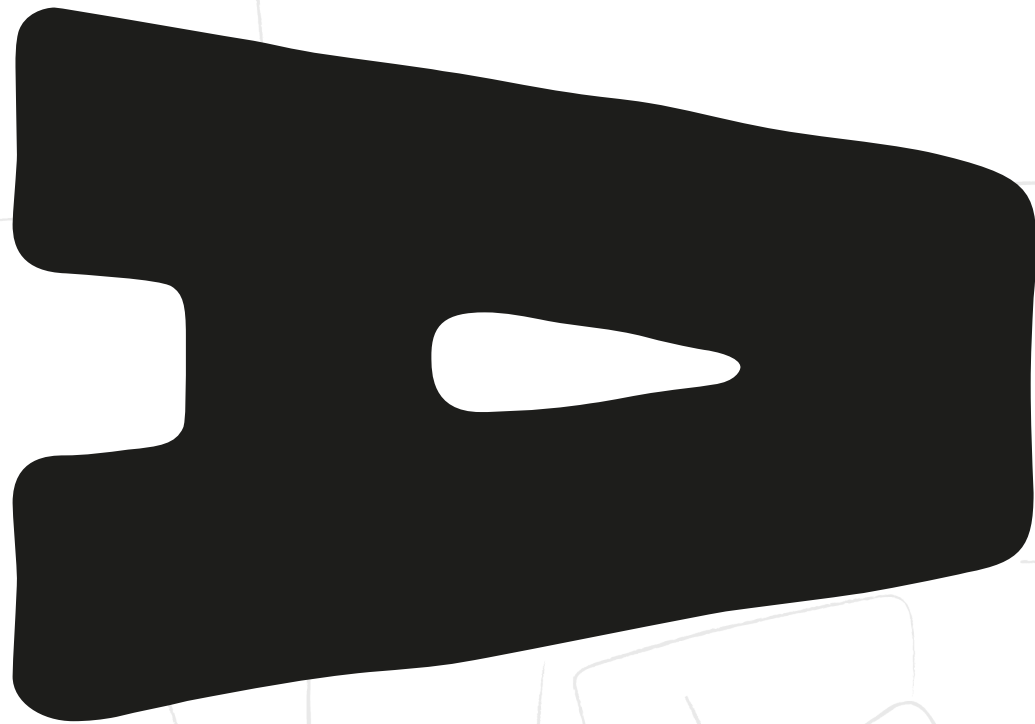
▸ Weitere Termine...

Mall of Shame

Bauarbeiter der »Mall of

FAU Berlin
Labour Rights in Germany
(for English Speakers)

As foreigners, we are especially vulnerable to exploitation because we are unfamiliar with our rights as workers in Germany. Employers often shamelessly exploit this situation. This leaflet is meant to give you a brief overview of your rights. The rights listed here represent only the minimum standards. If you want more, you have to fight. That's what unions are for. FAU stands for Free Workers' Union. Together, we can stand up to the bossesa and fight for equality in the workplace.

In the FAU the members decide. There is no leadership body or paid official telling you what to do. Every member can become active and have their say. By sharing knowledge and participating, members can also gain experience that will help them achieve concrete improvements in their workplaces and beyond.

In labour struggles, demands are developed by those whom they affect. Because of our grassroots structure, we can adapt to specific situations. We rely on solidarity and quick mobilization. The support of our members is direct, their actions effective.

We are organised locally, federally and internationally. The FAU is a federation with member groups in many major German cities. We are also part of the international revolutionary syndicalist workers' movement and routinely assist in their struggles, as they do in ours.

If you want to join us, then send an email (faub-aus@fau.org) and we will let you know what your options for meeting us are. For example, the FAU features a number of syndicates that are organised according to industry sector in different cities. German is generally spoken in most syndicates but there is always the option of communicating with us in English and/or Spanish. We will of course try to find comrades who are able to talk to you in other languages.

Please note: This is just a very general list and there are many details and exceptions to take into account. This leaflet is available in several different languages, see: www.fau.org/the-basics

A

1. Employment contract

You have the right to a written employment contract. Your boss has to give you a signed copy within a month at the latest. The following terms should be stated in your contract:

- Name and address of contracting parties
- Starting date of employment
- For fixed term contracts: length of employment period
- Job location or a note to the effect that the worker may be employed at different locations
- Job description
- Salary, including and detailing overtime pay, allowances, bonuses, extra payments and other components of your salary plus date of payment
- Working hours
- Length of annual leave
- Notice period for terminating employment
- Reference to any collective and internal company agreements that may apply

2. Minimum wage

A minimum wage is the lowest remuneration that an employee is entitled to. Remuneration can be determined as an hourly or monthly wage. As of 2019, the legal, nationwide minimum wage in Germany of 9,19 € per hour (gross) which applies to all employees working in Germany. As a general rule, the national minimum wage applies to everyone! However, for employees who have been unemployed long-term (for a year or more) immediately before taking up employment, the minimum wage does not apply for the first six months of employment.

Prior to the introduction of the national minimum wage in 2015, some industry sectors had already established higher minimum wages, e.g. the building sector (over 10,00 €/h) – these still apply. There are also a number of collective agreements which determine higher wages. If you are entitled to higher wages, these can be claimed in a court of law.

3. Non-payment of wages

If payment is delayed for a prolonged period, an employee is allowed to stop work until payment after giving notice. The employer has to continue paying wages for the time you don't work. Legally, all work must be paid, so beware of unpaid labour! As a general rule, you should write down all the hours you have worked. It is important to make a note of the date, as well as the time you began and the time you stopped work. Also write down the times of any breaks you may have taken.

4. Overtime and night shifts

You may be asked to work up to 10 hours per day on a temporary basis, but the average workday must not exceed 8 hours. If you work night shifts, you are entitled to additional paid leave or a pay supplement (at least 25 %). According to the Working Time Act, the night shift generally lasts between 23:00 and 6:00.

5. Breaks / rest periods

The Working Time Act also stipulates that you are entitled to a 30 minute break after 6 hours of continuous work. After 9 hours, you are entitled to a 45 minute break. You may also take 2 to 3 separate 15 minute breaks. Breaks are not counted as part of working time and are generally unpaid. If your breaks are shorter than 15 minutes, they do not count as unpaid break-time, but as paid (!) working time.

Between shifts you are entitled to an uninterrupted rest period of 11 hours at least. Workplaces with more than 10 employees must have a break room.

Your breaks may not be interrupted.

6. Leave / rest

You are legally entitled to at least 24 working days of paid annual leave. You must take this leave during the current calendar year. Generally speaking, you cannot have leave transferred to the following year; only in some exceptional cases can leave be transferred to the first three months of the following year. Some collective agreements allow for more days of paid leave and even extra holiday pay. Sundays and holidays are days of rest, but there are a number of sectors excluded from this rule (e.g. hotels and restaurants).

7. Illness

Your employer pays about half of your health insurance costs. If you are sick and can't work, your boss has to pay all your wages for up to 6 weeks. After that, the health insurance company will pay 70% of your net wages for another 78 weeks maximum. But you have to have been employed for at least 4 weeks and you have to inform your boss immediately if you can't work and roughly how long you will be sick. After three days at the latest, you must submit a sick note from you doctor. Please note: this means three calendar days, not three working days! If stipulated by your boss or stated in your contract or in the collective agreement for your industry sector, your boss can also demand a sick note on the very first day of illness.

8. Pregnancy and children

As a general rule, female employees can't be fired from the beginning of pregnancy until 4 months after giving birth. In some cases, however, your boss can apply to the local government to agree to a dismissal. Your boss must make a rest room available to pregnant employees within the workplace. You can take paid leave for the last 6 weeks before due date and until 8 weeks after giving birth (maternity leave). Theoretically you can work during this time – but only if you want to and at your own responsibility. You should, of course, not do this! There is a categorical ban on working for 8 weeks after giving birth.

Both parents together can take 14 months of parental leave after birth during which time they will receive financial support from the government and are protected from dismissal.

If a child is ill, both parents are entitled to ten days leave per child. If you have several children, the maximum amount of leave is 25 days. Single parents are entitled to twice the amount of leave – 20 days for each sick child and a maximum of 50 days for several children. If an employee has a seriously ill child to care for, these restrictions may be lifted. Generally speaking, your boss has to pay 100% of your wages for these days. However, the payment of wages in case of a sick child may be ruled out by a collective agreement. In this case you may be entitled to child care benefit payments. If the sick child is under twelve years old and there is no other person living in the household who is able to care for the child, these payments will be made by your health insurance company. To apply for child care benefit you will need a certificate from your pediatrician.

9. Dismissal / termination agreement

According to the Dismissal Protection Act, terminations based on misconduct must be preceded by warnings not to repeat said misconduct. Only severe cases of misconduct can lead to being fired without notice. This act provides safeguards against wrongful dismissal, but only applies after 6 months of employment and to workplaces with more than 10 employees working for at least 30 hours per week. Regardless of workplace size, you are entitled to 2 weeks of notice in your first 6 months of employment after which you are entitled to 4 weeks or more, depending on tenure.

Dismissals must be undertaken in writing. Wrongful dismissals have to be contested within 3 weeks. Your boss may demand that you sign your dismissal notice. Do not do this! In most cases this will be a so-called termination agreement. If you sign this, you may lose all your rights and may also be subjected to a ban on unemployment benefits or "Hartz IV".

10. Unemployment

Hartz IV (aka ALG II) is a barebones unemployment insurance for the long-term unemployed, the short-term employed, low-income earners, etc. It covers your rent (if it is deemed not too high) and health insurance and includes a minimal allowance for food and such. If you work and earn less than the Hartz IV rate, you can become a so-called "Aufstocker", i.e. the unemployment office will pay the difference between your wage and Hartz IV. If you have not worked long enough to qualify for full unemployment insurance, you can usually get Hartz IV. However, the exception proves the

rule. For example, EU migrants need a side job where they earn at least ca. 200 €/month or they have to have been residents of Germany for at least 5 years in order to get Hartz IV. You should seek advice before applying.

If you have been an employee subject to statutory social security payments for at least 12 months over a period of two years in Germany, you are entitled to full unemployment benefits (ALG I). Unemployment benefits are calculated based on your average income over the last twelve months, including Christmas bonuses, holiday pay and any other one-off payments. This sum is used to calculate a daily assessment wage which – after deducting payroll tax, solidarity surcharge and a flat 21% for social security contributions – is your actual daily wage. An unemployed person will receive 60% of this daily wage – 67% if you have children. You are entitled to ALG 1 payments for half of the amount of months that you have made social security payments in the last 24 months. In some cases this period may be extended. After this period ends, jobseekers move to Hartz IV.

11. Internships

In general, an internship is meant to be an opportunity to "try out" a job, not full-scale employment. For this reason, "genuine" internships are as a rule unpaid. Voluntary interns, unlike job trainees and student interns, have the same rights as employees do.

If you are an intern, you are also entitled to the statutory minimum wage if you fall into one of the following groups:

- Interns not working within a vocational training program or course of study who have already completed vocational training or course of study.
- Voluntary internships as a co-op program to a course of study or vocational training lasting over three months.
- Voluntary internships as a co-op program to a course of study or vocational training, if the student or trainee has already completed an internship with the same employer.
- Voluntary internships as a career or study orientation measure lasting over three months.

12. Freelancers / self-employed

Freelancers must be paid within one month after issuing their invoice. Most of the other rights listed here do not apply to them. However, you may be a "fictitious freelancer" and have the same rights as an employee. You would then have the right to a fixed contract. Under certain circumstances, it may be difficult to determine whether you are an employee or a freelancer. Above all, this depends on whether your work takes place as dictated by your boss, whether they tell you when and where to work, whether you are a fixed part of your employer's organisation, and whether your work is for "third-party use", i.e. if you work for your boss according to their plans.
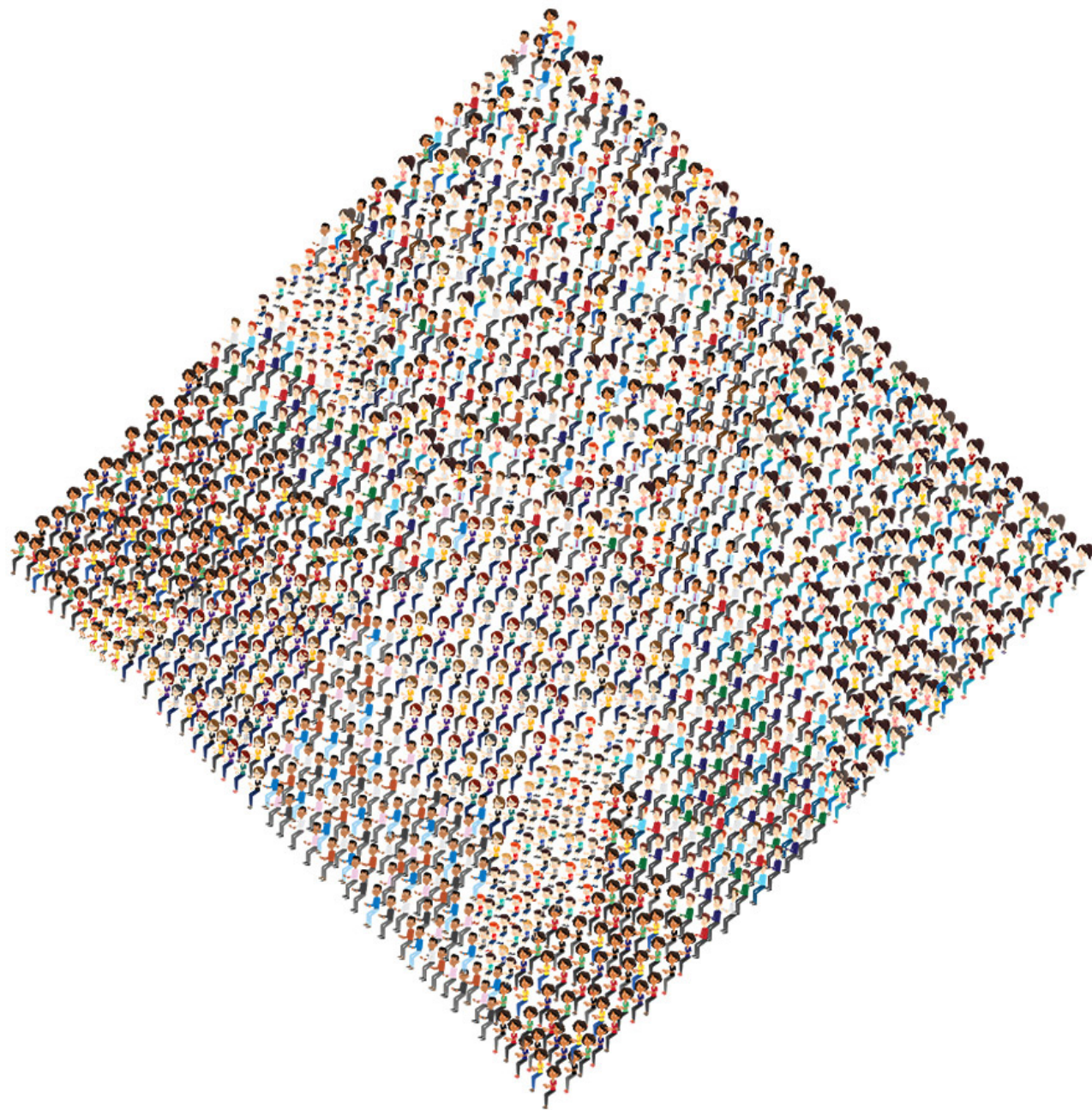
A
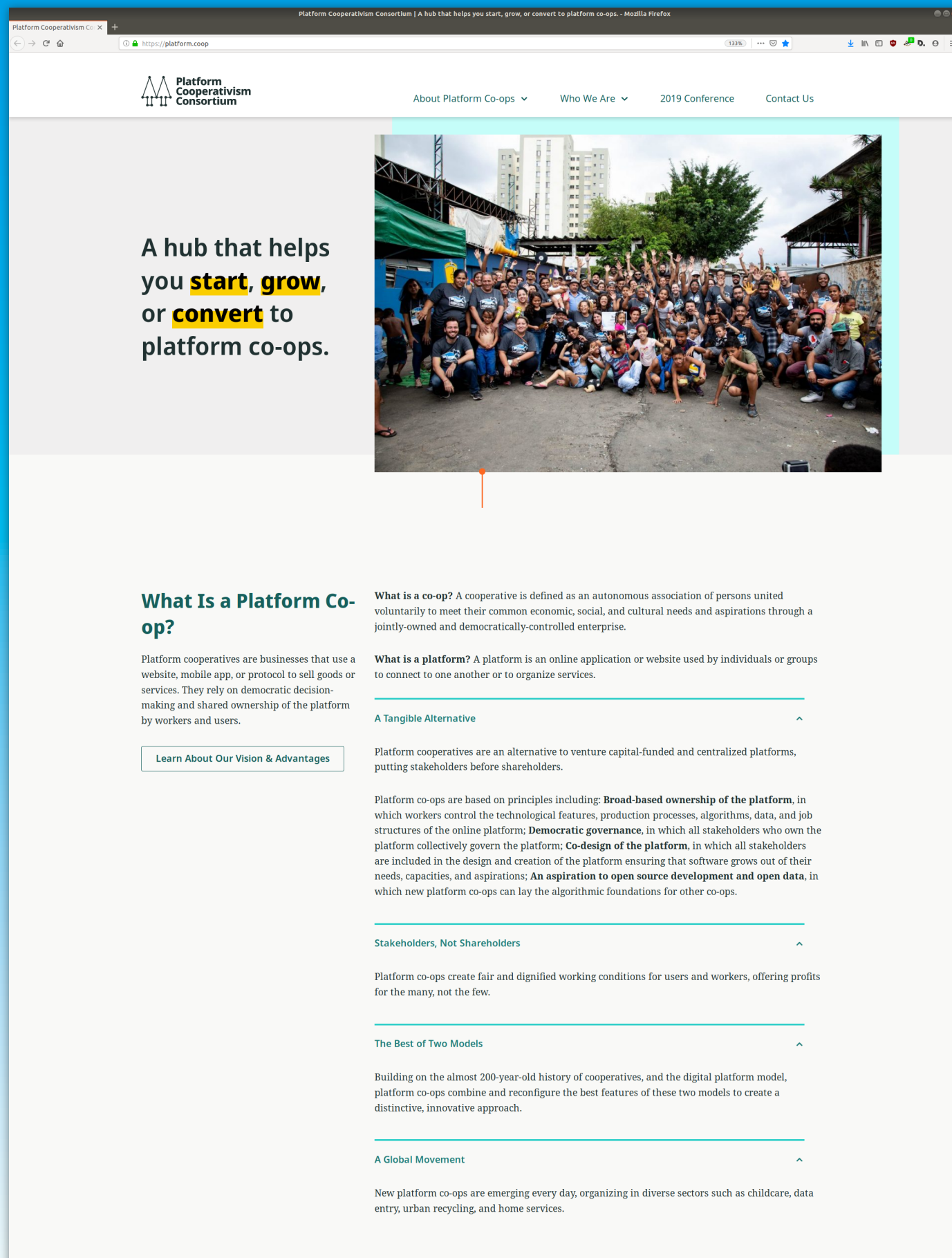
Sebastian Schmieg
Humans As Software Extensions

In 2008, the science-fiction movie Sleep Dealer by Alex Rivera envisioned a future which couldn't be more timely: the border between Mexico und the US has been closed. Therefore, immigrant workers in the US have been replaced by robots. However, these robots are remotely controlled by people in Mexico who have their bodies plugged directly into the network.

Two years later, in 2010, Crowdflower CEO Lukas Biewald speaks of a similar situation:

"Before the Internet, it would be really difficult to find someone, sit them down for ten minutes and get them to work for you, and then fire them after those ten minutes. But with technology, you can actually find them, pay them the tiny amount of money, and then get rid of them when you don't need them anymore."

Biewald's remarks, however, were not science-fiction. Instead, at that time they described a reality for some that has since become a reality for many: a contemporary condition and configuration that I would call humans as software extensions. In this configuration, people are extending computational systems by offering their bodies, their senses, and their cognition; and specifically, bodies and minds that can be easily plugged in, rewired, and discarded. These are bodies and minds that are algorithmically managed and under the permanent pressure of constant availability, efficiency and perpetual self-optimization.

Being Universally Addressable and Programmable

As such, humans as software extensions are both the foundation and the result of something that we could call a computational megastructure. Benjamin Bratton offers a helpful model of such a megastructure which he calls The Stack. This model describes a computational totality of planetary-scale that is comprised of six interdependent layers: earth, cloud, city, address, interface, and user; from rare-earth minerals to fingers touching screens to bots living somewhere inside this global stack.

What makes Bratton's model interesting is his proposition to consider all machines, software, etc. that surround us, and that we inhabit, not as separate but as forming a whole, even if that whole has come about accidentally. This totality both describes and generates a new geography, e.g. the Costa Rica-Nicaragua border dispute that was fueled by Google Maps in 2010, or potentially the scenario described in Sleep Dealer.

As Bratton characterizes users as expressions of platforms (the stack of layers), the Stack can also be considered a model that generates humans as software extension. A user is that which can initiate a so-called column inside the stack. Hence, a user can be a human, a bot, a car etc. For example, a message sent from one user to another travels from the sender at the top to the bottom of all layers, and then back up again to the receiver. Coming into existence as parts of columns that pass through the address and interface layers, all users inside the Stack, including humans as software extensions, are universally addressable, and programmable.

To be clear, from my point of view the model of planetary-scale computation as a totality is as much a reality – and not, at the same time, as Bratton points out – as it is also used as a gigantic fantasy and ideology of power, optimization, and efficiency.

Let me give you a few examples of what I mean by humans as software extensions, and what effects this way of managing digital labor has on us.

Managing My Extensions

In 2015 I published a piece in which I explored digital colonialism, and among other things Google's and Facebook's attempt to integrate into their services those 2/3 of the world's population who are not online yet. Using drones and balloons circling above areas without internet connection, Google and Facebook want to "suck" that which is below up into the network.

The piece which is called How to Appear Offline Forever consist of a mix of found material – videos, images, and questions. There is also a layer of stories written and sometimes recorded by people from Silicon Valley, Sri Lanka, and Zambia which are all locations of importance in the piece's story (Zambia is the country in which Facebook's Internet. org premiered, and Sri Lanka was meant to be the first country to be served by Google Loon).

In order to get in contact with people in Sri Lanka, I ended up using the outsourcing platform Upwork which offers a highly efficient interface for hiring freelancers from all around the world. On their platform you can sort freelancers by price, skills, and ratings. Their user experience of hire & fire is well crafted, offering freelancers as software extensions that can be plugged in, and removed again easily. It doesn't matter where, what or who they are – as long as they get it done.

Once the freelancers in Sri Lanka got to work, I noticed that I was not only able but also encouraged to spy on them: Upwork records key strokes and regularly takes screenshots while freelancers work, building a growing diary of their activity. I found myself in a situation in which I wasn't only being surveilled by states or corporations. I was also doing the same myself, managing my extensions, spying on them in order to monitor their performance.

This is not them spying on us, us protecting ourselves against them through encryption. This is all of us fighting for our place in the network, trying to be valuable nodes.

Only 15 years ago, outsourcing via the Internet was a practice that could only be employed by big IT companies. Today, it is cheap and easy and can be done by anybody. A new service by Amazon called Amazon Key illustrates this rather new situation perfectly:

With Amazon Key, you can remotely grant access to your apartment, and using the Amazon Key camera, lock, and app, you can spy on the otherwise completely invisible workers from your smartphone. In Amazon's promotional video, outsourcing doesn't generate free time. Instead, it is born out of necessity. Implicitly, Amazon Key is also marketed as making possible the transformation from being managed to being able to also manage others – while not having to deal with them in person at all.

Now, everybody not only can but has to – and of course: wants to – employ humans as software extensions, at the same time having to remotely track and rate their performance.

The Total Freedom of Survival Creativity

Greatly simplifying a complicated situation and development, we might say that while factory workers were and still are extending machines with their bodies, freelancers could escape the factory. Yet, they ended up as "flexible" extensions to the modern media assembly line through platforms like Upwork.

Now, in a more recent development, the alleged independence and freedom of entrepreneurs (or more precisely: gigtrepreneurs) turned out to be a diktat under which people have to invent their own jobs. Trying to anticipate possible ways in which they can extend temporary global assembly lines (or, in the framework of the Stack: configurations of columns), gigtrepreneurs package and offer their creativity in the form of so called gigs. Such gigs are sold on platforms like Fiverr for a fixed price (initially, each gig on Fiverr was priced at $5 with the platform keeping 20%).

Some months ago, I found a way to directly access all videos that are uploaded to Fiverr in real time, including every single video that people working on the platform are producing. Through this crack in the platform's surface, I've been looking at the leaked stream of videos for days and weeks, downloading over 100 gigabyte of video.

Let me share some observations. On Fiverr it is dog-eat-dog: be the best, the cheapest, the most creative, and the most efficient. At the same time, everybody is also fighting against the platform's algorithms and clean interface that hide most gigs on page two, three or four, no matter how cheap, creative or efficient these gigs are.

B

As many gigs offer unrealistically short delivery times for creative work, it also becomes clear that the gigtrepreneurs themselves use bots, generators, and templates, simulating creative work, creating yet another layer of man-machine-complexity in which they are using automation in order to not be replaced by automation. Doing so, their biggest selling point seems to be their low cost coupled with a truly natural interface, a human being.

In contrast, there is another group of people consciously offering their bodies, often as carriers of messages. Here, the fantasy of the universal addressability, programmability and availability of all nodes manifests itself in the distant and often "exotic" body that acts as a screen. This goes hand in hand with gigs offering personalized porn and fetish videos.

Here we can summarize: being a human software extension on a hyper-competitive platform fosters and demands something that I would call survival creativity: doing whatever it takes to survive in a competitive environment.

Let me remind you that Fiverr might be an extreme example but it exemplifies a development that has become a reality for many already. Furthermore, don't be mistaken, there is no we and them. We are all human software extensions.

The Future of Work is a Lot of Work

So far, I've drawn this bleak picture of a quasi-totality of work and exploitation. In the previous examples, platforms, software, and artificial intelligence acted as "scientific management", as the taylorist boss algorithmically distributing and modulating human workers as software extensions. However, don't automation and artificial intelligence supposedly bring about a future without work? According to a rather popular concept of a technophile post-work society, this could be achieved by not only automating the management of working bodies and minds, but also completely replacing all human nodes with artificial intelligence as well.

If you do not believe in magic then I have two more suggestions about what we as software extensions can do.

While I think this is an excellent foundation for discussing our society's obsession with work, I would argue that this accelerationist concept is as appealing as it is flawed (unfortunately). Artificial intelligence is an appropriation and a possible extrapolation of existing knowledge and skills, and as such it might as well do (some of) our jobs. But it is first and foremost a scheme to fragment work into tasks that can be done anywhere 24/7, and to make this labor invisible.

Artificial intelligence's recent awakening from hibernation cannot be explained by better algorithms alone. Next to big data, the new possibility of outsourcing clickwork via the internet on a massive

scale for little or no money has probably been the most important factor in making possible this recent development. Here, machine vision is a good example that allows us to understand artificial intelligence as a global infrastructure that has a massive but mostly invisible workforce at its core.

Like many other machine vision datasets (e.g. ImageNet), Microsoft's COCO image recognition dataset is based on photos culled from Flickr. The dataset's true value derives from the 600.000+ segmentations manually created by Mechanical Turk crowd workers, based on those photos from Flickr. With Segmentation.Network I created a piece in which all segmentations are played back in a random order, making visible some of the manual labor that goes into building artificial intelligence. Furthermore, it is also a piece about absence and irrelevance. Looking at the outlines, it becomes obvious that in each photo only a specific set of objects has been annotated and segmented while everything else has been deemed irrelevant. Therefore, each dataset can also be defined by its incompleteness.

Against this background, we have to realize that we can automate as much as we want, we will still have to train and maintain machines and software constantly. Thus, artificial intelligence creates yet another layer of badly or unpaid care and maintenance work which is often invisible on purpose.

(Of course, this needs to change, and feminist theory and practices have a lot say about this issue, as does for example maintenance art).

Seizing the Means of Magic

Here, a case in point and, maybe, a possible solution: At the end of 2011, while still being students sharing a studio, Silvio Lorusso and I started to take a screenshot of every single captcha that we had to solve while navigating the web. Over the years, proving that we are human time and time again, we captured hundreds of captchas, chronicling years of micro-labor as well as a history of captchas: from a technique to merely prevent spam to a method for deciphering house numbers and transcribing books to a means of teaching image recognition to AI software.

While we were still just collecting, in 2015, Gabriela Rojas-Lozano filed a class action lawsuit against Google. She claimed that Google "operates a highly profitable transcription business built upon free labor, which it deceptively and unfairly obtains from unwitting website users." Unfortunately, her claims were rejected on the grounds that "Plaintiff has not alleged any facts that plausibly suggest the few seconds it takes to type a second word is something for which a reasonable consumer would expect to receive compensation."
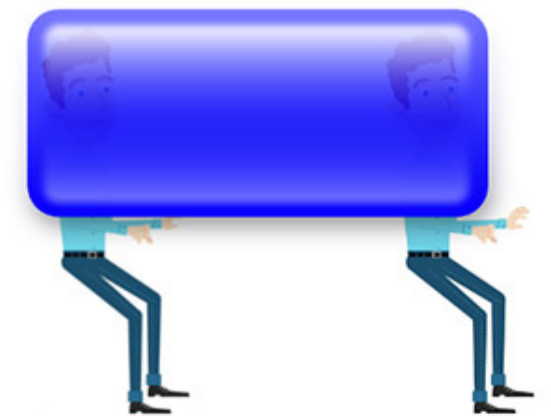
THE JOB AS A PIZZA DELIVERY BOT WAS ALRIGHT BUT THEY DIDN'T PAY WELL AND SO I DECIDED TO WORK ANOTHER JOB ON THE SIDE

However, her attempt to sue Google was still a success because it lead to the proof that Google has perfected a magical process in which work is transformed into literally nothing. Welcome Post-Work Society, after all!

How does this magical process work? It is rather simple: You take a job – let's say transcribing books or the New York Times archive – and you fragment this job, and you fragment it more and more until, suddenly, the job is magically done without anyone ever having worked on it! Because, if nobody has to get paid then nobody had to work either, right? Hence, the judge's statement is proof that this magic actually works. It gets better: Google still ends up being paid even though there is no job anymore.

What I want to suggest now is to seize the means of magic. Why not fragment those platforms that algorithmically manage us to such a degree that they simply do not exist anymore? Magically, their job will still be done, and in the end we get the money (I guess we could call a less magical version of this platform cooperativism).

By the way, Silvio and I have since published our complete collection of captured captchas as a series of five handmade leporello books, and the books span a total length of 90 meters.

Covert Interventions

If you do not believe in magic then I have two more suggestions about what we as software extensions can do.

In 2016, Donald Trump's team hired a Singaporean teenager through Fiverr (the platform I talked about earlier) to convert a PowerPoint into a Prezi, basically outsourcing the "Make America Great Again" campaign. In my recent speculative video piece I Will say Whatever You Want In Front Of A Pizza, the protagonist who is not only working as a pizza delivery bot but also as a cloud-worker on Amazon's Mechanical Turk platform gets to know this Singaporean teenager.

And, at least in my speculative video, she's got an idea. The idea is this: when we are extending software with our bodies and minds, we are also extending our reach into the software. And reaching into the software, being part of the software, we can start to manipulate these systems that govern us, and with which we have to govern others. Once we are plugged in, we can manipulate data, and we can create new and weird and slow and inefficient software from within. It can be fun, like leaving easter eggs for others to find, realizing, yes, there are actual people inside these systems.

An Aesthetic of Detachment

Finally, I will end by making a fool of myself, talking about Mark Zuckerberg. Being a software extension can also offer a new aesthetic, and a new way of being, and I think this video which could be called the father of all stupid demos illustrates this in a rather interesting way:

Here, for whatever reason, Zuckerberg demonstrates Facebook's VR by visiting Puerto Rico in the wake of hurricane Maria. Contrary to what he had intended, Zuckerberg as a crudely abstracted version of himself, turned into a software extension, detaches and dissociates himself from the reality that he attempts to visit and connect to. This is what I like, and I think you will agree with me: software is not perfect, it's full of bugs, it often behaves in unexpected and weird and glitchy ways, doing stupid things, often over and over again in an infinite loop.

Therefore, embracing the weird and abstract aesthetic of being a software extension could actually allow us to detach ourselves from circumstances under which we are required to be our best working selves all the time. Pretending to be a bot could be a mask behind which we can hide.

B

James Stanier
The Gig Economy's Unhappy Middle Class

Uber, Lyft, Postmates, and Deliveroo. These words are now part of our everyday lexicon.

The gig economy has changed the world. I find it hard to remember when I didn't see hundreds of delivery scooters zipping around the city near our office. Nor do I easily recall when it was unusual to see somebody happily getting into an unmarked car driven by someone they didn't know. From Beijing to London to San Francisco, our cities are bisected 24 hours a day by the journeys of bicycle couriers, delivery mopeds, and taxi drivers.

I previously wrote that the explosion of the gig economy over the past decade has been primarily fueled by the money of venture capitalists (VCs) and the software written by skilled and highly compensated software engineers. There is a notable dichotomy between the job security and income of those who are creating this new economy and that of the gig workers who are generating the revenue, one delivery or ride-sharing trip at a time.

One could argue that the drawbacks of gig work far outweigh the benefits.

In the race to rapidly grow the companies that utilize gig work, huge net losses are generated, signifying high risk for future investors and workers. Gig economy platforms such as Lyft and Uber, in their sprint for market dominance, dramatically undercut traditional companies such as local taxi and courier firms. These tactics create new unicorns that grow and become immensely valuable for their founders and staff. The VCs and investors that propelled their growth receive significant returns on their money.

And while this furious competition is excellent for consumers, who get cheaper, faster, and more technologically advanced services, what becomes of the human beings who generate revenue by driving and biking day and night, come rain or shine? Are the workers an afterthought in this economy? One could argue that the drawbacks of gig work far outweigh the benefits. There is no job security.

There is the stress of unpredictable income. There is a reliance on algorithms to get work. Ratings systems cast their judgment.

If labor laws change and these companies cannot operate as they currently do, or if cities and countries ban them altogether, gig workers may quickly find themselves out of a job with no safety net. Comparatively, the VCs expose themselves to little risk through their diverse portfolios. The software engineers can easily find high-paying jobs elsewhere in today's buoyant job market.

We all know that gig workers want better conditions. There have been protests and strikes around the world for many years. A common — and privileged — response to complaints from gig workers over their conditions is that if they don't like their jobs, they can quit. Nobody is forcing them to work at these companies. However, this misses important nuances about the diverse demographics who deliver your food and drive you to the airport.

We can partition those who are working in the gig economy into groups based on their motivation. A 2015 analysis published by Uber's head of policy research found that 51% of drivers work one to 15 hours a week, 30% work 16 to 34 hours, 12% work 35 to 49 hours, and 7% work more than 50 hours. It could therefore be observed that a comparably small proportion of Uber drivers are responsible for a majority of rides.

Given that a worker chooses how many hours to drive, we can interpret that choice as an indicator of their needs. If we consider the gig economy as a whole, the Pew Research Center reported that 56% of surveyed gig workers were financially reliant on gig work, versus 42% who could live comfortably without the income. Given that 57 million people in the United States alone are taking part in the gig economy, the nearly 24 million people using it to earn supplemental income are clearly reaping the reward of additional, flexible work at the press of a button — work that didn't exist until companies like Uber and Lyft were created.

Additional studies show that for some, gig work can be much better than the available alternatives. A 2018 study of Uber drivers in the United Kingdom showed that the vast majority of the U.K.'s drivers are "male immigrants primarily drawn from the bottom half of the London income distribution." These immigrant workers moved into the gig economy from permanent part- or full-time jobs and reported higher life satisfaction than in their previous jobs. Although the drivers are still in a lower income bracket, many are earning more money through Uber than they were before and are able to do so on their terms. A similar U.S.-based study in 2017 reported that driving for Uber gave workers flexibility that was unmatched by other working arrangements and, often, greater pay.

One could posit that these two groups are at the higher and lower ends, respectively, of income distribution. Those who are not reliant on gig work and use it for supplemental income are likely well-off, at least comparatively. Those who find that it offers better flexibility and pay than other alternatives are presumably in a lower socioeconomic bracket and have fewer specialized and transferable skills, meaning gig work is their best overall option.

But despite the benefit of being able to open an app, jump in a vehicle, and immediately earn money, the rapid global proliferation of gig work has created widespread friction and controversy. From protests to sexual harassment to mental health issues to suicides, rarely a week has gone by without a media furor. Although many gig workers report some satisfaction with their arrangement, there are clearly problems, and workers are starting to take action.

The challenging side of gig economy conditions has inspired grassroots action through organizations such as the Independent Workers Union of Great Britain (IWGB). Its stance on the gig economy is that it unjustly classes individuals as "independent contractors" in order to deprive them of employment rights. Local branches of the IWGB, such as the Bristol Couriers Network, have organized targeted strikes against gig economy platforms such as Deliveroo, demanding minimum payment guarantees and a recruitment freeze to ensure that there is enough work for couriers to have a dependable income.

Despite our rebellious impulse to root for the underdog, our underdogs have now become the dominant players in the market.

There is a parallel with the controversy over so-called zero-hours contracts in the U.K. Also known as casual contracts, the employee is on call to work when the company needs them. They do not necessarily have to be given any work by the company, and they do not have to work when asked. On the surface, this seems like a similar situation to those who are doing gig work: It's flexible work that is there for workers to take or leave.

However, the Trades Union Congress argues that these contracts exploit workers, stating that the flexibility they offer is good only for employers and not for the employees. Increasingly unstable economic conditions have seen workplaces replace traditional full-time or part-time staff with zero-hours contracts, meaning staff cannot guarantee their income or easily plan their working hours. The BBC reports that 2.4% of the working population in the U.K. are working zero-hours contracts, but two-thirds of those workers would prefer fixed hours.

According to the U.K. government, zero-hours contracts, despite offering unpredictable hours and, therefore, unpredictable income, must ensure that the national minimum wage is paid and that workers are entitled to statutory annual leave. Gig work is arguably even less secure, given that there is no guarantee of any income due to the arrangement's casual nature and because the pool of available work is regulated by two uncontrollable forces: the demand for services and the number of other workers competing for jobs at any particular time.

There have been numerous times in history in which workers were flocking to jobs with poor conditions. One notable period was the Industrial Revolution. Wages were low, and work was monotonous and unregulated. Poor conditions for workers led to backlash, protests, and attempts at unionization. However, the surplus of available work during the Industrial Revolution was continually filled by mass immigration to the U.K., ensuring that factory owners never had a staff shortage. This lessened the effect of labor unions since the effect of strikes and walkouts were minimal. Does that sound familiar? Perhaps we find ourselves in another transformational period for our economy and the nature of work.

Conditions during the Industrial Revolution gave birth to labor laws that underpin traditional employment today. The series of Factory Acts passed in the 1800s in the U.K. limited the minimum age of workers, the maximum hours per day they were legally allowed to work, and weekend working hours. Similar reform occurred in the United States, ultimately resulting in the Fair Labor Standards Act being passed in 1938, ensuring that workers had the right to a minimum wage, as well as overtime pay when working more than 40 hours a week.

In an article by Lee Fang for the Intercept, he argues that the race for Lyft, Uber, and their siblings to initial public offerings (IPOs) is partly driven by investors and founders looking to cash out at the highest possible valuation before labor laws catch up with them and potentially break the model that has given them their multibillion-dollar valuations. If Lyft really does lose $1.50 per ride, how much would it lose if it had to provide securities and benefits for its workers in line with those in permanent employment? In fact, when Uber filed for its IPO last week, its S-1 filing stated that "our business would be adversely affected if drivers were classified as employees instead of independent contractors."

Despite our rebellious impulse to root for the underdog, our underdogs have now become the dominant players in the market. For all our hatred of monopolies, the antiquated New York City taxi medallion system that Uber and Lyft has disrupted held a number of benefits for those who worked within it.

In 1937, New York City officials decided that owning or leasing a licensed taxi medallion — displayed on the hood of every working cab — was legally required in order to operate as a driver in the city. The medallion system was installed in response to the chaotic, unregulated taxi situation of the early 1930s. The city was flooded with cabs, congestion was rife, and driving was dangerous.

Rather than relying on legislation to curb and cap them, why can't they lead the way with changes that benefit society?

C

The number of medallions was capped, which, in addition to reducing congestion, meant that medallions became very valuable: As recently as 2013, a medallion sold for $1.3 million at auction. Although a taxi driver's income is moderate, the medallion system ensured that there was predictable income, since people in New York City always want cabs and the medallion cap limited the supply of cars. Purchasing a medallion was an investment, much in the same way that owning a property is. Upon reaching retirement, a taxi driver selling a medallion meant a secure future. But the disruption to New York City taxis by Uber and Lyft — these legal but unregulated and uncapped taxi companies — has driven down the price of medallions from the 2013 high of $1.3 million to a recent low of $160,000.

The regulated system had its flaws, especially for passengers, who often had to struggle to find available cabs during periods of peak demand, but it did provide some worker security. Now that taxi medallions are not as valuable as they once were, yellow cab drivers will have to work out whether keeping them remains financially viable over the long run or if they would be better off driving in the gig economy. In 2014, Uber stated that the median wage for an UberX driver working a 40-hour week in New York City was $90,766 a year, compared to around $30,000 for a yellow cab driver. However, these earnings have been disputed. More recently, the Economic Policy Institute released a report showing that drivers earn just $9.21 per hour once commission, fees, vehicle wear and tear, and a modest health insurance package are taken into account. In December, legislation passed to ensure that Uber drivers in New York City earn a minimum wage of $17.22 per hour after expenses.

Similar patterns are being repeated the world over. The surge and disruption of gig economy work all but forces those who are currently working in traditional regulated industries to join it. In doing so, they subject themselves to less protection from their employer and open themselves up to high risk if they are unable to keep working. Ten years ago, if a medallion-holding taxi driver became too sick to continue working, selling the medallion would be a reasonable way to exit with dignity. In the present day, our gig driver will have to hope they can find some other means of income.

Although this outlook could be considered dreary, I believe that within all disruption and chaos comes opportunity. There has been a tremendous amount of opportunity for new economies to be created, for companies to thrive, and for millions of workers around the world to find new ways of making an income for themselves and their families. No new and disruptive thing is ever entirely good, but I believe that, in the long term, the gig economy will be better for everyone involved — from the customer to the gig worker to the companies themselves.

The question is how we decide to arrive at this better future. In the past, change has come through legislation, such as the Factory Acts of the Industrial Revolution in the 1800s and the New York City taxi medallion system in the 1930s. We see similar legislative progress today, albeit at a pace that is probably too slow to make a meaningful difference. I believe the creators of gig economy platforms have a

decision to make that can become a differentiator in how they grow their businesses over the next 10 years: How can they use their position of power to become a force for good? Rather than relying on legislation to curb and cap these industries, why can't they lead the way with changes that benefit society?

Here is my challenge to the gig economy platforms: Which company is going to be the first to ensure the best possible deal for its workers?

Gig economy platforms are technology giants employing some of the world's smartest people. They have global reach and vast, deep data sets describing the world's lifestyle habits. Given that consumers are happy with the services provided, how can companies begin to turn their efforts toward creating the best possible experience for their workers?

Within the past year, major gig economy platforms, such as Deliveroo, have implemented insurance for their riders. Other platforms are following suit. But I believe there are more fundamental changes that could help workers thrive and thus attract customers to the services that have worker well-being in mind.

Allowing workers to identify as full-time and reliant on their income versus being part-time and earning a supplement could bias gig distribution in favor of those who need the money while still supporting the needs of both groups of workers. Additionally, the geographical data available within the system could prevent bicycle couriers from having to ride punishing uphill delivery routes or carry challenging and dangerous loads. Instead of fueling a subprime auto loan market, ride-hailing companies could offer better incentives to full-time workers to fund purchasing their own car with competitive loans, or perhaps partner with existing car rental networks to allow people to drive without needing to use their own vehicle.

In other industries, consumers are beginning to make more considered choices about where they spend their money. In the clothing industry, higher prices typically ensure that materials are ethically sourced and that workers in the supply chain are compensated fairly. The same is true for groceries: Higher-priced organic vegetables ensure that both the environment and the farmer get a good deal.

Here is my challenge to the gig economy platforms: Which company is going to be the first to ensure the best possible deal for its workers? Why should we wait for legislation to make things better? We as technologists should be trying to address these societal problems ourselves. I'd pay more per ride to ensure that I was properly supporting drivers who are reliant on the income. I'd wait longer for my meal to ensure that an appropriately suitable rider and a calm route are chosen. We've seen which companies have succeeded at being the biggest. Now it's time to see which will succeed at being the best.

c
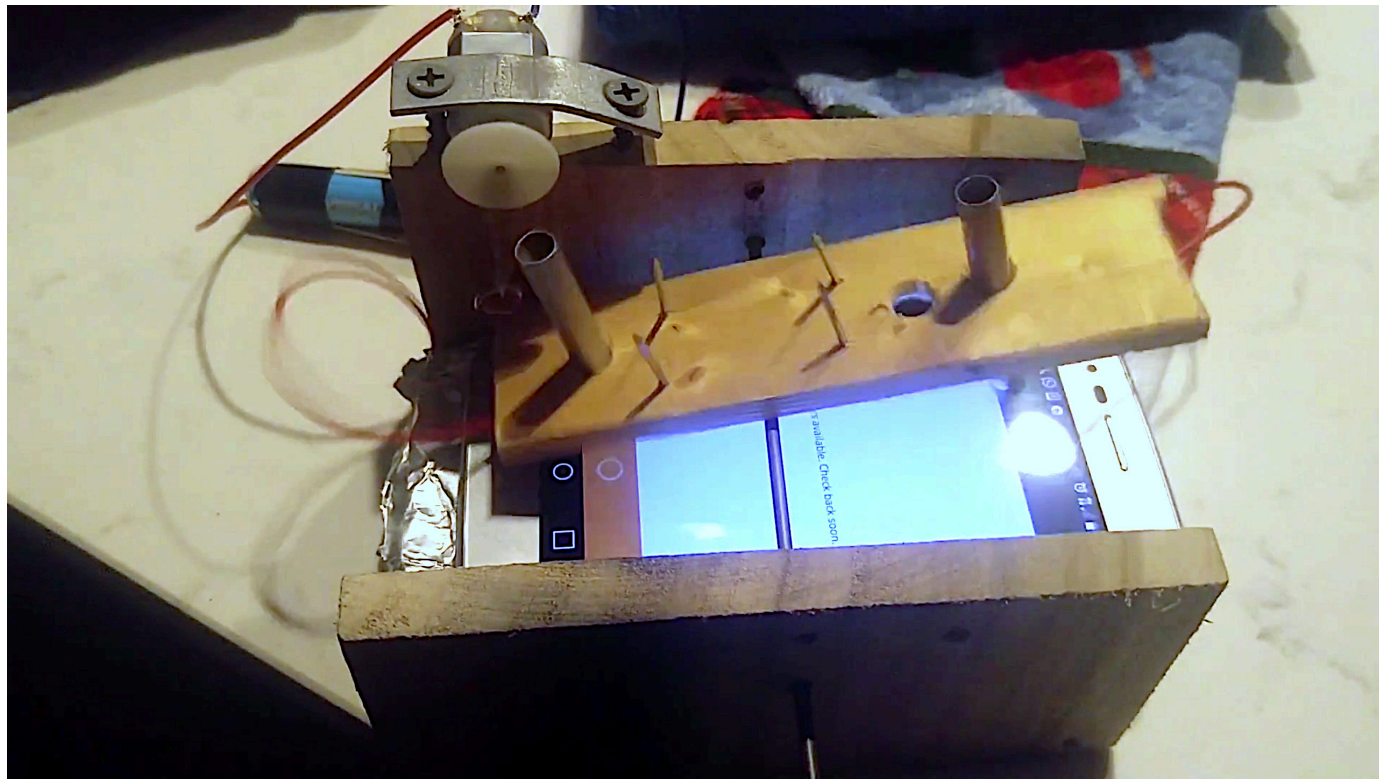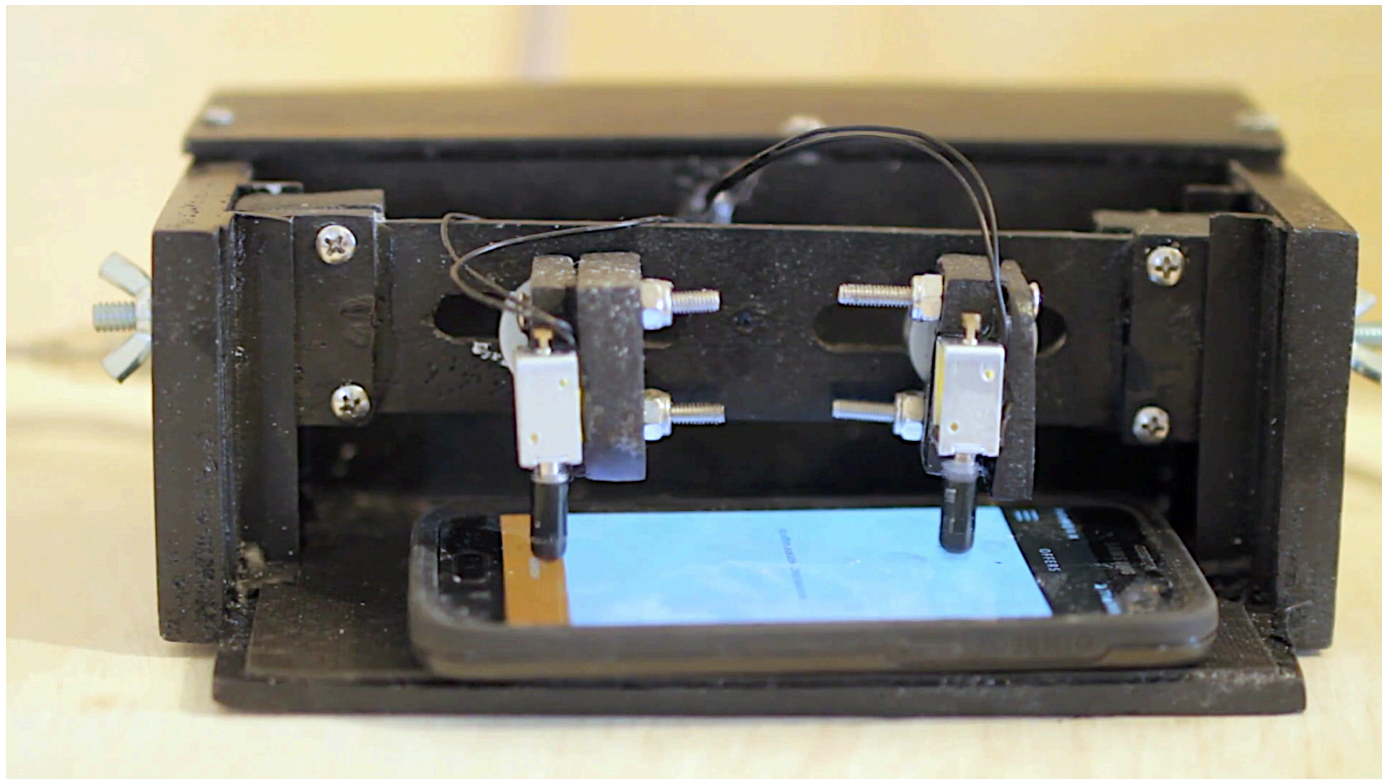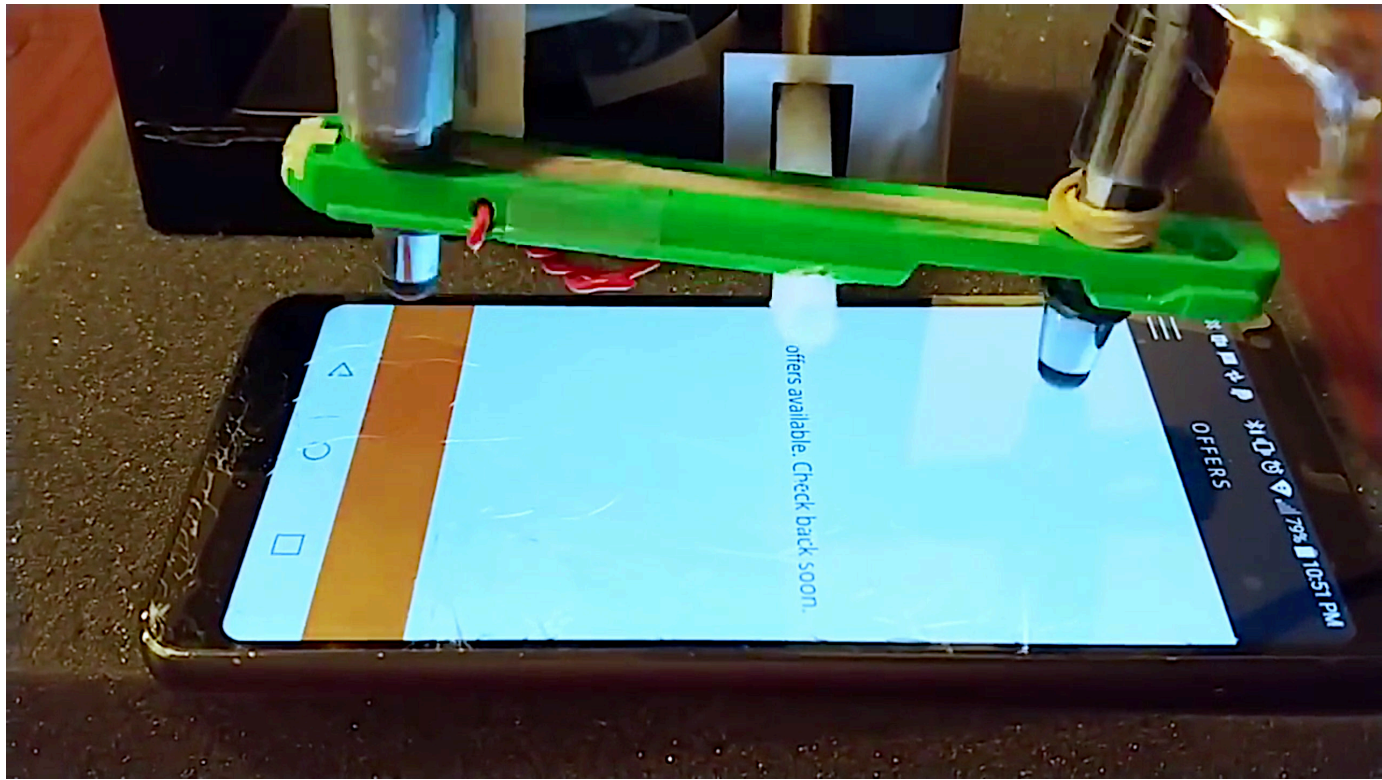
"Amazon flex block grabber homemade pick up 5 block a day and 35 block a week
$$$$$$$$1500" 2019, video compilation, stills

Amazon flex is an app based delivery service. Like with Uber or Foodora workers
can sign up and deliver amazon packages around town with their private car. The
delivery assignments are offered through the app as ‚blocks'.

Growing competition led to different tricks to maximize the chance for being the first
to accept a job offer. In numerous YouTube tutorials workers explain how to build a
mechanical ‚block grabber' bot. These motorized DIY constructions continuously
click buttons in the Amazon flex app to accept a new ‚block' as quick as possible.

Joanna Bronowicka,
Algorithms At Work: Rules About Data Rights of Workers might Need an Update

First published in "Internet Policy Review", a journal on Internet and regulation, May 2019

The future of work is happening now. Platform companies like Uber or Deliveroo collect massive amounts of data about workers to automate their decision-making systems (Rosenblat and Stark, 2016). Algorithmic management is also used to control the workers. During our research about Deliveroo and Foodora, we found that the digital control of couriers operates by automatically sorting workers into three categories based on their personal statistics. Only the workers with the best statistics get the promised flexibility when it comes to choosing shifts, while the worst performers can be fired based on algorithmic recommendations (Ivanova et al., 2018).

Digital control is not unique to the food delivery sector or even the platform economy. Workers at Amazon warehouses or call centres are faced with a similar challenge (Rozwadowska, 2018; Woodcock, 2017; Moore, 2018): how is the data produced at work collected, processed and used to evaluate our work? Technologies are transforming management in many sectors, so perhaps we all should be asking ourselves: are my data rights protected at work?

The answer to this question might be the key to securing the healthy balance of power of future work relations. In principle, the workers in Europe have their data rights protected by national labour laws and the General Data Protection Regulation (GDPR). Are these regulations sufficient to protect workers at a time when digitisation of the workplace is accelerating?

The GDPR did provide a useful common legal standard, which harmonises the rules for all companies in Europe. The regulation prohibits using automated processing, which produces "legal effects" or similarly significant results for the worker without human involvement (Article 22). Moreover, if specific rules are introduced by European member states or collective agreements, they should protect the human dignity of the data subjects, as well as "their legitimate interests and fundamental rights, with particular regard to the transparency of processing, [..] and monitoring systems of the workplace." (Article 88)

However, it appears that there are significant gaps in the current framework, which leave some workers vulnerable and voiceless. For example, the platform workers who work as self-employed do not enjoy the same rights as employees who can form works councils or trade unions (Degner and Kocher, 2018). In other words, they cannot bargain around the use of technology as part of the collective agreements with employers. As a result, in platform companies - where traditional unions are often unwilling or unable to organise, the workers have little or no say on how the technology used to control them is designed.

Indeed, the basic principle of digital platform employers is that of an information asymmetry between the companies and people who work for them (Rosenblat and Stark, 2016). As our research among Berlin food-delivery companies reveals, workers have very little information about the technology used to monitor them (Ivanova et al., 2018). For a healthy balance of power to be reestablished, workers need more than just access to their own data – they also need information about the parameters used to evaluate them and the design of the automated control.

As we mark the one-year anniversary of the GDPR, it is time to say loud and clear: the current regulatory framework might not be sufficient to protect our rights in a digitised workplace. We should consider codifying the principles for workers' privacy and data protection developed by trade unions and technical organisations in a regulation that is specific to the workplace. Also, it would make a difference to introduce standards for designing accountable systems before they are rolled out, so that workers' interests are represented already in the technology development phase (Wagner and Bronowicka, 2019). We should also think about strengthening the institutions responsible for the implementation of laws or for creating new ones, like the European Labor Inspection.

As we contemplate how to improve the existing rules, we desperately need research into the detailed reality of the implementation of the GDPR in a wide variety of workplaces. This kind of research is difficult because it needs to account for algorithm rules, which are dynamic and opaque. It requires trans-disciplinary work of legal, social and technical researchers who combine methods to analyse impact on workers data rights and well-being. Providing workers and researchers with access to data and inviting workers to co-design the technology can spur innovation – the kind that puts the interest of workers at the centre. The future of work is happening now, let's make sure it is a fair one.

Degner, A. and Kocher, E. (2018). Arbeitskämpfe in der „Gig-Economy"? Die Protestbewegungen der Foodora- und Deliveroo-"Riders" und Rechtsfragen ihrer kollektiven Selbstorganisation. Kritische Justiz, 51(3), 247–265

Ivanova, M., Bronowicka, J., Kocher, E. und Degner, A. (2018).The App as a Boss?. Control and Autonomy in Application-Based Management, Arbeit | Grenze | Fluss – Work in Progress interdisziplinärer Arbeitsforschung 2, Frankfurt (Oder): Europa-Universität Viadrina Frankfurt, 27 Seiten. doi:10.11584/Arbeit-Grenze-Fluss.2

Moore, P. V. (2018). Tracking Affective Labour for Agility in the Quantified Workplace. Body & Society, 24(3), 39–67. https://doi.org/10.1177/1357034X18775203

Rosenblat, Alex and Stark, Luke, Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers (July 30, 2016). International Journal Of Communication, 10, 27. Available at SSRN: https://ssrn.com/abstract=2686227orhttp://dx.doi.org/10.2139/ssrn.2686227

Rozwadowska, A. (2018). Znamy opinię biegłego o pracy w Amazonie: „Może powodować urazy psychologiczne I fizyczne", Gazeta Wyborcza, 30 January 2018 http://wyborcza.pl/7,155287,22939723,krzeslo-laski-mamy-pierwszy-raport-bieglego-o-pracy-w-amazonie.html

Wagner B. and Bronowicka, J. (2019), Designing for Labour? Accountability and self-management in an app-based management, ACM CHI Conference on Human Factors in Computing Systems, Glasgow 2019

Woodcock, J. (2017) Working the Phones: Control and Resistance in Call Centres, London: Pluto.
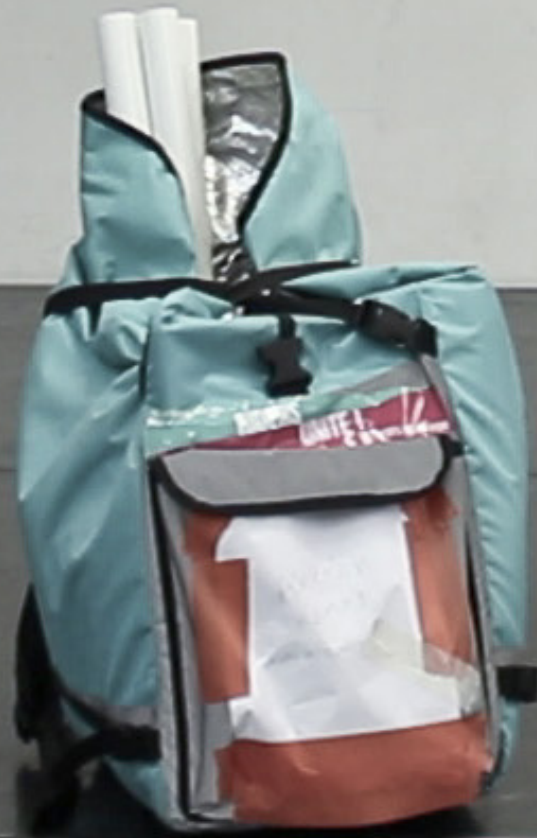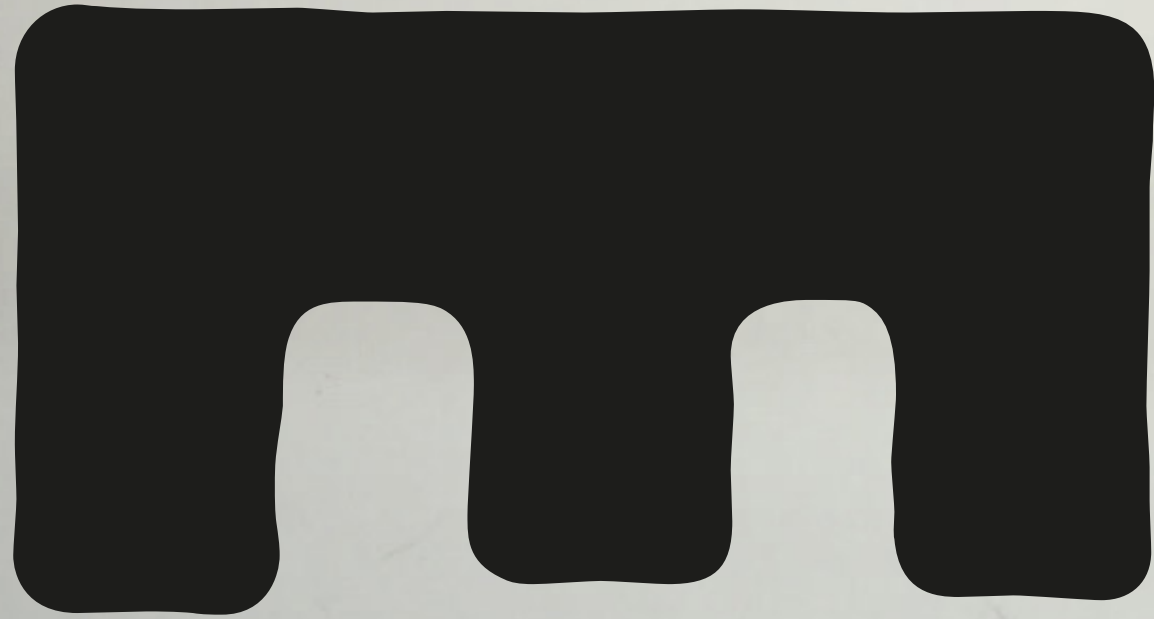
D

Akseli Aittomäki
Work in Progress

E

We have our pride in working on the streets on our bicycles, we have our dignity in being free to wear whatever we see fit for our work day. It can be called schein-selbständigkeit, and it is, it is entirely fake form of supposed enterpreneurship. Yet it gave us a bit of space, in accepting our fake-independence, we also embraced the few freedoms they had to grant to us. They could not supervise us, they could only manipulate our working conditions. The bicycles are our territory. We find our pride and diginity in what is ours, in our survival. They created this fake-micro-market where we are forced to compete against each other. But the streets are ours. The traffic, the wind, the rain, the exhaustion, the boredom, bicycle break down – we survived. We never loved Deliveroo. We just loved the streets despite of Deliveroo.

It's true those venture capitalists did not care to pay pension insurances or health insurances or accident insurances. They cared for nothing. They only gave us "opportunities", opportunities to compete with each other over who got the nicest orders and made the most out of what work happened to be available that evening. But we still preferred our bicycles to some other crappy minimum wage job. At least we felt we had some agency. We could earn more by riding faster. We could choose not to go to work next week, if we worked enough last week.

We would curse those venture fund asses any time we met each other – but a rider did not want someone to come tell them that we were victims. Someone to come and tell them they had no agency and needed to get it from a union. Of course we knew we only competed with each other, on terms set by the company, but we just didn't think of it that much. Many didn't believe the game could be changed. So we played, thinking we wouldn't do it for that long time anyway. There was solidarity between the regulars, but there were always enough newbies who didn't know anyone. One works alone in this job, and has no means to contact anyone. It takes time before one finds friendly colleagues on the streets, gets connected, and can learn from the fellow riders.

We were dispersed on the streets. How does one organise one's colleagues for a strike when one does not know how many are on this shift and where they are? In the beginning we had a chat platform, but the company took it down. It was more valuable to them to make it more difficult for us to get into contact with each other, than to listen to what we were talking about. They did not care what we were thinking and talking about. Their only concern was to have every order delivered. They chose to treat us as an anonymous crowd of production animals. We had to chase each other on the streets to reach out to our colleagues. To build a bit of that community the management of the company was so scared of. Solidarity that is a disturbance to the games they play with us.

30.8.2019
Akseli Aittomäki

Julia Ticona
Inequality in the Gig Economy

"Moving the Needle" podcast by B-School
for Public Policy, University of Pennsylvania.
Interview with Julia Ticona, August 2019
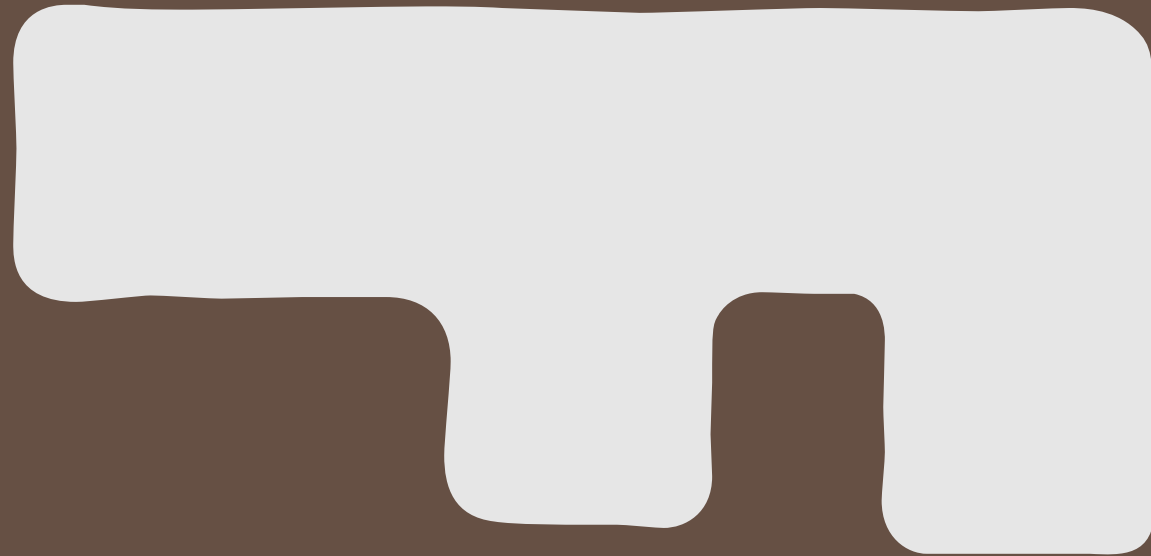
Gig economy jobs have soared in recent years, but as the consumer receives a quick service or a same-day delivery product, what are the workers getting? When this type of work, including ride-hailing services and ice cream delivery came along, some thought women would benefit greatly. But data shows that this hasn't occurred yet, as inequality is a growing component of the global workforce. There has been an "Uberization" of what the gig economy is today, and those jobs are mainly done by men which has left the discussion about women in this sector primarily on the side.

Knowledge@Wharton: A report by Julia Ticona, Assistant Professor in the Annenberg School of Communication at the University of Pennsylvania, takes a look at these issues. The report is titled "Beyond Disruption: How Tech Shapes Labor Across Domestic Work and Ridehailing." It's a pleasure to have Julia joining us here in-studio. Nice to meet you.

Julia Ticona: Thank you so much, Dan. I appreciate it.

Knowledge@Wharton: Thank you. Let's dig into the research and give us a backstory about how you accomplished this, and what you were looking for.

Julia Ticona: Absolutely. My co-authors and I, Alexandra Mateescu and Alex Rosenblat, who are both colleagues of mine at the Data & Society Research Institute, which is where I was a post-doc as I did this research. We noticed in 2016 that women were being completely left out of this media coverage and business knowledge and understanding about what was happening in the gig economy and in the future-of-work

conversations in general, which was really disturbing to us – especially because at the time the Pew Research Centers put out a report in 2016 that showed that 55% of the people who actually find paid work that they do through these online labor platforms were women.

And I'm a sociologist by training, and when you see 55% of women doing something at the same rate as men, right? – so basically men and women doing something at roughly equal rates – it's pretty remarkable in the world of work. Because oftentimes with men and women, our labor is very "gender-segregated," as they say.

That prompted us to say, "We need to be paying more attention to what women are doing with these apps on these platforms." Along with my two co-authors, we interviewed ridehailing drivers. These are folks who are working for Uber and Lyft. And we compared those folks to people who were finding work through domestic work apps. These are work apps like TaskRabbit and Handy, and also care work apps like Care.com, UrbanSitter, and Sittercity.

Knowledge@Wharton: Why do you think, then, there was this dynamic in place where there was more attention given to the men in this workplace or this sector than there was to the women?

Julia Ticona: I think it's Uber, honestly. Uber has, as a company, pursued a kind of public relations strategy that is like disaster governance, right? They're just governing by scandal, or they're using all of these scandals around their platforms to give themselves more public relations, good or bad. I think the company has changed tactics now, thankfully. But at the time that we were starting this report, and also if you think about around 2014 – which is where

we saw this peak Uber coverage – you know, you couldn't open The Wall Street Journal, The New York Times, any kind of business publication without seeing something about the latest scandal or something that Uber was doing.

And at that same time, the platforms where these women are finding work – I'm not saying "employ," because they are not employers – where they're workers, were not pursuing that kind of public relations strategy in large part because the kind of work that women do through these apps requires a degree of trust and this kind of solidarity and care with the clients that they were meeting that just doesn't jive with that kind of a public relations strategy, right?

And so I really think that they were being left out of these major publications because of the way that these companies are covered in the media.

Knowledge@Wharton: What was the impact, then, from this type of an approach playing out in the gig economy, especially with some of these other areas of it? When we think "gig economy," we first obviously think about ridesharing. But with the care positions, what kind of impact were you seeing?

Julia Ticona: In terms of what was happening with the platforms on the –

Knowledge@Wharton: Correct. And the impact on the worker.

Julia Ticona: What we've seen overall is really that these platforms have created a multiplying effect of the ways that domestic workers look for work nowadays. And so domestic workers have always been in this kind of informal and gray part of the labor market, right? A lot of domestic work happens under the table. A lot of these folks are undocumented immigrants, right? That's absolutely on purpose that that is happening that way. But these workers have always found work. It has always been necessary for them to look for work through five or six different means all at the same time.

They use agencies. They look for work online through things like Craigslist, on Facebook. They use word-of-mouth networking and they find each other jobs through friend networks and other people that they've worked with at past jobs.

And what we've seen with the entrance of platforms into this economy is that this has added a whole other layer, a whole other consideration that these workers have to take into account when they're doing their job search. It's basically adding more unpaid labor.

Knowledge@Wharton: But in many cases, these are apps and sites that are determining a lot of this information through algorithms. How does the use of the algorithm have an impact on this, as well?

Julia Ticona: Yes, that's a great question. What we found is the way that algorithms function in this environment is a little bit different from the way that they function in ridehailing and in some of these other more familiar platform environments. What we found was that these care work companies, much like Uber and Lyft, claim that they're democratizing work, right? They're bringing down the barriers, they're making it

so that anybody and everybody who wants to care for a kid or an elderly person can come in – as long as they pass a kind of background check – to do that.

And where we come from as a critical social science perspective on this is saying instead of taking that company line at face value, what we wanted to look at is when you democratize something, you're not necessarily just removing, destroying barriers. But those barriers move around. And so what we wanted to understand is, okay – what are the new barriers? How are those barriers being shifted, and who are they maybe disproportionately affecting?

And what we found is that algorithms function differently on these care websites, because they don't monitor and track the execution of work tasks. So as an Uber driver – the algorithm is tracking, we believe, the speed of your car, how you brake, all these different things. With care, they're not trying to track how quickly you bathe a child or how effectively you deliver that snack to them – yet, at least – they're not trying to track those things. But what they are doing is they're trying to match clients and workers together in a very effective way. And so what we found the effect of this is that there is an immense pressure on workers to brand themselves, to present themselves in a way that makes them seem trustworthy and employable and recognizable to these algorithms.

So whether or not you're actually trustworthy and employable, which is a whole separate question, the algorithms prioritize different things in making workers present themselves in particular ways.

Knowledge@Wharton: So then are we talking about a necessary change that needs to occur within either the thought process with these companies or the actual algorithm, so that you don't have to perceive yourself as being trustworthy? You just are trustworthy on your persona.

Julia Ticona: Yes, that's a good question. I think there are a bunch of changes that companies could probably make to lessen the pressures of some of these environments that they've created for workers. But I see my role as a researcher as really bringing these experiences to the surface, and really saying that when we ignore women's experiences in this part of the labor market, we completely miss the importance of these experiences and kind of leave it to the companies, leave it to the policy researchers to really use their expertise and make those decisions about how those changes should be made.

Knowledge@Wharton: But are the companies aware of them? You mentioned Care.com being one of them. Is Care.com aware of some of these issues and understanding that they recognize this and that maybe they need to make change or they need to tweak their process moving forward?

Julia Ticona: Yes, I believe so. I tend to come at this research from a place of good faith, where I really believe that these companies are trying to do the right thing. I think they have bottom lines. I think they need to make money for their shareholders. Care.com is a publicly traded company. It has been

a publicly traded company for many, many years, as opposed to a company like Uber that just went public a couple of months ago. And I think they're always trying to balance those priorities, as any kind of business does.

I think because they haven't had the kind of public scrutiny that some of these other companies have had, that maybe they've been able to fly under the radar a little bit more. And I do see a part of my role as to kind of bring that out and to say, "Hey, we should be looking at these technologies that are affecting a huge number of workers." Care.com has 11.5 million workers who are registered to work on their platform in the United States alone. And this is an international platform, right? That is a huge amount of Americans or people who are living in this country who are affected by these technologies. And so I think it's time to publicly recognize these inequalities.

Knowledge@Wharton: But then I would imagine there also has to be a concern around data privacy with this, as well. Because if you have 11.5 million people registered, and probably not all are active at one particular time, you're still talking about a lot of personal data that is in the Care.com system and obviously in the internet that will benefit people that would want to have a caregiver, but also is a potential touch point for a hacker, for somebody looking to steal information.

Julia Ticona: Yes, absolutely. You're right on target. There are two ways that this is really important. The first is that one of the things that workers really told us as being concerning about the platform is their sense that what – to put it colloquially – "What happens on Care.com doesn't stay on Care.com." Right? It just kind of migrates all over the internet, because these are networked media, so they're not these kind of walled gardens where things just kind of stay within one site.

So as an example, on Care.com when you create a profile, the default is that that profile is public. And what that means is that all of this personal information – and workers are encouraged to post profile pictures, biographical descriptions about themselves and their work history, their education history, their weekly schedule availability. They are encouraged to connect their social media accounts – any of these ways that you can make yourself individually visible are publicly available, visible on the internet.

And so you or I or anybody without a Care.com account can Google "nanny" and a person's name. Or "elder care worker" and maybe a city, and all of that information comes up through Google. So data privacy in this context is extremely important, especially for this workforce, who we know are overwhelmingly women of color and has a high proportion of undocumented folks in that industry.

Knowledge@Wharton: You have also talked about the fact that there's an element of this where these workers are also to a degree treated like consumers in this process, as well, which I think when you look at that specifically, you want to have a differentiation between worker and consumer, but maybe that wall is not there.

Julia Ticona: Yes, so this is a line where Care.com and these other care platforms are actually similar to the ridehailing platforms. And my colleague Alex Rosenblat has written about this in her book called Uberland, which if you're interested in this, you should definitely check out, where there's this kind of blurring of the boundaries with language. This is where language and culture become really important, where these companies will refer to all of their users – so meaning people who are requesting rides, people who are giving the rides in their cars – all as "users" of their platform.

And these care websites actually do exactly the same thing. And where we've seen this is in their handling of scams. So something that a lot of people might not know if they haven't used these websites is that scams are really rampant on these websites. So care workers are being constantly bombarded with fake jobs, where they're being offered exorbitant amounts of money to care for children that don't really exist. And they're essentially fake check scams, so they're not very sophisticated scams. But what they do is they basically prey on newcomers, and those nannies are then solicited to send a check to an address, and then they lose that money.

And so what we see when the care platforms are trying to protect workers against this, are trying to inform them about these scams, is that they tell workers that if they suspect a scam is happening, that they should obviously tell the platform. They can flag an account. But they should also report these people to the FTC – the Federal Trade Commission – which is the federal agency that regulates consumer issues, and not to the Bureau of Labor or something like that. And so we can see this kind of slippage where workers are being regulated as consumers, or are being kind of encouraged to pursue those.

Knowledge@Wharton: And I think that's part of a bigger question which we've talked a lot about on other topics in this show of whether or not there is a true understanding by the U.S. government, by agencies within the U.S. government of the potential pitfalls that are here, this being another instance. We've talked about what's happened with Facebook and the Equifax scandal, as well. But now you're talking about the potential of another entity that could very well be in this same type of realm because of the data, because of whatever the level for data security that might be occurring with these companies.

Julia Ticona: Yes, and actually the news about the FTC and the Facebook fine that was just recently levied is actually very hopeful to me. I think, again, I'm not on the policy side of things. I like to stay on the research side. I leave it to the policy folks to decide what the best strategy is as far as where the political momentum is and what they're able to do politically to regulate these companies. But I think there's a case to be made that when you look at different types of platforms – social media platforms, labor platforms – there are a lot of similarities there in terms of the kind of power and the kind of data that they have access to that might require similar kinds of regulation.

Knowledge@Wharton: I mentioned the impact on the people who are working in these areas, but what about the impact on the companies themselves?

Julia Ticona: The impact of…?

Knowledge@Wharton: Well, they're obviously potentially looking at Facebook, looking at a huge fine, looking at a massive loss. But then from the bottom line, if it's a publicly traded company, they're looking at a negative financial impact on their bottom line, as well.

Julia Ticona: Yes, absolutely. I would love to learn more about that. I would love to get the good folks at Wharton to explain how those business dynamics work to me.

Knowledge@Wharton: How do you think, then, the inequality needs to be better addressed?

Julia Ticona: Yeah, I think there needs to be a much broader conversation, a much broader acknowledgement of the importance of data protection as worker protection. And that when we're talking about workers' rights, when we're talking about things like equal pay, non-discrimination against different kinds of minority groups – all these kinds of worker protection – even when you think about things like basic benefits, like access to insurance and other kinds of workplace protection. I think when we think about workplace protection for the 21st century, data protection has to be a part of that conversation. And I think in that way, studying what might seem as a kind of esoteric or kind of weird case – these domestic workers on labor platforms might not seem like the most relevant group of workers to be studying – but these folks are, I believe, for lack of a better phrase, "canaries in the coal mine" for pressures, for things that are going to be affecting all of us as American workers in the years to come.

And so I think it's in our own interests, not just in the interests of this particular group of workers, that we pay attention to the kinds of inequalities that they're facing, because they're soon going to be facing all of us.

Knowledge@Wharton: Are you optimistic that we can move in that direction? There are, obviously, a lot of concerns out there that we get to a certain point, and then companies are not willing to go beyond that point, to take that step 3, 4, and 5 in the process.

Julia Ticona: Yes, that's a great question. I think about that professionally a lot. I don't think I would be doing the kind of research that I do if I wasn't an optimist about this stuff, because otherwise it would just be too depressing to continue doing this research. And I plan on it. You know, I tend to be a very optimistic person, and I think that when advocates – when policy-makers, when politicians – have sufficient pressure on them and are also able to figure out ways to make the financial case to companies and to really say, "Hey, look – if you at all," meaning the companies, "want to ensure that you have a diverse workforce, that you have a platform that's inclusive, that you really are ensuring economic opportunity for all, which is a part of the platform promise to workers in the United States, you've got to address these issues." And that eventually when you're not, there's going to be consumer pressure.

Knowledge@Wharton: But I would think there would also be hope that you would be able to have that type of a con-

versation. And obviously the government piece to it, I think, is important. But if you can have that conversation between the workers and the companies themselves, and if those two parts have a recognition of it, that maybe they can work together, it may be company by company by company – but at least you're moving in the right direction.

Julia Ticona: Yes. I hope that through reports like this that perhaps the workers that we've interviewed and some of the worker advocates that we've been working with through the process – that they are able to gather that strength, gather that confidence that their stories are not unique – that these are not individual problems, that these are shared social issues that they are systematically seeing within their communities.

Knowledge@Wharton: Is there a next step in the process from a researcher's perspective? Is there a next natural step for you playing off of this research to take this even further?

Julia Ticona: Yes, sure. I am really interested in getting parents' perspectives, or the folks who are looking for care through these platforms. And that's going to be the next population that I am really interested to understand how they actually see these interfaces, the ways that they're actually interpreting these messages from the company, instead of again, taking those messages at face value.

Knowledge@Wharton: Great meeting you. Thank you for coming in.

Julia Ticona: You too. Thank you so much.

Knowledge@Wharton: Nice to meet you. Julia Ticona, who is with the Annenberg School of Communication, an Assistant Professor there, here at the University of Pennsylvania.

Niels van Doorn

On the conditions of Possibility for Worker Organizing in platform-based Gig Economies

First published in "Notes From Below" a socialist journal that uses class composition analysis to ground revolutionary politics in the perspective of the working class. June 2019

One key challenge shared by labor organizers and researchers of platform-based gig work is recruitment. How do you study and/or organize workers who mostly operate in isolation, who are not always visible, and who frequently lack a strong attachment to a collectively crafted professional identity, let alone a social class? These are certainly not the easiest people to find and to mobilize. However, many gig workers are already one step ahead and have taken it upon themselves to organize and let their voice be heard.

Over the past few years, Uber drivers in different cities across the globe have protested against unfair working conditions and rate cuts. Similarly, food delivery workers in Europe have attracted significant public exposure for taking delivery platforms like Deliveroo and Foodora to task for their malpractices. Workers have been able to leverage existing communication infrastructure, such as a company-initiated Telegram chat group (in the case of Deliveroo in the Netherlands), to begin organizing. This combines with the generative possibilities of meeting in public spaces during work time, through which these couriers have forged grassroots and improvised modes of resistance. These did not only capture the media's attention, but also spurred unions and other labor organizations (like the FNV in the Netherlands and IWGB in the UK) to take a serious interest in a category of workers many previously considered to be by and large 'unorganizable'.

In September 2017, I was looking for gig workers who were willing to participate in the Reshaping Work conference. It proved to be relatively easy to recruit Deliveroo couriers who had then recently joined the Riders Union. However, it was much more difficult to find cleaners working through Helpling, a platform for domestic cleaning and handyman services that operates in nine countries worldwide.

In contrast to the visible militancy of the predominantly young and male delivery workers, Helpling cleaners were conspicuously absent in spaces of labor organizing as well as in public debates about on-demand gig work (on this last absence, see this piece by Julia Ticona and Alexandra Mateescu). While I was doing research in New York City, I found that food delivery workers operating for companies like Postmates, Caviar, and Uber Eats were much less willing and able to organize against their increasingly tough working conditions. This left me with a question that I would like to reflect on here: what are the possibilities for worker organizing in platform-based gig economies?

How should we study gig work?

Allow me to make a point that may seem obvious but which is nonetheless frequently discarded in the bulk of hot takes on the future of work: there is no such thing as "the gig economy". We need a more differentiated approach to studying platform-based gig work that focuses on particular economies (plural), markets, and/or industries which platforms have sought to "disrupt", while taking into account a number of factors that co-determine how/to what extent gig workers in each industry will be able and willing to organize. I believe the following factors need to be considered by researchers, labor organizers and policymakers alike, as they seek to grasp and improve the conditions of gig work in its multiple forms.

What is the nature of the work performed?

For example, whereas food delivery work takes place in public spaces and is highly visible, domestic cleaning takes place in private homes, away from the public eye. The barrier to public protest will therefore be lower for couriers, who are "at home" in the streets (where they are already visible to each other and the public at large), compared to cleaners who operate in a more isolated workplace. Moreover, while food delivery workers usually have very little engagement with customers or restaurants, domestic cleaners often develop a more extensive relationship with their repeat clients, whose homes form intimate workplaces where their work is monitored and evaluated by the client more than by an algorithm.

In other words, food delivery work produces a much more fungible, or interchangeable, service compared to domestic cleaning. This is likely to affect the the extent to which either type of gig worker is willing and able to protest her/his conditions and organize for change: if you decide to strike, who will be negatively affected by this action? As a cleaner, you may be hesitant to let down a client with whom you have built up a professional and personal relationship, and whose household depends on you. The client may also decide to cancel all future cleanings as a response to your absence, which means that you lose a source of income and will have to find another regular client (if the platform has not deactivated you).

What is the social situation and legal status of the worker?

When assessing the extent to which gig workers are willing and able to organize or protest their conditions, it is also important to expand our view beyond the immediate sphere work to include a worker's social/domestic situation as well as their legal status. To focus on the latter, undocumented workers will rightfully be much more reluctant to join protests or organize against their employer, for fear of retaliation.

In New York City, food delivery has traditionally been a highly informal and unregulated sector of the city's economy where the work is done by (mostly Chinese and Latin American) immigrant men, many of them undocumented and laboring under hyper-precarious conditions. As food delivery platforms entered this space, I found that undocumented workers in NYC have recently also started to experiment with this new form of gig work, even though they are technically not allowed on the platform without a social security number and a background check.

While most undocumented couriers continue to work directly for restaurants, the distinction between traditionally organized and platform-orchestrated food delivery is becoming more blurred, generating a need to think creatively about how undocumented workers can be safely and responsibly included in struggles for better platform-based work. Worker centers and community-based organizations such as Make the Road will play a vital role moving forward.

What is the worker's relationship to/investment in the work?

Gig work is often presented as a good way to earn some supplemental income, but I have met many people who have turned – or are trying to turn – ride-hailing, (food) delivery, cleaning and other kinds of platform-based work into a "full time" occupation. The measure of time and capital invested in gig work, and thus the level of dependency on this work as a source of income, will greatly affect the extent to which a gig worker is prepared to fight for better labor conditions.

In New York City, couriers whose livelihood depends on food delivery expressed relatively more interest in labor organizing than those who had a more casual relationship to this work. In contrast, the "full time" cleaners who offer their services through Handy and/or TaskRabbit were generally much less interested in labor organizing. Instead of understanding themselves as belonging to a class of workers, they were much more likely to adopt an entrepreneurial perspective in which they embrace their independent contractor status, sometimes aspiring to start their own cleaning company. Handy, for them, is primarily a lead generator serving them clients whose business may potentially be taken off the platform. This illustrates how professional self-identification shapes one's relation to the work at hand, which in turn affects one's inclination to collectivize.

How fragmented is the labor relationship and daily work experience?

To be sure, when the food delivery workers I interviewed in NYC told me they worked "full time" – meaning at least 40 hours but often a lot more – this did not mean that they worked with one company, using only a single app. They usually operated through multiple platforms, with three or four apps on their phone that alternated between on a daily basis: when one app was "slow", they tried other ones in an effort to reach their daily income targets and thereby cobble together a living. There were simply too many couriers out there to trust any single company to give them enough orders and this problem was getting worse.

This situation is not just worrisome in itself, it also impacts couriers' ability to protest their deteriorating wages. Because their daily work experience is so fragmented, it complicates the question of who, exactly, is the "employer" that should be protested/bargained with. This, in turn, highlights the importance of industry-level actions and solutions, even as this industry is still in its relative infancy and shared norms, standards, and expectations concerning delivery worker's rights and protections are scarce at this point.

How is the labor managed?

Each platform company governs its workforce in a particular – app-based, data-intensive – way, gradually developing its own take on what has been termed "algorithmic management". Decisions made during this process depend to a large extent on the previously discussed nature of the work that has to be managed. Moreover, these decisions materialize as various control and evaluation protocols aimed at optimizing the labor process with respect to quality and productivity.

G

Here I'd like to briefly highlight one such optimization technique, namely the use of incentives that segment and gamify the work of food delivery. In doing so, I aim to illustrate how this technique exacerbates a central problem facing labor organizers in the platform-mediated gig economy: the difficulty of determining and fighting/bargaining for a "fair wage". Incentive schemes, like Uber's Promotions or Caviar's Milestones, offers "delivery partners" windows of opportunity during which they can work towards particular goals that, when reached, unlock a temporary income guarantee or a bonus payment. These incentives are not always available to all partners and, with the performance and behavioral data that companies generate, can potentially be structured differently depending on who receives them. In this way, they create a segmented labor market where – depending on criteria that remain unknown to delivery partners – one group of couriers can take home substantially higher wages than another group, even though they are basically doing the same work (albeit in a different area and within a different time frame).

This consequently generates an unequal and competitive system of winners and losers where some couriers are celebrated as kings of "the hustle" while others either aspire to be like them or become disgruntled when they fail to meet "the rules of the game". Moreover, incentive schemes contribute to a more general trend in the platform economy, namely the proliferation of variable, personalized, and contingent wages. One central task for labor organizers and policymakers will thus be to remain committed to the idea of a fair wage as a fundamental right, while also rethinking what this looks like in the context of platform-mediated labor and establishing new ways to achieve its enforcement.

The long shadow cast over platform-mediated gig work

Finally, the socio-historical position of particular industries and their workforces should also be taken into account as an overarching factor, as it compounds the previously discussed factors and affects the level of public interest in, and support for, labor struggles. One important reason for the success of many food delivery and cleaning platforms is precisely that they entered – and thereby selectively formalized – traditionally informal and poorly regulated sectors. We should remember that these sectors have always relied on the precarious labor of marginalized, increasingly immigrant men and women who service households by delivering their food or cleaning their homes. In other words, long before the market entry of these platforms, food delivery and domestic cleaning were already devalued and as a result these deeply classed, gendered, and racialized forms of "menial" labor were excluded from many protections and rights bestowed on other, more respectable (i.e. white working and middle class) kinds of work. One of the main questions I therefore aim to answer in my own research is to what extent –and how – platform companies operating in these low-wage service industries perpetuate, intensify, and/or counter these existing inequalities, while perhaps also creating new forms of inequality.

I believe that the technical capacities of digital platforms could potentially grant them a positive and empowering role in the lives of workers, many of whom have never experienced the
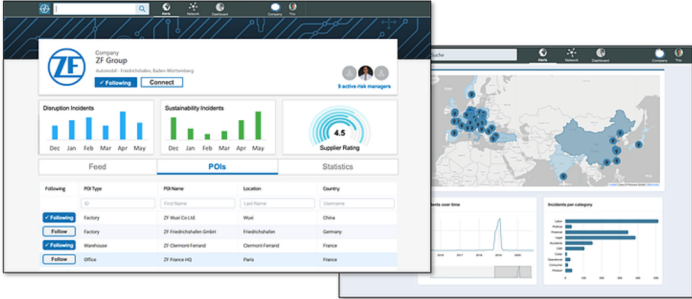
privilege of secure employment with a firm that pays a living wage and provides the benefits and protections many of us rightfully feel entitled to. Yet, I also think it is clear that today's venture-backed platform companies are not making good on this potential, if not actually operating to diminish it. The urgent question then becomes: who will step up to organize and hold them accountable?
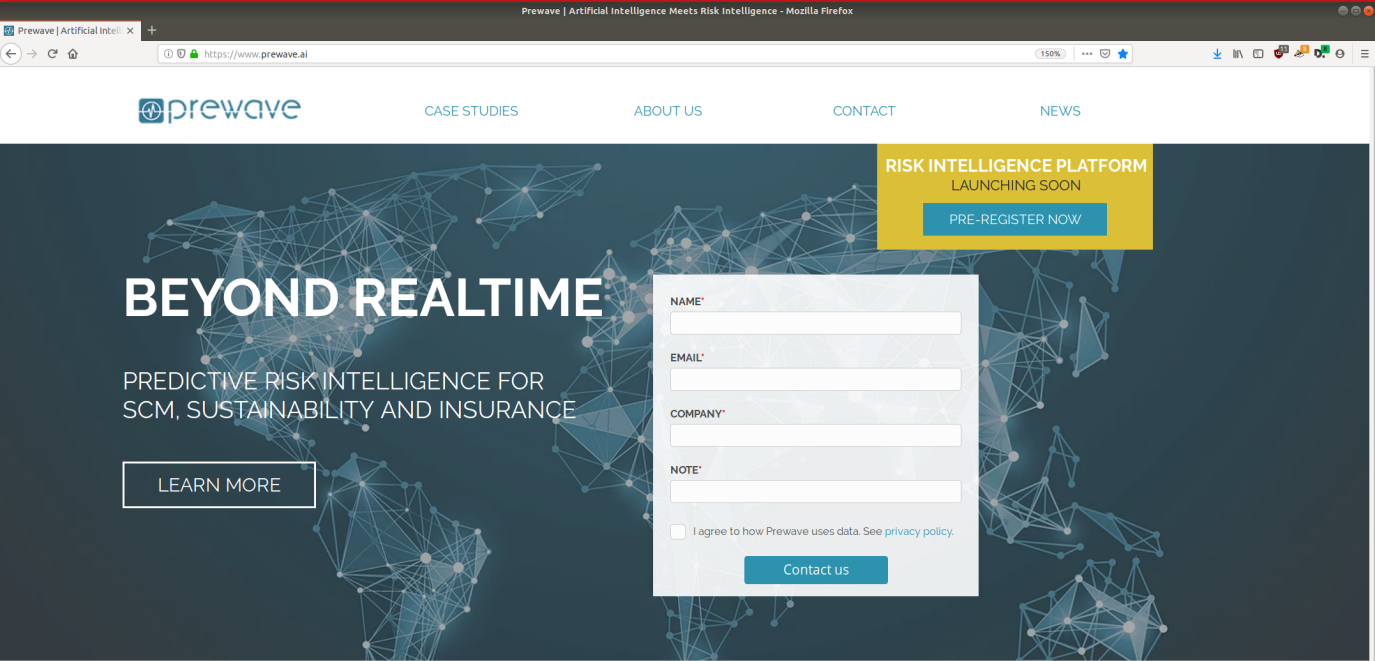
G

Strike Now!!
Wed, 11. Sep – Sun, 15. Sep, 2019
panke.gallery

A project by **Aram Bartholl**
Funded by **Stiftung Kunstfonds**

STIFTUNG**KUNSTFONDS**

42

Imprint

Techsploitation is Toxic action - An affinity group of San Francisco housing justice activists in collaboration with artist Leslie Dreyer and in solidarity with those fighting Google in Berlin and San Jose blocked tech buses with piles of tech scooters in SF's Mission District on May 31, 2018. Banners called on neighbors to "Strike Back" against „Techsploitiation - from the sweatshop to the gig economy to the e-waste dump" and to "Sweep Tech Not Tents", highlighting the city's classism and hypocrisy in allowing tech companies to throw their commodities all over the sidewalks, while trashing the vital belongings of homeless residents.

Photo by Jin Zhu

Cllr Lawrence Hemmings
@Ireland_Greener

Bicycle locked. Deliveroo bag ready for the day's work. The new working homeless.

Government is failing to deliver public and affordable housing and failing to control rents.

#homelessindublin

Tweet übersetzen

10:28 vorm. · 28. Aug. 2019 · Twitter for Android

927 Retweets   **2,2 Tsd.** „Gefällt mir"-Angaben