Upwork at work: Labor as a service

A transformation of labor in the platform society



Figure 1: An illustration of 'free'-lancing (DesignDay, 2016)

S.E. (Stephan) Dijkstra 4153030

Supervisors:

Prof. Dr. J.F.F. (Joost) Raessens Dr. M.T. (Mirko) Schäfer

Thesis

Word Count: 11.003

MA New Media & Digital Culture
Utrecht University
April 7, 2017



Summary

Whereas platforms such as Uber and Airbnb are often in the spotlights, similar companies transform other segments of the so-called platform society. Amidst competing platforms, accusations and legal issues as result of platform capitalism, scholars and companies look for new propositions to deal with revolutionary technology, the transformation of conventional industries and a need for cooperativism. When it comes to labor, this paper argues how a platform such as Upwork is a transforming actor for how labor should be understood nowadays. By reusing theories of Karl Marx in combination with recent works of José van Dijck, Henry Jenkins and Trebor Scholz, a theoretical foundation is built to facilitate a starting point for a new kind of platform analysis. Based on two existing approaches, the Upwork platform is analyzed from detailed technocultural and socioeconomic perspectives on the one hand and overarching platform mechanisms on the other. The situation of an exponential growing online marketplace, where companies come to offer jobs to freelancers and where freelancers offer their experience and skills, a new type of working activity seems to stabilize: labor as a service.

Keywords: Capitalism, Cooperativism, Labor, Mechanisms, Platform Analysis, Upwork

Table of Contents

| IN | ITRODU | JCTION | 4 |
|----|--------|---|----|
| 1. | LAB | OR IN TRANSFORMATION | 7 |
| | 1.1. | LABOR AND TECHNOLOGY | 7 |
| | 1.2. | A SOCIETY OF PLATFORMS | 9 |
| | 1.3. | PLATFORM CAPITALISM VERSUS PLATFORM COOPERATIVISM | 11 |
| 2. | ME | THOD FOR ANALYSING UPWORK | 14 |
| | 2.1. | PLATFORM ANALYSIS | 14 |
| | 2.1.1. | ASPECTS OF PLATFORMS AS MICROSYSTEMS | 15 |
| | 2.1.2. | PLATFORM MECHANISMS | 16 |
| | 2.2. | ANALYSIS SET-UP | 17 |
| 3. | ANA | ALYSIS AND INTERPRETATION OF UPWORK | 18 |
| | 3.1. | TECHNOCULTURAL APPROACH TO UPWORK | 18 |
| | 3.2. | SOCIO-ECONOMIC APPROACH TO UPWORK | 20 |
| | 3.3. | MECHANISMS OF UPWORK | 22 |
| C | ONCLU | SION | 25 |
| ВІ | BLIOG | RAPHY | 27 |
| Α | PPEND | X - COMBINING METHODS | 30 |

Introduction

Thinking of platforms today, Facebook, Uber and Airbnb are probably the most obvious companies to point to. Questions rise on the kind of businesses that these firms run currently since they are not producing something by themselves (Morozov 2015). Is Uber, for example, just a technology company? Is Airbnb an accommodation provider itself? In the eyes of conventional companies and employees, such as regular taxidrivers and travel agencies, they are not. In several cities and countries in Europe and the United States, both Uber and Airbnb were confronted with legal issues regarding rental regulations in the case of Airbnb and transportation principles in the case of Uber (Coldwell 2014; Schipper 2016). Such enterprises rather consider themselves as platforms for simply bringing supply and demand together. Whether they are considered as technology companies or not, some countries in which these platforms operate are not unwilling to new kinds of business, while other governments are sceptic (Schipper 2016). In relation to such online services, the term 'platform' has only emerged in recent years as an increasingly familiar term (Gillespie 2010, 2). Besides the transportation and hotel sector, also platforms for education (Coursera), fitness (Fitbit), journalism (Blendle) and neighborhood surveillance (Nextdoor) are upcoming. Such platforms fuel a transformation of conventional settings as part of a 'Platform Society' (Van Dijck et al. 2016, 11). This society is constructed along the infrastructures and social networks which are part of Web 2.0.

The idea of Web 2.0 as successor of the earlier invention of the Internet, was coined by Tim O'Reilly in 2001. He describes a transformation of societies and everyday life on an enormous scale with new opportunities for collective interactivity and participatory labor (O'Reilly 2001, 36-7). Such a different kind of society-being was introduced by others in terms of the gig or sharing economy, an on-demand society, an attention economy or simply as the next industrial revolution (Benkler 2006; Shirky 2008; Srnicek 2016). Users could be identified now as relatively new active participants in the field of technology, calling them 'prod-users' or workers in the participatory culture (Bruns 2007; Jenkins 2006). Within this participatory attitude as part of the platform society, companies tend to concentrate on bringing existing supplies and demands together in code-built spaces online. Scholars have conducted critical studies onto social media and their algorithms which often remain inscrutable 'black boxes' (Bucher 2012; Van Dijck 2013; Paßmann & Boersma 2016). Since technology has gained such influence in societies and the ways in which individuals work, behave and relate to each other, continuous research to shareholders of the platform society is important to commoners as well.

Besides big labels such as Uber and Airbnb, who operate on the foreground of the platform society – probably because their markets cross the business-private borders – some platforms focus on all kinds of online tasks which can be done for money, Amazon Mechanical Turk for example. Also, there is the platform Upwork that specifically focuses on freelancers and freelance-jobs. While LinkedIn is merely a social media variant of Facebook for business connections and relations management, Upwork is concerned with bringing employer and employee together on a marketplace

for work. In the platform society, a tension is noticed between labor and precarity that is due to a flexibilization of labor induced by platforms (Van Dijck et al. 2016, 72). Difficulties remain on how to deal with such changes and its effects for employment, the organization of labor, expectations and the understanding of platform mechanisms by civilians, in terms of appropriate policies and regulations. Moreover, research regarding labor is needed since labor has a history of continuous adaptation and reinvention in response to developments in time. Nowadays, this means adaptation of skills and experience on the one hand and flexibility and temporal work sprints on the other. Also, the understanding and relations of labor should be considered whereas every click online might be perceived as an act of work (logging, buying, playing etc.). The platform society has been a hot topic in recent times, but in the academic field little attention is paid yet to platforms for employment purposes and the transformation of labor that is fueled and designed by platforms.

This paper is concerned with building a foundation for the analysis of labor in the platform society. Its focus is both on labor and the future of work within that society, which is constituted mainly by media giants (known as GAFA¹) and platforms that operate across their borders such as Uber, Airbnb and Upwork. The latter one will be taken for investigation into labor transformations for freelance-activities. As a platform, Upwork (formerly ODesk) is mainly operating in the United States but active on a worldwide scale as well. It is considered one of the major connecting platforms that focuses on the direct connection between job provider and job seeker – probably in a similar manner as Uber and Airbnb do between customer and provider. The fascinating point is in the difference that the services of Uber and Airbnb are primarily about one-time or very temporal connections and communication while Upwork's service is about connecting employer and employee, which in a conventional sense should be a longer-term connection than a taxi ride. Nevertheless, the manners in which labor is organized and offered by Upwork seem to change in the direction of the kinds of services that Airbnb and Uber provide. The core of this research paper is led by the following main question: How does Upwork transform labor in the platform society? This question will be answered in three steps. First, a short history until today regarding the organization of labor is considered to provide context to the current situation. Second, the development of labor on platforms is investigated and third, a practical analysis of Upwork is conducted to reveal insights about its transforming power and the practices of a marketplace for labor.

The theoretical framework draws upon famous works of Karl Marx and the Frankfurter Schule regarding labor and culture criticism. Both were influential in the past and have gained attention again regarding the ongoing social shift under the influence of platforms and because of their critique on the role of technology in societies. The recent work of Van Dijck, Poell and De Waal (2016) facilitated an occasion to consider the platform society and build from that concept to the field of labor, which is closely tied to the topic of societies in transformation. Henry Jenkins, Sam Ford and Joshua Green

-

¹ Acronym for the big four media-tech conglomerates Google (Alphabet), Amazon, Facebook and Apple. Van Dijck et al. (2016) suggest that Microsoft should be considered here too (21).

(2013) provide context to the preceding situation of Web 2.0 from which the platform society arises. Nick Srnicek (2016), Trebor Scholz (2016) and Douglas Rushkoff (2016) reflect critical on the current situation by pointing to everyone as potential activists for change. It is necessary to describe how labor and technology interrelate and how both have developed over the years to conduct a platform analysis that combines a method for disassembling platforms (Van Dijck 2013) and platform mechanisms (Van Dijck et al. 2016). Upwork is considered as an ultimate example of the platform ecosystem for reshaping traditional and current perspectives on labor to 'labor as a service'. The method of platform analysis that is used, provides three approaches: a technocultural, socioeconomic and mechanisms perspective. In this manner, the focus of this paper is not concerning the discourse surrounding the transformation of labor nor the discourse of the platform society. This research rather concentrates on the transforming actor that Upwork is for the understanding of labor and labor relations today. Right after the following theoretical framework in chapter 1, the platform analysis is set up in chapter 2 and described in chapter 3.

1. Labor in Transformation

Throughout the ages, labor has manifested itself in many forms. In prehistoric ages, agrarian work was the basis of everyday life and a necessity for everyone. During the middle ages, craftsmen interchanged their skills and products until the assembly lines came after the industrial revolution and the return of more individualized labor came back over the past decennia. This chapter is about the theoretical context of the transformation of labor throughout history until today and beyond. Regarding this study, a literature review will provide context in threefold by starting with stabilizing an understanding of labor in general (1.1). Second, the concept of the Platform Society that is proposed by José van Dijck, Thomas Poell and Martijn de Waal, is used to give context to labor in the current situation (1.2). To investigate the platform Upwork as stakeholder in the platform society specifically, the third theoretical part comprehends studies to labor and the future of work in a context of so-called 'platform capitalism' (1.3). After the conceptual approach to the transforming shapes of labor in the platform society, a method (chapter 2) for platform analysis is set up and conducted by intensively studying the platform Upwork (in chapter 3).

1.1. Labor and technology

The Oxford dictionary points "especially [to] physical work" when searching for a definition of labor (or 'labour'²). Both as noun and as verb, the term 'labor' seems to implicate unskilled hard work. Traditionally, unskilled work was mainly associated with physical activity on agrarian lands, in the woods or by all means outdoors, cultivating or hunting for food to survive in life. Nowadays and since ages, there is no need for everyone to do the same work for living and the position of agrarian workers is very much acknowledged, although in the Western world. Speaking of labor in general brings associations to the front regarding the jobs individuals have, the scale and spread of production and social statuses are closely tied. The continuous shift that is concerned with labor adaptations is related to critical ideas about the construction of society from theorists such as Karl Marx. The German philosopher (born in 1818), gained his fame with ideas about revolutionizing societies from class structures and capitalistic governance to systems of socialism and communal ownership (Hughes-Warrington 2008, 245). Recent years of crisis have caused a revival of aversion to global capitalism and along with this development, Marxist ideas are resurrecting according to Jeffries (2012). Although capitalistic influences have brought wealth to the West, the free market systems caused worldwide crises from which the latest was in 2008. It proved how capitalism could cause instability to complete societies, explicitly to the ones that were considered 'world-leading'. The search for an alternative to "economically catastrophic times [triggers] the revival in interest in Marx and Marxist thought" (Jeffries 2012, n.p.).

² In this paper, the spelling of 'labor' is used because of its usage in current debates and to avoid political connotations with 'The Labour Party' in the United Kingdom.

The contemporary period of capitalism and the contrast between the poor and the rich, is the third era in a row of five social formations throughout European human history described by Marx and Friedrich Engels in their collection of manuscripts called *The German Ideology* (1970, first publication in 1932, 5-6). After a first stage of primitive communism and a society of slaves and feudalism as second, the worldwide society is now built on capitalistic systems for profit in which employers gain more than their employees who execute the actual tasks. Through phases of socialism, activism and revolution during an expected fourth stage, the world will eventually enter a fifth stage of communism. In contrast to the fact that communism is based on concepts of Marxism, Marx himself was not about constructing military government or dictatorship even though communism is often associated with the political circumstances of the Soviet Union for instance. Marx rather pledged for communal ownership of the production factors in the economic society. His critique pays attention to the relation between employer ('the owner of money') and the employee ('owner of labor-power'). According to Marx, this relation has no natural basis but is a product from previous economic revolutions and former expressions of social production (Marx 1887, 120).

In the readings of Marx on capital (1887), he describes how all products should be considered as commodities. Commodities are non-human items that represent a certain value because of its potential to satisfy human needs. Here, Marx distinguishes two kinds of value depending on usefulness on the one hand and the exchangeability between commodities on the other (e.g. What is this product worth in relation to another commodity?) (Marx 27). Regarding labor, a similar twofold analysis of the workers who are paid by employers is described by him. Employees manage their labor power as they are able to sell it to employers or not (idem 33). On the other hand, this employeremployee relationship demands a certain attitude of the labor-owner when selling his labor-power for a specific period only. Otherwise, Marx argues, the worker would become a slave since the capitalist buys off the power of the worker and thereby the ownership of the commodity of labor, converting the worker into a commodity himself (idem 119).

In capitalistic senses, the strive for continuous surplus value by capital owners (employers) leads into a circle of technological innovation and intensive exploitation of labor to reduce profit losses. In this way, the ownership of labor power becomes compromised while the workers might become pushed within the same contractual conditions and without profiting of the surplus value as the employer does. Writing with a focus on the industrial revolution, Marx describes how technology could threaten the worker's labor power even more:

"The machine [...] supersedes the workman, who handles a single tool, by a mechanism operating with a number of similar tools, and set in motion by a single motive power, whatever the form of that power may be. Here we have the machine, but only as an elementary factor of production by machinery" (Marx 263).

Since the industrial revolution, many developments have added to the establishment of large-scale-production. The Frankfurter Schule developed its critique after the first world war, in a devastated world that needed a positive outlook (Thompson 2013a, n.p.). By uniting the ideas of Karl Marx and Sigmund Freud, members of the Frankfurter Schule developed theories regarding mass production, mass consumption, pop culture and standardization for example, as 'critical theory' to fuel social change and react to the influences of capitalism and technological progress (Adorno 1941; Benjamin 1936; Horkheimer 1937). In their observations, the role of the individual – both the consumer and worker – is reduced to an addition to the bigger picture only not necessarily connected to the product of the labor, what Marx has pointed to as the 'alienation of labor' (1887, 122). Next to constant conditions of production which are held by machines, workers have become replaceable components of a larger production mechanism (Thompson 2013b, n.p.). However, Marx noted that at that time, machinery operated "only by means of associated labour, or labour in common" (Marx 1887, 268). And thus, labor remains ever since an activity between human and technology where production is due to interaction between the two

1.2. A society of platforms

Whereas labor today is about the relation between man and technology too, technological progress and development lead to reinventions and new creations accompanied by another shift of labor. A move further away from direct production by human labor, towards pervasive technological substitutions. The most futuristic thoughts then are those of robots, existing alike humans. More realistic manifestations on short-term are autonomous cars and drones while machine learning in the form of self-learning algorithms is already there. The latter development is widespread, though unknown by the public and critically approached by scholars in research to social media newsfeeds, ranking mechanisms and recommendation systems (Bucher, 2012; Van Dijck, 2013). The substitution of human labor-power by technological solutions is a result of developments in automation and digitalization by which the relations of labor and society are reinvented as well. Besides ideas of technologically connectedness, in terms of The Internet of Things for example, the current organization of societies is mainly configured online, through mobile applications and technological systems. In *The Platform Society*³ (2016), José van Dijck, Thomas Poell and Martijn de Waal describe transformations from Web 2.0 towards an ecosystem of platforms that has taken a significant role in the broader (online) society. As they stress throughout their work, platforms have adopted a new kind of operating that is about being a marketplace instead of being a space for social meetings only.

While platforms are mainly facilitating spaces and channels for information production and sharing, economic values and transactions have become part of this platform system as well (Dijck et al. 10). Tarleton Gillespie (2010) had already described the development of the term 'platform' at that

9

³ Free translation from the Dutch title: *De Platformsamenleving*.

time. The term is literally about staging a certain service or company to a space or place where room for interaction is provided. Interaction via platforms does not just concern producer-consumer but is important to attract advertisers, potential partners and policymakers as well. Gillespie explains how labelling an online service as 'platform' means an important entitlement that has "discursive resonance" similar to terms such as 'network', 'channel' and 'broadcast' (349). He divides the usage of the term in four categories of meaning: computational, architectural, figurative and political. The first refers to the most recent understanding of the term as technological infrastructures of hardware and software. The second is an architectural definition, the oldest and most straightforward since it points to physical structures that have a surface on a higher level on which someone or something can stand. Thirdly, the figurative explanation is about conceptual uses of 'platforms' regarding a foundation, basis or condition for something to happen or to start from, a first job for example – to start a career with. Fourth, the political explanation is merely about articulating beliefs and positioning in the political spectrum. Here, Gillespie argues how the neutrality that is associated with the other three explanations seems to be disappeared (350).

Although the term 'platform' appears as an innocent label for something that is both a website, a forum and a socioeconomic meeting space, Gillespie concludes that the term was not randomly picked for example by Google after the take-over of YouTube. According to Gillespie, calling such spaces on web 'platforms' is political motivated since platforms are trending and *the* way to 'transform' a website, service or program into a public or semi-public space.

"Google and YouTube have also positioned themselves as champions of freedom of expression, and 'platform' works here too, deftly linking the technical, figurative and political" (Gillespie 356).

Users, advertisers and producers can be brought together and connected with each other whether directly or indirectly for all kinds of activity. Despite their feeling of 'new' occurrences in the online society, platforms have to deal with old dilemmas such as public expression and free speech (Gillespie 360). Platforms therefore, seem not to differ explicitly from other media and social media websites as spaces for speech, interaction and transactions. However, Van Dijck et al. (2016) describe four key points that would distinct platforms from other online systems such as websites. First, platforms collect large amounts of data about users and their activity. Second, they enable access to these data to third parties for further exploitation and development through API's⁴ Third, platforms let algorithms execute the work of processing input to desired output and thus let machines help to generate, collect and interpret the data. Fourth, platforms – due to the algorithmic structures – make use of recommendation systems for targeted services and advertising through the economic configurations

⁴ Application Programming Interfaces

that they have become (Van Dijck et al. 19). In this 'platform way of life', Van Dijck et al. identify also three core mechanisms that work together to help the online system that a platform comprises to function in optima forma.

The first mechanism is that of *datafication*, which is about the interaction, quantification and predictions that can be made with collected data from user activity in terms of online behavior, interaction and content production. Out of the seas of data that platforms and their users produce, an overarching goal is to give meaning to the datasets and make it functional. Every aspect of the set can be valuable because it is traceable, calculable, interpretable and it offers room for forecasting in the context of the total (Van Dijck et al. 39). The second mechanism is all about the conversion of the raw data into valuable pieces that together give information about topics, trends and behavior – as Cukier and Mayer-Schoenberger (2013) explain: "Big data helps answer what, not why, and often that's good enough" (29). This is part of what Van Dijck et al. call commodification, from the inner data mazes to the outer interface, transforming data results and content into useful input on the one hand. By generating economic value on the other hand, the data is functional for the platform itself, its stakeholders and perhaps third parties. According to Van Dijck et al., there is an active role for users when they promote themselves, their products or activities (39). The third mechanism is called selection and is often two folded within platform environments because it is about users' influence on the one hand and algorithms on the other. Whereas users decide what content in the data flows is relevant for them and what they 'like' to see, algorithms play a determining role in the mechanism of selection. By predetermining the supply of content that is based on user preferences and personalized recommendation systems, algorithmic feeds such as search results and news feeds can cover a continuous interplay between new data from users and predetermined algorithmic structures. These inherent platform mechanisms have further attention and elaboration in the method (chapter 2) and analysis (chapter 3) sections.

1.3. Platform capitalism versus platform cooperativism

Media scholars present studies that point to a contemporary society of datafication and platforms as further extensions of what was called "Web 2.0" (Gehl, 2011; Scolari et al., 2012; Manovich, 2013). A popular study regarding online participation, collaboration in content production and user-journalism, was published by Henry Jenkins, Sam Ford and Joshua Green (2013). Through critically describing the utopias of Web 2.0 regarding more user influence in the production and distribution of culture and users as 'co-creators', they argue how the moral understandings of producers and audiences remains out of balance. (Jenkins et al. 2013, 48-9). From a political economy perspective, they criticize the commercial models of profiting from audience activity without compensation for this 'free labor' that users offer. It resembles the 'alienated labor' that stems from the assembly lines in industrial factories where workers would lose the emotional relation with the product or lacked pride in what they did, because there was no explicit contribution to the final product – which is in line with the Marxist'

view of the alienation of labor-power (Jenkins et al. 58). Labor in this sense, would be almost entirely motivated by means of financial returns.

However, this appears not to be at stake because users are not aware of the economic value of their online activity in their spare time (idem 59). In addition, the use of online platforms consists in a way of 'self-branding' too because users generate online content and are often interested in expanding their own audience and reputation – what Van Dijck et al. (2016) see as part of the platform mechanism of commodification. Users then, take pride in personal accomplishments and external appreciation, such as numbers of views or likes, which does not alienate the work at all. Thus, Jenkins et al. see audience-labor as engaged rather than as exploited (Jenkins et al. 2013, 60). Engaged in a sense of users or online communities pursuing their own interests as is the case within the network of platforms that constitutes the platform society. Even if users are aware of commodification and exploitation, they continue sharing content and that is, according to Jenkins et al. not solely expressed in economic terms. Instead of financial returns, in peer-to-peer interactions it is merely about status, reputation, appreciation and relationship building for cultural production. Companies try to merge the social and economic with techniques that make it harder to distinguish and probably cover the capitalistic tendencies that come along with datafication, commodification and selection. If the terms of the transaction are not transparent or not subject to negotiation with all participants, according to Jenkins et al. they destroy the moral economy of shared profits (Jenkins et al. 65; Thompson 1971, 77). This notion obviously aligns with Marxist ideas of capitalistic striving for surplus value over the backs of employees as platforms make use of the 'free' data that is produced by user activity.

The concept of platform capitalism is used by Nick Srnicek (2016) to reflect upon developments in the past four decennia until the contemporary age of 'advanced' capitalism. With this kind of next-level-capitalism, Srnicek describes how a new kind of raw material is placed in the middle: user data. In contrast to knowledge that is about reasoning and understanding the past, data comprises simple information pieces only and form together rich overviews by which predict can be made (Srnicek 2016, 39; Cukier & Mayer-Schoenberger 2013, 39). Throughout years of misfortune, progress and crisis, the contemporary situation has often been referred to as the next industrial revolution because of the so-called sharing economy or on-demand economy. This is mainly constructed by the platforms, about which Van Dijck et al. (2016) have introduced some notions and mechanisms. The competition within the platform society that is mainly concerned with the possession of data flows, is what Srnicek (2016) drastically points to as "Platform Wars", illustrating how and why the capitalistic tendencies lead to differentiation of products on the one hand and to closed platform environments and internet structures on the other (113). The transformation from preplatform models into platforms is not always smooth and is just another part of the competitive situation that platform capitalism comprises. Srnicek acknowledges a certain shift within the platform capitalism that occurs in the notion of the on-demand and sharing economy as well, explicitly the fact that services often will be delivered as a rental-service or a pay-per-use system. Similar to Van Dijck

et al. (2016), he points to governments and their position to control platforms and intervene in the construction of monopolistic infrastructures that might harm transparency, 'free'-choice and privacy of citizens (Srnicek 127; Van Dijck et al. 143).

Trebor Scholz (2016b) argues how the Silicon Valley companies have disruptive influences on the original idea of sharing and that is why he calls the current situation rather an on-demand economy in which market relations are shared into every aspect of life (1). Before scholars began to write about a society of platforms, many terms for the transformation of culture and society have been thrown into the debate. The infrastructure of such a platform society is built upon the computational networks that were constructed in recent years after 'the invention of' the Internet, formerly for army purposes only, later for academics and increasingly for the public. Despite the benefits that came along with the Internet, Scholz pledges for a broader look on the opportunities and warns for the illusion of an unstoppable evolution of progress that would lead to an 'uberization of society' (Scholz 2016a, 13). In this manner, the capitalistic trend is doubted again and the need for collective owned organizations for labor in particular is underlined. Scholz proposes his notion of 'platform cooperativism' following two important principles of ownership and governance by means of communal and democratic decisionmaking to ideally secure income for participating people (idem 16). The current situation of a platform society does not necessarily have to be the next progressive step in the evolution of humanity.

Whereas Scholz tries to provide new models and advices on how to turn the capitalistic constellation of platforms into a system of platforms for collective profit on the one hand, he describes the need for positive alternatives to the negative attitude towards the capitalistic companies from Silicon Valley on the other. Such a change is concerned with structural alterations of ownership, solidarity and efficient innovation with benefits for all in mind (Scholz 2016b, 14). Douglas Rushkoff (2016) provides critical and some negative perspectives on the current situation in addition. In contrast to how Van Dijck et al. (2016) rather describe the platform society with nuance and neutrality, Rushkoff criticizes the loss of sustainability and the destruction of existing industries that is created by platform capitalism and which leads to only a few monopolies (2016b, 21-2).

"It's the same old industrialism, being practiced with powerful new digital tools. It's also utterly inconsistent with the underlying biases of digital technology" (Rushkoff 2016b, 22).

In the case of industries, Rushkoff's main point seems to on the topic of the downward spiral that platform corporations are in, because they all work to make sure that there is room for only one of their kind: themselves (2016a, 67). Rushkoff describes the example of the music industry shortly, where a couple of winners – platforms that own the music production and its distribution – that take all, literally. That is why Rushkoff also advocates the ideal of 'Platform Cooperativism', the desired factors of reclaiming value and forging solidarity prepare the way to a new system of collective value

and goods (2016b, 23). This ideal reminds of Marxist elements about communal ownership and equal shares of surplus value, which requires a revolution of values or a re-birth – a 'Renaissance' would Rushkoff call it. Such a reincarnation of society is necessary for platform cooperativism, which is as an ongoing goal according to Scholz, it is all about the development and transformation of the economic system in response to the recent trend of platform capitalism (Scholz 2016b, 3). Both Rushkoff and Scholz point to the big companies that function as stakeholders in the platform society, such as Uber, Airbnb and even Upwork which are accused of exploiting labor, participants and ownership. This is an interesting approach to keep in mind when entering the stage of method and analysis, that starts below in chapter 2 and 3.

2. Method for analyzing Upwork

Building on the foundation of the introduced theoretical fields which are concerned with the transformation of labor in the platform society, the analysis framework is positioned below. In this section, the method for platform analysis and the set-up of the proposed steps are described. The method comprises a combination of disassembling platforms via technocultural and socioeconomic approaches on the one hand following an earlier work of José van Dijck titled *The Culture of Connectivity* (2013). On the other hand, there is an analysis of platform mechanisms after Van Dijck et al. in *The Platform Society* (2016). This manner for analysis is chosen because it combines two methods of platform analysis from the same author (José van Dijck) that differs from other kinds of platform analysis used in the field of game studies for example (Bogost and Montfort 2008). By using this new combination, a shift from aiming at social media to more exploitation-focused corporate platforms becomes visible. The two approaches from the first work (2013) help analyzing details of the platform while the second work (2016) focuses on overarching mechanisms that combine the details into the spindle of the system. The method thus falls apart into three parts, each as a stage of the analysis that resemble three sections in chapter 3, in which the analysis of Upwork is described. In the appendix, an overview of the method components is provided.

2.1. Platform Analysis

The first part of the method (Van Dijck 2013) is a mixture of two approaches, a technocultural and a socioeconomic one (further explained in 2.1.1). Both approaches are inspired by the actor-network theory (ANT) from Bruno Latour, John Law and Michel Callon, and a political economy perspective that is proposed by Manuel Castells regarding the potential of informational networks for growing into major industrial stakeholders (Van Dijck 27). In the process of disassembling social media platforms systems (to the extent that is credible from an external research position), José van Dijck proposes six aspects for investigation. On the one hand, the technocultural approach is about the technological parts of the platform (1), the opportunities for users and usage (2), and content (3). On the other hand, the socioeconomic approach is concerned with fundamental elements in terms of ownership (4),

governance (5) and business models (6) (Van Dijck 28-9). The second part of the method is based on the recent work regarding platform mechanism analysis in the platform society (further explained in 2.1.2), in which new online alternatives to conventional systems have arisen (chapter 1; Van Dijck et al. 2016). The mechanisms of *datafication*, *commodification* and *selection* are part of the analysis after descriptively stripping labor-platform Upwork. Together, the method is a descriptive one since it does not provide researchers with access to others systems, code or hardware structures than Upwork provides to anyone via its website and application. Neither does the method require interaction or observation via ethnographic records, because its focus is on the parts of the platform that are accessible to the researcher. From that point of view, the method lets a lot of room for interpretations and associations by users of this method.

2.1.1. Aspects of platforms as microsystems

At first technologically, this part of the method is about software-based structures and computational services instead of a focus on the hardware on which platforms are built, such as servers for instance. While algorithms might be pointed to as unknown blackboxes (Paßmann & Boersma, 2017), the challenge is to analyze hidden software layers through the top layer: the interface. That is where the visible constructions of the software occur regarding "(meta)data, algorithm, protocol, interface, and default" (Van Dijck 2013, 30). Closely tied is the degree of user agency because that is about users' (un)consciousness of the technologies behind interfaces and newsfeeds. Van Dijck (2013) describes the comparison between technological coding strategies and the manner in which user agency is a negotiated concept due to policies and architectures that platforms provide users on the one hand and the manner of participation and activity of the users themselves in the spheres of 'online sociality' (idem 33). Users might participate in the creation of content as was a rising standard with the development of Web 2.0 and the phenomenon of online sharing of *cultural* content (e.g. texts, music, images and videos). Here, Van Dijck stresses the duality of sociality, because for users the connectedness and common social identity with others is inviting while their activity together reveals valuable information about trends and preferences (idem 35).

The traditional split between producer and consumer is gone and although the relation between provider and user or employer and employee might still be in shape, the understanding of ownership in the platform society has shifted. In the constructions of platforms, an ownership model is according to Van Dijck, "a constitutive element" in the system of production (idem 37). On meso and macrolevels, ownership depends on the kind of owner-organization regardless of whether they remain independent or are absorbed by larger platforms (Instagram has become part of Facebook for instance). Ownership statuses vary from the individual creating content and the institution or corporation that regulates the platform through pieces of code and converted output. Major platforms created formal and social regulations to enable government in the dawn of Web 2.0, by providing technical and social protocols on how to deal with user activity (idem 38). A well-known example is

that of (endless) terms of services that users must agree with before joining a platform. However, this differs per nation and might cause tension to governmental conventions:

"[L]aws arise in national and thus culturally specific contexts. Germany, for instance, has tougher privacy laws than the United States. Of course, terms of service are routinely adjusted to national customs, but the global reach of most platforms gives owners a vast advantage over states when it comes to regulation" (39).

Interwoven with the governance by platform owners are the constructions of business models following a new logic of production and distribution, for instance by selling downloads and streams or providing 'free' services with advertisements. These services would operate through the same paths as recommendation systems, by tracking, sharing and selling user (meta)data which might be ahead of policies by the government.

2.1.2. Platform mechanisms

In their work, Van Dijck et al. (2016) take some platforms as case examples of platforms for (public) transport such as Uber and platforms in the hotel and travel market such as Airbnb. These categories of platforms are analyzed following the three core mechanisms as part of the larger ecosystem in which they function (idem 64). The authors also look at platforms for journalism and education to show how other parts of society are transformed in the platform system too. The mechanisms of *datafication*, *commodification* and *selection* operate in between the interactions of users, technologies and business models on the social side of platforms. In the end of their work, Van Dijck et al. state suggestions towards the ones involved in the platform society: platform owners, users and governments. They try to create awareness of this situation of development towards a broader platform society and acknowledge the important role for governments in policy and decision-making regarding data usage and the possibilities for civilians to make the choices they want.

While in the *The Platform Society* a transformation of labor is named – "eventually, everyone becomes an unorganized freelancer" (Van Dijck et al. 2016, 71) – it is taken as a general transformation rather than one that is driven by specific platforms such as Upwork. Though, the given mechanisms that can be analyzed provide insight in the constituting power for the transformation of labor by Upwork. In her earlier work Van Dijck (2013) already mentioned the need for investigation of (social media) platforms to reveal infrastructures and working strategies:

⁵ Free translation of Dutch citate from Van Dijck et al. (2016) on page 71.

"To analyze the governance structure of a social media site, one needs to understand *how*, through what mechanisms, communication and data traffic are managed" (Van Dijck 38).

Through combining the detailed information that is found in the former two approaches, the overarching mechanisms are analyzed. Upwork is analyzed on what opportunities it holds for interaction, quantification, interpretability and forecasting that can be done with the flows of data processed by its system. Although the servers of Upwork are not accessible, what is needed for optimal usage of personal profiles, job searches and communication is analyzed and taken as part of the first mechanism of *datafication* which starts with the fact that Upwork is a software environment. Second, the manner in which Upwork utilizes the collected data to bring the right users together on the marketplace is an element of the analysis of *commodification*. The valorizing power of Upwork is investigated in so far as is analyzable from the surface while using the platform both as client and as freelancer. Third, the possibilities for selection from the user-side and results that come from the system via algorithms are part of the mechanism-analysis regarding *selection*.

2.2. Analysis set-up

In the analysis part that follows in chapter 3, the platform study of the former two approaches is conducted by investigating the freelancer-platform Upwork and its transforming power for labor in the broader context of the platform society. As is mentioned above, two user accounts have been registered to analyze Upwork from the two user sides that the platform has: the employer or job offeror on the one hand and the employee with specific skills, who operates on freelance basis and hourly rates on the other. For both sides, it is necessary to set-up a truthful profile, providing information about education, skills, experience and personal details regarding date of birth, address and a profile photo in the case of freelance-users. Users who offer jobs must provide details about their field of business, company name, location and tax information. From this point, Upwork was analyzed from both perspectives – what does it mean to set up a profile and search for a job or in which manner can jobs be offered and how can a good freelancer be found? Besides user-perspectives, other recent studies to Upwork and general webpages of Upwork (the 'About us' page for example) and their community forum provide background information for the analysis⁶. Through analyzing the six aspects of Upwork as a microsystem itself and subsequently its overarching platform mechanisms, the following analysis is concerned with the transformation of labor in terms of organization, communication, payments, career opportunities, ratings and representation. Observations from both user-sides are combined in the analysis description for coherence and structure. By adding the three mechanisms to the first six steps, a nine-steps pathway is now formed for the case of Upwork. The appendix provides an additional overview of these steps and relevant terms.

⁶ The Upwork community forum, https://community.upwork.com/

3. Analysis and interpretation of Upwork

After the merge of Elance and ODesk in 2013 and the renaming of the company into *Upwork* in 2015, the platform has become one of the largest online marketplaces for bringing employers and employees together (Chen et al. 2016, 7). According to numbers published by the company, more than twelve million freelancers are registered on the platform and over five million clients (employers, companies) have registered to propose jobs⁷. Moreover, the platform puts together professionals and businesses on a remote connection basis only and the communication and transactions need to be done through the platform's infrastructure. In the usage of Upwork, one could log on to the platform as an employer – someone who offers a job to do – or as a freelance worker – someone with skills that fit certain tasks. As in social media systems, the professionals have to create personal profiles which are reviewed on 'realness' by the platform before participation on the marketplace is enabled. Companies can register by filling in VAT-numbers and company's administrative documents. This chapter is about analyzing Upwork as a cultural transforming factor regarding the understanding of labor, its mechanisms and its distinctive role in the platform society. As was mentioned in the method section, below the conducted analysis of Upwork is described following three approaches that consist of nine sub steps, an overview of this method combination is added in the appendix.

3.1. Technocultural approach to Upwork

Taking together the technology, users and content of Upwork in the technocultural approach, this chapter is about disassembling the platform as an important cultural transformer because of its technological influence on the one hand and its consequences for user participation and labor on the other. The technocultural approach is about combining analysis of technological parts of the platform, its users and usage and the content that is created by the platform and by its users.

Technology

As was noted in the method section (2.3), this analysis has been conducted both as a client-user (who offers a job) and as a freelancer-user (who looks for a job). The platform has for both users a different interface and different requirements for the user-profile. Whereas the client needs to specify his offer and his wishes, the freelancer needs to promote his qualities in terms of skills, education and experience. Every interaction is done through the software that is provided by the platform. At first, there is the website, the entrance of the marketplace where every user starts to build a profile. Also, there are the Upwork applications for desktop and mobile, which enable messenger and time-tracking for real-time updates between the client and the freelancer. When it comes to the data of users, it is thus about personal profiles, company profiles and the information about their history on Upwork.

⁻

⁷ "12M+ Registered freelancers. \$1B+ Worth of work done annually. 3M Jobs posted annually. 5M+ Registered clients". Retrieved from: https://www.upwork.com/about/

Metadata that is available through API's, concerns real-time activity on the marketplace, active existing engagements, authentications through Upwork, interactive sessions between client and freelancer besides the regular functionalities that the platform offers⁸. For developers and external parties, this enables opportunities for creating personalized apps, specific programs or recommendation systems such as Chen et al. (2016) have tried for Upwork in order to provide students of Massive Open Online Courses (MOOC's) with real jobs in their field through an API-based application (7). The underlying algorithmic protocols that structure Upwork's dataflows, can be slightly discovered when logging in on different moments while searching for specific jobs. The algorithms seem to be programmed in a way to show new job offers at any time, depending on profile preferences, filters and search terms. In a thread on the community forum is explained how search results algorithmically rotate, to spread chances for professionals and sort results for employers each moment differently⁹.

The interface of Upwork is straightforward and looks like a mixture of social media such as LinkedIn and Facebook, while at the same time the jobfeed for freelancers and the freelancerfeed for clients somewhat resembles online marketplaces and webshops such Ebay or Amazon. Social networking is not really a part of the platform, the interaction is merely about network-building for being hired or finding professionals. It is both in the default and the protocol of Upwork to reveal as much as possible about one's experience and profession, completed jobs for example remain visible on a profile. There is freedom to work on a job or more jobs at the same time within the structures and interaction applications that the platform provides. However, it is necessary to publicize as much as possible of work-related personal information on Upwork to look for the right fit.

Users and usage

In this manner, labor is offered as a one-time service per task between freelancers and clients. Upwork provides the online space and infrastructures for bringing supply and demand together, and when using Upwork, everything – except the actual task – has to be conducted through the infrastructures of the platform. The user participation is both implicit and explicit because on the one hand they are obligated to fill in profiles and on the other hand it is up to their active attitude to find jobs to complete (or freelancers to do the job). Employers rate worker(s) when a job is done or when a project has stopped, based on the process and results of work. In contrast to the critique on participation that expresses itself on social media platforms through collaboration in leisure time and 'free labor' – similar to Upwork jobs for content creation, programming, developing, designing, writing, translating and such – the whole online marketplace is built around the hourly rate of the freelancer and budget for the job.

⁸ API Reference, https://developers.upwork.com/?lang=python#introduction

⁹ Algorithm how Upwork sorts Freelancers, https://community.upwork.com/t5/Freelancers/Algorithm-how-upwork-sorts-Freelancers/td-p/135262

"For our analysis, we took a snapshot of all available tasks on Upwork on September 15, 2015 leading to a total of 56,308 open tasks. Each task is assigned to one or more topical categories, e.g. Translation or IT & Networking. Additionally, tasks can be tagged with particular required skills such as excel or python. Tasks either pay per hour or have a fixed budget." (Chen et al. 7).

Collaboration through Upwork is anytime remotely and probably from a freelancer's home or space where wireless internet is available. It is about the relation between employer and freelancer mainly, while freelancers might work in teams when the client connects them in a group.

Content

Whereas content points to production and distribution by users of a platform within the infrastructures and flows of the platform, Upwork jobs do not necessarily lead to published media content as on social networks. Content on the front-end is mainly concerned with profiles and job proposals. Right after the process of hiring, Upwork provides a messenger and time-tracking application on mobile and desktop for communication and the exchange of documents between employer and freelancer. The skills of natural language processing, programming, number and text ordering, design and marketing for the creation of preferred content are very common on the platform as is on social media. A main difference between social media and Upwork is the fact that it is no platform for distributing mediacontent. Upwork is about distributing and updating the profiles of freelancers to the supply of jobs by clients. The actual tasks in which content is created for the client, remains private and in possession of the client. Individual freelancers are able to practice their craftsmanship in a similar way as craftsmen did in the middle ages. Upwork now only intermediates between the specialist and the client that needs labor as a service. Although freelancers can label their experience on 'entry level', 'intermediate' and 'expert', their results or product may be considered professionally in contrast to social media content that is created in senses of 'free labor'. The quality of the final product in terms of amateur and professional might be questioned but the employer is the one who hires a specific freelancer and who judges and rates the freelancer afterwards. A small amount of jobs has no commercial but charity purposes. Then, there often is a very small compensation available for the job that should be done.

3.2. Socioeconomic approach to Upwork

When it comes to the ownership, governance and business models of online platforms, the approach to Upwork shifts from technocultural to a socioeconomic approach with which the relations of power, social interaction protocols and economic values are analyzed.

Ownership

Regarding the current shape of Upwork, the platform is a combination of former platforms Elance and ODesk, which operated in the same field for bringing supply and demand together on a marketplace for labor. The merge has led to the launch of the platform Upwork in which the best of both systems is combined ¹⁰. The company is commercial, but unquoted and privately owned which means that the company has one or several key persons who own and manage the company along with investors and a team of directors. On Upwork's website a team of executive officers and a board of directors are introduced as the leading ones of the company. Also, investors are named who are mainly capital partners from the United States, but it remains unclear to what extend such parties have a role in the directions of the company. As was mentioned, API's enable external parties to develop sub-agencies and applications based on Upwork data and content. On the other side of the spectrum, regarding ownership of content, in the user agreement (§8.6) is noticed how the client – who pays for the work – owns all the intellectual property rights unless otherwise is contractual agreed (Upwork, 2016). The marketplace for jobs and freelancers is a business on its own that asks for owners of labor-power and owners of jobs – employees. Within the marketplace, owners of capital search for an owner of the appropriate labor-skills to hire for a relative short-term job-specific arrangement.

Governance

There is no tangible relation between the end-users (freelancers and employers) and the owners, investors or directors of Upwork, simply because it is the system that mediates between the job provider and the freelancer. Upwork is an employer, but only to its own personnel such as developers, directors, marketing and salesmen. To users of the platform, Upwork is no more than the company that owns, regulates and organizes the space where they come together for interaction regarding jobs, which are the negotiable goods on this market. Amongst users, it is possible to comment, rate and 'flag' profiles or job offers to report about results, communication and inappropriate behavior. Then, Upwork notifies the user and proposes steps for a solution (remove content because it is stolen, update profile picture etc.). One needs to understand that all of this happens within the infrastructures of Upwork, and thus the system, that is built by developers of Upwork, rules via algorithms and code behind an interface. In this manner, the system shapes the social relations of users between freelancer to freelancer and between freelancer and employer. The Upwork applications also constitute this relation through the possibilities for communication in terms of time tracking, schedules, fileexchange and payments. The governance of the platform influences the labor itself the least. However, the fact that Upwork is not an employer for its users and only provides interaction and connection opportunities, transforms the conventional idea of labor-agreements as contracts and conditions into labor as a service.

¹⁰ Our Story, https://www.upwork.com/about/

Business model

The business model of Upwork is built around its core business: the job tasks offered by companies (clients, employers) that are executed by freelancers. Of all the transactions within the system of Upwork, the platform generates income from any single transaction (2.75%) and from the costs of freelancers which are paid by clients. The model is about balancing the expectation of the users about the cost for what they get, Upwork presents a *no cure*, *no pay* system in which the platform gains a fee only when a client and a freelancer start working together.

"As economist Clemons (2009) rightly points out, social media's business models are a delicate harmonizing act between users' trust and owners' monetizing intentions. If users feel that they are being manipulated or exploited, they simply quit the site, causing the platform to lose its most important asset" (Van Dijck 2013, 40).

Since 2016, the Upwork business model is charging its fees on a sliding scale, which means that Upwork demands a payment that is dependent of the total costs for a client. In the lowest segment (til \$501) the platform demands 20%, for the middle segment (til \$10,000) it is 10% and for the highest segment (over \$10,000) it is 5%. Such a model is not necessarily new on the market, because conventional companies in the field of recruitment and selection have similar fees as part of the salary of workers who are 'stored' at a client's (company) position. Instead of encouraging short-term contracts and small tasks, in this manner Upwork encourages longer-term relations, at least in favor of the freelancer who relatively receives less for smaller tasks. This is an interesting turn at the online marketplace for labor where jobs are offered for labor as a short-term service.

3.3. Mechanisms of Upwork

From the two approaches on technology, culture, social structures and economic values of the platform, this section is concerned with the overarching mechanisms that can be found through analyzing Upwork.

Datafication

The datafication that is part of an overall development in the industries of technology, new media and web analytics, comes to the front in terms of traceability and interpretability when participating at Upwork. Since every move via Upwork is embedded in software, all traffic is traceable because of data traces and metadata collection. Through the exploitation of this large sets of data, Upwork is able to study their users on a wide scale, to interpret, predict and recommend in specific situations.

Whether a freelancer is a starter on the labor market, or if a company is well-experienced in a certain

field and needs an expert for a task, Upwork's system is able to connect the right users. Although users are able to make choices for themselves and choose whether they engage with a job or not (which is part of the selection mechanism), the competitive strategy of Upwork in contrast to conventional employment strategies, works without physical contact or appointments because datafication replaces, automatizes and enriches such processes. In this line, Upwork acknowledged some shortcomings of remote collaboration and has tried to obviate this by providing a very complete application as extension of the marketplace to work on tasks in a controllable manner. In the near future, Upwork might be able to forecast clients' needs and skill supplies similar to how they publish a skills index now every quarter¹¹. In this index, the fast-growing freelance skills are published and promoted to the Upwork-community on the one hand and probably to activate and inform the outside world about the most trending developments and needed skills on the other hand – where obviously Upwork has solutions for: its freelancers.

Commodification

The promotion of skills through the publication of an index, for encouraging freelancers is about a reciprocity that is concerned with bringing more freelancers and clients to the platform. Upwork is all about commodifying the labor-power of freelancers and enabling users to usefully spend leisure time or add extra income to a regular job, similar to how Airbnb helps valorizing attics by letting owners offering such places as hotelrooms (Van Dijck et al. 2016, 44-5). The labor-power of the freelancers, who are not permanent employed, is valorized through a representational profile, exhibition of skills, education and experience to eventually fit clients' needs with specific job tasks. In this manner, Upwork creates economic surplus value for both the freelancer who offers his labor-power and for the platform itself because of its intermediary position and the fee that is part of every transaction.

"As in most online marketplaces, reputation mechanisms play a very important role in facilitating transactions, since they instill trust and are often predictive of the employer's future satisfaction" (Kokkodis & Ippeirotis 1687).

Whereas Upwork is not about specific products but merely about transforming labor-power to labor as a service, systems for rating reputation and quality of work are very important for the business of Upwork and its relationship with customer-users. The information density of a user profile is important for the beginning freelancer, in later stadia the focus is more on reputation through quantity of completed jobs, earned money and the percentage of 'job succes'. The commodification by users themselves through self-promotion and active participation on the marketplace is part of the

¹¹ Upwork press release, https://www.upwork.com/press/2017/01/26/upwork-reveals-fastest-growing-skills-q4-natural-language-processing-tech-skills-top-list/

overarching commodification strategy of Upwork that is about valorizing every detail of the marketplace for recommendation and trend-forecasting use.

Selection

The strategy for commodification is thus closely tied to the manner of user participation, which in the end comes down to big flows of user data as the main product in the platform society instead of conventional media products and audiences (Van Dijck et al. 2016, 48). Besides the importance of data about reputation, the social marketplace is concerned with connecting personalized information, preferences and activity history to concretize this eventually in freelance job arrangements. It is not Upwork who directly and explicitly connects a freelancer with a client. A combination of manually added personal information, preferences and filters when searching for jobs by users on the one hand and algorithms – the current recruitment experts – which bring together all available information on the other, result eventually in the fit for a job. This is the mechanism of selection in which several actors in the network (both the users and technologies) interact and create output together within the borders of a platform.

The labels that Upwork plies regarding level of expertise, language, field of work, hourly rate, experience, earned amount and job success, enable the algorithms to pre-select job offers for freelancers and otherwise propose qualified freelancers for client's jobs. The final choice – to buy the labor-power of a freelancer – is up to the client who offers a job. Recommendations start for both usersides right after logging in, whether the user has explicitly applied some filters in that session or not. The Upwork marketplace processes millions of such routes of negotiation per year, due to datafication, commodification and selection. Criticism on filter bubbles or echo chamber-effects through such interplay of selection mechanisms might apply to the online marketplace for labor as in social media environments although an algorithmic rotation of search results was observed (3.1 Technology). However, when it comes to work-specific skills, the applied filters and sets of personal preferences do not let much room for other relevant job offers unless freelancers improve their skills, following the Upwork Skills Index for example. In addition, Upwork transforms the labor-intensive activities that can be done online into valuable activities with which one can earn money instead of regular 'free' social media participation. The idea of jobs going viral might not be similar to the social media content of memes and vines that go viral. Rather frequently asked skills are measurable and exploitable through promotion by Upwork, asking external clients to join the marketplace because the best professionals are awaiting there for a job.

Conclusion

The main questions in this research are concerned with a transformation of labor in the wake of a current society of platforms. Regarding this transformation, at first it is important that the history of the organization of labor was analyzed and that elder theories from Karl Marx and the Frankfurter Schule were reintroduced among others as relevantly applicable to today's situation. The organization of labor has gone from an agrarian culture via craftsmanship in the middle ages, revolutionary industrial assembly lines and mass production to an online participatory culture in which labor is just a part that facilitates income. In the sharing economy, platforms have played an important role in the exploitation of users' labor-power for free on the one hand and the usage of property for profit on the other. Through analyzing Upwork, this platform seems to operate in contradiction of the critique on free labor by Jenkins et al. (2013) because online participatory labor is transformed into freelance activity which is paid for and is no longer 'free'. In the same manner, the labor is in no way alienated although freelancers might not see the bigger picture that the job-offering-client is focused on, which is not unfamiliar in the relation between employer and employee (as was noted by members of the Frankfurter Schule in chapter 1.1).

Users enhance their online reputation and self-promotion on Upwork as they do through social media channels. The difference in the critique of Jenkins et al. and the reality of Upwork is in the focus on individual labor and that of participatory work, the critique regarding audience-labor is the production of content through participatory production, which is less at stake on the Upwork marketplace although one could work in teams of freelancers if a client sets up such a team. The ideal of shared profits in a moral economy seems to be brought back on the online marketplace that Upwork maintains. In addition to exemplary platforms such as Airbnb and Uber which transform traditional businesses and sectors into new systems with new technological solutions as key features, Upwork seems to be decisive in the manner on how is thought of labor in the platform society. Whereas the transportation sector and hotel industry are transformed, journalism, education and labor facilitation are taken to another level too. The focus seems to be on short-term solutions: the citytrip in a local residence, a taxi-ride from A to B, a specific educational course, a local incident journalistic report or a one-time freelance job. All presented as a service, meeting suddenly short-term demands with flexible supplies of available resources that can be almost anything; the empty attic at home, the car, leisure time, skills, and so forth. Along with other fields in the platform society, labor nowadays is demanded, offered and eventually sold as good in an online marketplace environment, traceable and calculable due to technology and content that is provided by participants: the users which are both companies who offer jobs and freelancers who search for jobs.

Whereas Gillespie has been critical on how companies such as YouTube have misused the term 'platform' and only provide structures instead of shaping the public discourse (Gillespie 2010, 348-9), Upwork truly constitutes new manners of interaction and understanding of what labor is in the

contemporary society. Srnicek (2016), Scholz (2016) and Rushkoff (2016) all argue for a shift towards collective, state-independent platforms that make use of all the data that is available and by which users and producers are all together equal. While this might look like a utopian vision, Srnicek stresses – in line with Van Dijck et al. (2016) – how the government or the collective should strive to regulate the biggest stakeholders in the platform society instead of awaiting further development of the long turn down – as is the case in the social media ecosystem now. It would be an inspiring step if Upwork hired freelancers via its platform too, to enhance the platform system and offer freelance jobs to add features or develop code. It might be a risk too, because the platform would have to open its infrastructures partially.

This research has tried to build a foundation for further analysis of labor itself, labor relations and the transforming roles of platforms in the current society. This method of platform analysis was valuable for the descriptive research onto Upwork and observations regarding a continuous adaptation of labor along with technological development and new mechanisms that are all concerned with data. Whereas this study tried to contribute to the present debate, obviously limited sources and approaches could be consulted. Platform analysis could be used also to consider intercultural differences for the transforming role of Upwork, regarding variances of labor ethics between a Western and an Asian nation for instance. On the other hand, it could be very interesting to analyze Upwork more deeply from an actor-network-theory approach, disassembling the online relations and comparing them to conventional relations between employer and employee. Also, a discourse analysis of the transformation of labor in online realms could be fascinating as well as an ethnographic investigation could provide further support for the transforming actor that Upwork is, by observations from engagement on the marketplace for a specific period. Furthermore, questions about ethics and critique could be on the room that Upwork provides for employer-unions, hierarchy and health insurances as part of the Upwork payroll services and the possibility for connections between companies. Comparisons between Upwork and similar platforms might provide new insights as well by analyzing Amazon Mechanical Turk for example, or how Uber and Airbnb treat their users could be worth researching too in addition to this study. Such research could give more body to this examination and deepen the manner in which platforms such as Upwork are at work as cultural transformers.

Bibliography

- Adorno, Theodor W. "On Popular Music." (Or. 1941). *Cultural Theory and Popular Culture: A Reader*. Ed. John Storey. Essex: Pearson, 2006. 73-84.
- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction of Art." *Illuminations;* Essays and Reflections (1936). N.p.
- Benkler, Yochai. *The wealth of networks: How social production transforms markets and freedom.* Yale University Press, 2006. N.p.
- Bogost, Ian, and Nick Montfort. "New Media as Material Constraint. An Introduction to Platform Studies'." *Electronic Techtonics: Thinking at the Interface*. Eds. Erin Ennis et al. Durham: Duke University, 2008. 176-192.
- Bucher, Taina. "Want to be on the top? Algorithmic power and the threat of invisibility on Facebook." *new media & society* 14.7 (2012): 1164-1180.
- Coldwell, Will. "Airbnb's legal troubles: what are the issues?". *The Guardian*. July 8, 2014. https://www.theguardian.com/travel/2014/jul/08/airbnb-legal-troubles-what-are-the-issues. Last visit on March 1, 2017.
- Chen, G., Davis, D., Krause, M., Aivaloglou, E., Hauff, C., & Houben, G. J. "Can Learners be Earners? Investigating a Design to Enable MOOC Learners to Apply their Skills and Earn Money in an Online Market Place." *IEEE Transactions on Learning Technologies* (2016). 1-12.
- Cukier, Kenneth and Viktor Mayer-Schönberger. *Big data: A revolution that will transform how we live, work, and think.* Houghton Mifflin Harcourt, 2013. 28-40.
- Dijck, José van. *The culture of connectivity: A critical history of social media*. Oxford University Press, 2013.
- Dijck, José van, Thomas Poell, and Martijn de Waal. *De platformsamenleving: Strijd om publieke waarden in een online wereld.* Amsterdam: Amsterdam University Press, 2016.
- Gehl, Robert W. "The archive and the processor: The internal logic of Web 2.0." *New media & society* 13.8 (2011): 1228-1244.
- Gillespie, Tarleton. "The politics of 'platforms'." New Media & Society 12.3 (2010): 347-364.
- Horkheimer, Max. "Traditional and critical theory." *Critical theory: Selected essays.* 1937 (publication of 1976). N.p.
- Hughes-Warrington, Marnie. "Karl Marx 1818-80". *Fifty key thinkers on history*. New York: Routledge, 2008. 241-251.

- Jeffries, Stuart. "Why Marxism is on the rise again". *The Guardian*. July 4, 2012. https://www.theguardian.com/world/2012/jul/04/the-return-of-marxism>. Last visit on March 26, 2017.
- Jenkins, Henry, Sam Ford en Joshua Green. "Where Web 2.0 Went Wrong". *Spreadable media:*Creating value and meaning in a networked culture. New York: New York University Press, 2013, 47-84.
- Jenkins, Henry. Fans, bloggers, and gamers: Exploring participatory culture. NYU Press, 2006.
- Kokkodis, Marios, and Panagiotis G. Ipeirotis. "Reputation transferability in online labor markets." *Management Science* 62.6 (2015): 1687-1706.
- Manovich, Lev. Software Takes Command. New York: Bloomsbury, 2013.
- Marx, Karl, and Friedrich Engels. *The German ideology*. Vol. 1. International Publishers Co, 1970 (1932). 1-25.
- Marx, Karl. *Capital. A critique of Political Economy*. Moscow: Progress Publishers, 1867 (English: 1887).
- Morozov, Evgeny. "Where Uber and Amazon rule: welcome to the world of the platform". *The Guardian*. June 7, 2015. https://www.theguardian.com/technology/2015/jun/07/facebook-uber-amazon-platform-economy>. Last visit on April 2, 2017.
- O'Reilly, Tim. "What is Web 2.0: Design patterns and business models for the next generation of software." Communications & strategies (2007): 17-37.
- Paßmann, Johannes and Asher Boersma. "Unknowing Algorithms". *The Datafied Society*. Eds. Schäfer and Van Es. Amsterdam: Amsterdam University Press, 2017. 139-146.
- Rushkoff, Douglas. "The Platform Monopoly". *Throwing rocks at the Google bus: how growth became the enemy of prosperity*. Portfolio Trade, 2016a. 61-68.
- Rushkoff, Douglas. "6. Renaissance Now". Eds: Scholz, Trebor and Nathan Schneider. *Ours to hack and to own: The rise of platform cooperativism, a new vision for the future of work and a fairer Internet*. New York: OR Books, 2016b.
- Schipper, Nienke. "Is Uber een taxiservice of een technologiebedrijf?". *Trouw*. November 29, 2016. https://www.trouw.nl/home/is-uber-een-taxiservice-of-een-technologiebedrijf-~ae2498ef/>. Last visit on March 1, 2017.
- Scholz, Trebor. "How Platform Cooperativism Can Unleash the Network". Eds: Scholz, Trebor and Nathan Schneider. *Ours to hack and to own: The rise of platform cooperativism, a new vision for the future of work and a fairer Internet*. New York: OR Books, 2016a.

- Scholz, Trebor. "Platform cooperativism: Challenging the corporate sharing economy". New York: Rosa Luxemburg Stiftung New York Office, 2016b.
- Scolari, Carlos Alberto, Juan Miguel Aguado, and Claudio Feij. "Mobile Media: Towards a definition and taxonomy of contents and applications." *iJIM* 6.2 (2012): 29-38.
- Shirky, Clay. *Here comes everybody: The power of organizing without organizations*. United Kingdom: Penguin, 2008.
- Srnicek, Nick. "Platform Capitalism". Platform Capitalism. Great Britain: Polity, 2016. 36-92.
- Thompson, Edward P. "The moral economy of the English crowd in the eighteenth century." *Past & present* 50 (1971): 76-136.
- Thompson, Peter. "The Frankfurt school, part 3: Dialectic of Enlightenment". *The Guardian*. April 8, 2013a. https://www.theguardian.com/commentisfree/2013/apr/08/frankfurt-school-dialectic-of-enlightenment. Last visit on April 5, 2017.
- Thompson, Peter. "The Frankfurt school, part 4: Herbert Marcuse". *The Guardian*. April 15, 2013b. https://www.theguardian.com/commentisfree/2013/apr/15/frankfurt-school-herbert-marcuse. Last visit on April 5, 2017.
- Upwork. *User Agreement*. September 12, 2016. < https://www.upwork.com/legal/>. Last visit on March 26, 2017.
- Figure 1. "Upwork formerly oDesk". January 14, 2016. http://designday.club/upwork-clients-cover-letter-and-rating/. Last visit on March 26, 2017.

APPENDIX - COMBINING METHODS FOR DISASSEMBLING SYSTEMS & MECHANISMS OF UPWORK

APPROACHES

Disassembling Platforms (Van Dijck 2013)

Platform Mechanisms (Van Dijck et al. 2016)

| TECHNOCULTURAL | Properties | SOCIOECONOMIC | Properties | MECHANISMS | Properties |
|--------------------|---|--------------------|---|--------------------|---|
| 1. Technology | Data / Metadata Algorithm / Protocol Interface Default | 4. Ownership | StatusDevelopmentPartnerships | 7. Datafication | TraceabilityQuantifiabilityInterpretability |
| 2. Users and usage | Implicit participationExplicit usageUsers | 5. Governance | Social protocolsAgreementsRules | 8. Commodification | Value transformationPromotionUtilization |
| 3. Content | DesignSubstance of contentAmateur/professional | 6. Business models | TransactionsEffectsFees | 9. Selection | FiltersPersonalizationViralityNormsAlgorithms |