

İSTANBUL BİLGİ UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
COMMUNICATION PhD PROGRAM

BEYOND DIGITAL LABOUR:
A THEORETICAL INQUIRY INTO VALUE AND ABSTRACTION IN
COMMUNICATION

MÜSLÜM GÖKHAN ASLAN
113813003

PROF. DR. YAŞAR AYDIN UĞUR

İSTANBUL
2021

Beyond Digital Labour: A Theoretical Inquiry into Value and Abstraction in Communication
Dijital Emegın Ötesinde: İletişimde Değer ve Soyutlama Kavramları Üzerine Teorik Bir
Sorgulama

Müslüm Gökhan Aslan
113813003

Tez Danışmanı : Prof. Dr. Yaşar Aydın Uğur (İmza)
İstanbul Bilgi Üniversitesi

Jüri Üyesi : Doç. Dr. İtir Erhart (İmza)
İstanbul Bilgi Üniversitesi

Jüri Üyesi : Doç. Dr. Erkan Saka (İmza)
İstanbul Bilgi Üniversitesi

Jüri Üyesi : Doç. Dr. Eylem Yanardağoglu (İmza)
Kadir Has Üniversitesi

Jüri Üyesi : Doç. Dr. Özgür İlke Şanlıer Yüksel (İmza)
Çukurova Üniversitesi

Tezin Onaylandığı Tarih: 04.01.2021

Toplam Sayfa Sayısı: 177

Anahtar Kelimeler (Türkçe)

- 1) Dijital Emek
- 2) Emek-Değer Teorisi
- 3) Çalışma
- 4) Sosyal Medya
- 5) Tüketim

Anahtar Kelimeler (İngilizce)

- 1) Digital Labour
- 2) Labour Theory of Value
- 3) Work
- 4) Social Media
- 5) Consumption

PREFACE

This thesis is a product of a long journey in books, articles and inspiring discussions. Finally, I am proud to present it to the readers. First and foremost, I would like to thank Prof. Y. Aydın Uğur for his help, wise guidance and patience. He constantly encouraged me at all phases of this research. I am grateful to the Assoc. Prof. İtir Erhart, Assoc. Prof. Erkan Saka, Assoc. Prof. Eylem Yanardağoğlu and Assoc. Prof. Özgür İlke Şanlıer Yüksel. They supported and motivated me to explore new perspectives that paved the way for me to formulate a new conceptualization, and they also directed me with their kind feedbacks to improve my methodological approach.

I would like to thank The Scientific and Technological Research Council of Turkey (TÜBİTAK) for the generous financial funding (BİDEB – 2211-A) during my doctoral studies.

And I am grateful to my friends and family members for their patience and support throughout this long adventure.

TABLE OF CONTENTS

PREFACE	iii
TABLE OF CONTENTS	iv
LIST OF ABBREVIATIONS	vi
LIST OF FIGURES	vii
LIST OF TABLES	viii
ABSTRACT	ix
ÖZET	x
INTRODUCTION	1
CHAPTER 1: TRANSFORMATION OF SOCIETY: PRODUCTION, CONSUMPTION AND CULTURE	6
1.1. FORDISM AND THE CONSUMER SOCIETY	6
1.2. TOWARDS THE <i>PROSUMER/PRODUSER</i> AGE	12
1.2.1. The Information Society	12
1.2.2. <i>Prosumption, Prosumer/Produser</i> in New Media	17
1.3. DISCUSSION: FROM CULTURE 1.0 TO CULTURE 3.0 RETHINKING CULTURAL PRODUCTION AND CONSUMPTION	20
CHAPTER 2: CONCEPTUALIZATION OF WORK	27
2.1. WORK: ETYMOLOGY AND EARLY CONNOTATIONS ...	27
2.2. WORK IN THE HOMERIC SOCIETY, CLASSICAL GREECE AND ROMAN PERIOD	30
2.3. WORK IN THE MEDIEVAL PERIOD AND TRANSFORMATION OF WORK WITH REFORMATION	36
2.4. THE RISE OF CAPITALISM AND THE INVENTION OF MODERN WORK	41
2.5. DISCUSSION: TOWARDS AN OPERATIONAL DEFINITION	47

CHAPTER 3: LABOUR AND ABSTRACTION	56
3.1. FROM WORK TO <i>LABOUR</i>	56
3.2. <i>ABSTRACTION</i>	64
3.2.1. Industrial Capitalism and <i>Abstraction 1.0</i>	72
3.3. BEYOND <i>LABOUR</i> : <i>ABSTRACTION 2.0</i>	80
3.3.1. Post-Industrialist Production and <i>Social Factory</i>	80
3.3.2. Symbolic Production and <i>Abstraction 2.0</i>	88
CHAPTER 4: BEYOND DIGITAL LABOUR	97
4.1. DIGITAL LABOUR AND BLINDSPOT DEBATE	98
4.2. INQUIRY INTO DIGITAL MODE OF <i>ABSTRACTION</i>	103
4.2.1. Rationale and Methodology	103
4.2.2. Sources of Revenues and (Surplus) <i>Value</i>	108
4.2.3. An Overview of Content Curation through Algorithms	125
4.2.4. Regulation of Ads and <i>Surplus Value</i>	128
4.3. REFLECTIONS OF <i>ABSTRACTION 3.0</i>	133
CONCLUSION.....	138
REFERENCES.....	143
APPENDICES.....	159

LIST OF ABBREVIATIONS

AD	Advertisement
ATM	Automated Teller Machine
CPM	Cost Per Mille
CPT	Cost Per Thousand
DAU	Daily Active Users
FAQ	Frequently Asked Questions
FYI	For Your Information
G7	Group of Seven
GDP	Gross Domestic Product
ID	Identity
IPO	Initial Public Offering
MAU	Monthly Active Users
NASDAQ	National Association of Securities Dealers Automated Quotations
OECD	Organization for Economic Co-operation and Development
SEC	The U.S. Securities and Exchange Commission
SNS	Social Network Sites

LIST OF FIGURES

Figure 3.1. Share of Main Activities in Employment, selected OECD economies, 1700-2002, in %	85
Figure 3.2. Share of manufacturing in total employment, G7 countries, 1970-2003, in %	86
Figure 3.3. Upgrade of <i>Abstraction 1.0</i> to <i>Abstraction 2.0</i>	95
Figure 4.1. Number of Active Users of Social Media Platforms (millions)	106
Figure 4.2. Proportions in Facebook's Revenues (%)	111
Figure 4.3. Revenues from Payments and Other Fees (in million \$)	113
Figure 4.4. Advertising Revenues (in million \$)	114
Figure 4.5. The Rate of Yearly Increase in Advertising Revenue Compared to <i>DAU</i> and <i>MAU</i> (%)	117
Figure 4.6. The Rate of Yearly Change in Ad Revenue Compared to Change in the Number of Delivered Ads and the Average Price of Ads	120
Figure 4.7. Feedback Options to the Ads	129
Figure 4.8. Personal “Ad Preferences” Panel of A User	135

LIST OF TABLES

Table 2.1. Conceptualizing Work	49
---------------------------------------	----



ABSTRACT

Labour has been discussed regarding many facets of it in social, economic, technological, and cultural domains. With the advancements in digital technologies, labour has been revisited in recent years and these discussions lead to the manifestation of digital labour. The objective of this thesis is to inquire into work (as a word, concept, and experience) and labour to critically analyze the distinctions between generic productive activities and *value*-generating activities of people. Through this inquiry, it is aimed to reassess the productive contribution of any individual (user) in capital accumulation of the contemporary informational capitalist revenue-generating model of social media. This reassessment shows us the need for an understanding “labour” of social media users beyond digital labour. This thesis proposes the theory of *abstraction* that refers to an immersive mechanism beyond (digital) labour. It manifests how the necessary connection between work, product, and a worker is being abstracted (throughout history) at three modes: *Abstraction 1.0* (industrial mode), *Abstraction 2.0* (post-industrial mode), *Abstraction 3.0* (digital mode). By conducting an etymological, lexical, and conceptual analysis of work and labour it is aimed to reach a comprehensive critical discussion of production and consumption at each mode concerning (abstract) *value*. Finally, *value*-generating activities (that is *labour*) of social media users are inspected through analysis of official financial reports and releases of Facebook. As a result, it is found that the principal source of value is the backend algorithmic operations that manipulate supply and demand of the advertisements displayed on Facebook, rather than the attention time of social media users. These operations construct a model of capital accumulation that functions as an abstracting, self-referential, machine-learning-based, and digital mechanism. It also reveals a new way of *value* production, which is sophisticated and far beyond the concept of labour.

Keywords: Digital Labour, Labour Theory of Value, Work, Social Media, Consumption

ÖZET

Emek kavramı sosyal, ekonomik, teknolojik ve kültürel veçheleri üzerinden tartışılmaya devam eden bir araştırma konusu olarak güncelliğini koruyor. Özellikle dijital teknoloji alanındaki yeniliklerle birlikte son yıllarda emek ve çalışma yeniden değerlendirilmeye tabi tutuldu ve bu alandaki tartışmalar dijital emek kavramını ortaya çıkardı. Bu tezin amacı öncelikle çalışma (bir kelime olarak, bir kavram olarak ve bir deneyim alanı olarak) ve emek kavramlarının teorik bir sorgulamasını ortaya koymaktır. Bu sayede genel anlamdaki üretim faaliyetleriyle *değer* üreten faaliyetler arasındaki ayrımlar eleştirel bir incelemeye tabi tutulmaktadır. Bu teorik sorgulama ve eleştirel inceleme üzerinden sosyal medyanın enformasyonel kapitalizm temelli gelir modeli içerisinde bireylerin (kullanıcıların) üretim içeren katılımları yeniden değerlendirilmektedir. Bu değerlendirme sosyal medya kullanıcılarının “emekleri” üzerine yeni bir anlayış ve yaklaşım ortaya koyma ihtiyacını göstermekte, dijital emek kavramının ve bununla sınırlı tartışmaların ötesine geçme gerekliliğini açığa çıkarmaktadır. Bu amaçla, bu tezde üretim ve tüketim olgularını da kapsayan, dijital emeğin ötesinde bir işleyişe sahip *soyutlama* üzerine bir teori ortaya konulmaktadır. Bu teorik sorgulamada çalışma, çalışan ve ürün arasındaki zaruri ve kendiliğinden ilişkinin nasıl soyutlanarak *değere* indirgendiğinin tarihsel akışta üç farklı modda izi sürülmektedir: *Soyutlama 1.0* (endüstriyel mod), *Soyutlama 2.0* (post-endüstriyel mod), *Soyutlama 3.0* (dijital mod). Çalışma ve emek etimolojik, anlamsal ve kavramsal analize tabi tutulmakta, böylece bu üç ayrı modda üretim ve tüketimin (soyut) *değerle* ilişkisi açısından incelendiği kapsamlı bir eleştirel tartışma ortaya konmaktadır. Son tahlilde, soyutlamanın dijital modunu açıklamak için Facebook tarafından beyan edilen resmi finansal raporlar ve ilgili bülten içerikleri analiz edilerek sosyal medya kullanıcılarının *değer* yaratan faaliyetleri (emek) araştırılmaktadır. Sonuç olarak, sosyal medya kullanıcılarının sarf ettikleri bireysel zamandan ziyade gösterilen reklamların arz ve taleplerini manipüle eden arkaplandaki algoritmik işleyişin *değer* üretiminde başat olarak yer aldığı bulgusuna ulaşılmıştır. Bu algoritmik işleyiş, kendini referans alan, soyutlayıcı,

makine-öğrenimi temelli ve dijital tabanlı bir sermaye birikim modeli örneğidir. Bu model, emek kavramının çok ötesinde, karmaşık bir *değer* üretim modelinin varlığını açığa çıkarmaktadır.

Anahtar Sözcükler: Dijital Emek, Emek-Değer Teorisi, Çalışma, Sosyal Medya, Tüketim



INTRODUCTION

The internet and particularly social media have proliferated into our daily lives and have become an essential component of several domains of society, such as production, consumption, recreation and finance. In other words, they are immersed into many practices in almost all operations, actions, procedures and routines of people and organizations. The population of internet users has grown rapidly in the last two decades and has reached more than 4.5 billion. And the high majority of these users have also social media accounts. Today there are more than 3.8 billion social media users worldwide.¹ Due to the significance of this phenomenon, many scholars regard social media as a paradigm and analyze social media's substantial influences on social, economic, political and cultural transformations.

Technological developments -including social media platforms- are certainly happening as a result of the interplay among many paradigms throughout history. So, rather than adopting a technological deterministic approach, focusing on one-way impacts of technology on society, we need to adopt a comprehensive perspective that refers to the development of the environment (e.g. cultural and economic) that established the ground for the emergence of potential technologies. Among the numerous aspects regarding this multifaceted interplay between society and technology, what seemed prominent to us at the beginning of this study is actually due to personal experiences and reasons: we increasingly spend time on social media and this has started to make us feel as if we are working for this platform rather than simply consuming/using it at free will. So we asked ourselves the following question: could our activities and efforts on social media be thought of as a form of work or labour to maintain social media business? As ordinary users, we log in to social media platforms to keep in contact with people, read news and fulfill our social needs. We don't aim to use social media to produce content to go viral or raise our profiles to the level of

¹ Simon Kemp, "Digital 2020: Global Digital Overview," Datareportal, January 30, 2020, accessed December 5, 2020, <https://datareportal.com/reports/digital-2020-global-digital-overview>.

social media influencers. These are tools for us to maintain mundane social relations. That's why we call ourselves "ordinary users". We are differentiated from users who consciously generate content for an objective or end as well as curate their accounts intentionally for a personal project or as a requirement of a job task. This personal question (or casual hypothesis) motivated us to inquire into the work or labour of social media users. Based on our initial question we furthered our inquiry into a grounded thesis.

Firstly, to understand the position of the user as a consumer or as a producer (and worker) we need to analyze the transformation that production and consumption have undergone in the contemporary condition. Here, we can conceive "the contemporary condition" as a new form of capitalism, namely *informational capitalism*.² So in the first chapter, we begin our thesis by analyzing the macro-level developments that shaped the organization of society around production and consumption. In the first chapter, by reviewing the literature we discuss the changing logic of production and consumption as well as the definitions of consumer and producer. At this point, we investigate critically the role of technology, particularly media and communications in these transformations. Within this framework, we aim to discuss the activities or efforts of a social media user as an example of *consumer work*³ and conceive the user as *prosumer* or *producer*.⁴ The first chapter presents a discussion that helps us to conceive production and consumption as sibling experiences in the contemporary informational economy and it proposes an explanation of the recent cultural setting (that is Culture 3.0).

Although the analysis of macro-level transformations in production and consumption gives us an understanding of how social media is part of a wider system, that is *informational capitalism*, we still need to clarify the conceptual or

² M. Castells, "Materials for an exploratory theory of the network society," *British Journal of Sociology* 51, no. 1 (2000): 18, <https://doi.org/10.1111/j.1468-4446.2000.00005.x>.

³ Stephanie Anderson, Kathy Hamilton, and Andrea Tonner, "Social Labour: Exploring Work in Consumption," *Marketing Theory* 16, no. 3 (2016): 383, <https://doi.org/10.1177/1470593116640598>.

⁴ G. Ritzer, P. J. Rey, "From 'Solid' Producers and Consumers to 'Liquid' Prosumers," in *Liquid Sociology: Metaphor in Zygmunt Bauman's Analysis of Modernity*, ed. M. Davis (Farnham: Ashgate, 2013), 160.

terminological confusions. In the second chapter, we aim to look into the various meanings and connotations of work. Here, we apply the etymological and conceptual analysis of work as a word/term, as a concept, and as an experience. We follow the transformations in the meaning of work and worker by investigating the qualities assigned to them throughout history. We have found that work becomes more dependent on institutional relations in time. It has gained dignity and glorified towards modernity and expanded into many domains of life, but its definition has been reduced to the activities made for tangible or identified goals. We conclude this chapter by conducting a critical discussion to reach an operational definition of the modern concept of work so that we differentiate work as a generic, anthropological category from “work” as a modern category which refers to mostly paid employment or consciously performed productive activities for an identified end. Here we claim that ordinary social media use differs from the modern conceptualization of work (paid or unpaid) when it is not done intentionally to create a product.

In the third chapter, we extend our discussion from the modern conceptualization of work to Marx’s concept of *labour*. Firstly we apply etymological and conceptual analyses to solve the controversies around *labour* caused by misreadings of Marx’s texts and lexical ambiguities. We can therefore distinguish between work, labour and *labour*. Here we should clarify that *labour*⁵ refers to *abstract labour* that generates *value* for the capitalist organization. This chapter is a turning point in our analysis because after we specify *labour* as a *value*-generating activity we eliminate other forms of “work” from our scope of analysis. Here we justify that any activity, whether done intentionally or not, whether “productive” or not, could be conceived as *abstract labour* just because of its contribution in generating *value* for a capitalist organization. Based on this conceptual analysis and critical discussion, we also establish the base to explain the first phase of our theoretical proposition: *abstraction*. In this part, we define *abstraction* as the reduction of any quality of people or things into *abstract*

⁵ We write the word “labour” in italic throughout the thesis to denote the meaning of it as defined in the third chapter, refers to the *abstract labour*.

categories to be used in the evaluation of their *values* in capitalist exchange relations. In the third chapter, we put Marx's *abstract labour* and *value theory* into the center of our analysis of the first mode of *abstraction*: *abstraction 1.0*. We conceive Marx's *labour* as a reflection of *abstraction 1.0* which emerged with the modern industrial mode of capitalism.

In the fourth chapter, our purpose is to explain how *labour* as defined in the third chapter has changed into an immaterial form. We propose this mode of *value* production as *abstraction 2.0*. Here we discuss how *value* becomes less dependent on the real *labour* of workers and *abstraction* starts to produce *value* self-referentially. Here we develop our critical analysis by combining theories regarding postmodernity (Baudrillard, Bauman) and considerations by autonomist Marxists (Hardt & Negri, Lazzarato). And we conclude our critical analysis with an explanation of the second mode of *abstraction*. We call this part as "Beyond *Labour*" because this part presents the deviation of the *labour* of the postindustrial period from the *labour* of Marx's times -from the *labour* of the industrial age. Here we underline that we name our theory as *abstraction* because the rational relationship between the worker's real productive activity and the *value* of the product is diminishing in this period and becoming more fluid (or *liquid* as used in Bauman's *liquid modernity*).

In the last chapter, based on the theory of *abstraction* established up to this point, we examine the digital part of this "story". Here we aim to investigate how *abstraction* meets with digital technologies to eventually generate *value* more efficiently. So in this chapter, we aim to understand how value is generated through digital operations and where/which component of these operations are principal for increased *surplus value*. To examine this we analyze Facebook's business and revenue model as a case. We apply the content analysis of the statements in the annual reports released by Facebook between 2012 and 2020. We particularly focus on the sections which help us answer the questions related to *value* generation: From which operations does Facebook substantially generate revenue? Where is the user located in this revenue model? What are the key metrics defined by Facebook to explain surplus and profitability? And what is the

share of users in surplus and profitability? In addition to annual reports, we also examine news releases concerning the updates in the algorithm of Facebook's main advertisement place, the *News Feed*. This place features as the core component for Facebook to efficiently generate revenue. We match the information in the annual reports with the statements in these news releases to make inferences about the impact of the updates on the indicators regarding the performance of the revenue model. In this chapter, we conclude our discussion through an analysis of the text in "About Facebook Ads" page and the "Ad Preferences" panel that are provided by Facebook to give information about what type of information is categorized by the machine learning system to be used for enhanced targeting. Additionally, we support the validity of our discussion by inferring the secondary sources concerning the categorization made by Facebook. At the end of this section, we propose that Facebook's revenue and business model reflect the mechanism of the current mode of *abstraction*, that is *abstraction 3.0*. We define its mechanism as the working -algorithmic- machine that is principal in *value* generation, more so than personal efforts and activities of social media users. It is the model of *abstraction 3.0* which features as underlying omnipresent *labour*. Hence, we see that all qualities of life can be reduced to abstract categories into the virtual domain to be processed by a machine learning system. This tends to operate omnipresently and ubiquitously. And the results of these continuous calculations, which are scores assigned to connections between everything online, are used to define the new version of *exchange value*. So *abstraction 3.0* refers to a new level of assigning meanings and values to the lifeworld, and it goes beyond spheres of production, consumption or recreation. Hence it leads us to be more skeptical regarding differences between work, labour and *labour*. It encapsulates life digitally and presents a new *value*-generating mechanism to the capitalist re-organization of the future.

CHAPTER 1

TRANSFORMATION OF SOCIETY: PRODUCTION, CONSUMPTION AND CULTURE

1.1. FORDISM AND THE CONSUMER SOCIETY

We can follow a series of parallel processes to conceive the interactions between the social structure, production/consumption modes and the mode of communication at different periods of social transformation. From the “modern mode” of society to the postmodern, production and consumption patterns transform paradigmatically with concurrent alterations in communication - from mass communication (mass media) to decentralized-distributed communication (new media).

The first phase in the transformation period, in a broad definition, can be referred to as *modern times*⁶. We can think of factories and stores (shopping malls) as metaphors (or representative contexts) of the social condition of this period. They are at the center of the social life, determining almost every single aspect of life. On the one side, in factories; goods are produced in bulks at low costs. These factories might be -for instance- production units of a luxury car, media companies, advertising agencies etc. On the other -complementary- side, consumers are exposed to numerous products, symbols and meanings via the distribution of physical products and/or cultural commodities. This condition of society can be conceptualized as Fordism –at the risk of reducing the whole social formation to a single term. Robins and Webster define Fordism as a “social system” and list the main components of this mode of society. Firstly, there is “the progressive intrusion into the sphere of reproduction -leisure, the family, and

⁶ Here, we intend to remind Charlie Chaplin’s *Modern Times* (1936).

everyday life- by capitalist social relations.”⁷ Mass production integrates with mass consumption and hence, “*consumerism* as a way of life” grows⁸.

The second component is “the increasing state intervention in the management of society.”⁹ The state tends to control (via its administration and regulations) daily life over both production and reproduction; “extending methods of factory discipline into the state's management of the social totality.”¹⁰ Here, we can remark that this can be achieved through the *apparatus*¹¹ of the modern nation-state. Mass communication is the communication model of the modern nation-state society. As in Fordist production, in the order of the modern nation state, from the center to the periphery, messages are disseminated to the citizens. According to Poster, mass communication and modernism are in the same order, and both are elements of industrial capitalism and modern nation-states. As there is a hierarchy between rulers and citizens, in mass media order there is a hierarchy between the exclusive elites (namely gatekeepers) and the audience. In this positioning, citizens are located principally as the receivers of the messages in the structure of the propaganda model of communication. Media companies are positioned as the elites who create content (images, texts, meanings) centrally and have the power to manipulate public opinion.¹²

The third and fourth components are closely linked and can briefly be stated as “the attempted *capitalist annexation of time and space* respectively.”¹³ According to Robins and Webster, “Fordism extends and deepens that process through which capital has sought to impose its rhythm and tempo upon time and

⁷ Kevin Robins & Frank Webster, “Cybernetic Capitalism: Information, Technology, Everyday Life,” in *The Political Economy of Information*, eds. Vincent Mosco & Janet Wasko (Madison : University of Wisconsin Press, 1988), 49.

⁸ Robins & Webster, “Cybernetic Capitalism.”

⁹ Robins & Webster, “Cybernetic Capitalism,” 50.

¹⁰ Les Levidow & Bob Young, “Introduction,” in *Science, Technology and the Labour Process*, vol. 1, eds. Les Levidow & Bob Young (London: CSE Books, 1981), 5, cited in Robins & Webster, “Cybernetic Capitalism,” 50.

¹¹ *Apparatus* is used in relation to Althusser’s definition of “ideological state apparatus.” See L. Althusser, “Ideology and Ideological State Apparatuses (Notes Towards an Investigation),” in *The Anthropology of the State: A Reader*, eds. Aradhana Sharma & Akhil Gupta (Wiley-Blackwell, 2006), 86-98.

¹² Mark Poster, *The Second Media Age* (London: Polity, 1995), cited in V. Miller, *Understanding Digital Culture* (London: Sage, 2011), 1.

¹³ Robins & Webster, “Cybernetic Capitalism,” 50.

time-consciousness.”¹⁴ This refers, in every scale of daily life, to the fragmentation of time and distribution of space to be used efficiently in production or consumption. An instance of this *annexation* is the disappearance of the separation between work and leisure space/time. There is an ongoing process in which "leisure" and "free" time are being “subsumed under the regime of consumerism.”¹⁵ The population is disciplined into spending leisure time and purchasing goods to feed the capitalist system.¹⁶

The disappearance of the distinction between work time and leisure time refers to a significant change in human experience. This leads to the domination of the consumption culture over the whole daily life remaining after work time. The market starts to manage the formulation and dissemination of needs. The “rational” relation between products and their *use value*¹⁷ is disrupted. And this disruption steps at high speed, utilizing the capabilities of the industry and the market. Another dimension of this condition is the disappearance of the “rational” flow between production units and shopping units, namely between factories and stores (which are mentioned above as the metaphors or representative contexts of the modern social condition). This disappearance can be conceived as the loss of the “rational” – and natural- relation between production and consumption, *use value* and needs, the natural and the artificial. Ritzer clarifies the manipulation of the relation between production and consumption by reference to Baudrillard as follows:

To Baudrillard, consumption is not merely a frenzy of buying a profusion of commodities, a function of enjoyment, an individual function, liberating of needs, fulfilling of the self, affluence, or the consumption of objects. Consumption is an order of significations in a ‘panoply’ of objects; a system, or code, of signs; ‘an order of the manipulation of signs’; the manipulation of objects as signs; a communication system (like a language); a system of

¹⁴ Robins & Webster, “Cybernetic Capitalism,” 54.

¹⁵ Robins & Webster, “Cybernetic Capitalism,” 54.

¹⁶ L. King, “Information, Society and the Panopticon,” *The Western Journal of Graduate Research* 10, no.1 (2001): 44.

¹⁷ *Use value* is used in reference to the Marxist value theory of labour.

exchange (like primitive kinship); a morality, that is a system of ideological values; a social function; a structural organization; a collective phenomenon; the production of differences; `a generalization of the combinatorial processes of fashion`; isolating and individualizing; an unconscious constraint on people, both from the sign system and from the socio-economico- political system; and a social logic.¹⁸

Products emerge as the solution for every condition of life and this, in turn, constructs a social reality that is inseparable from the consumption culture. “The cumulative effect is the conviction that for every human problem there is a solution waiting somewhere in the shop and that the one skill men and women need more than anything else is the ability to find it.”¹⁹ Consequently, the logic of the market becomes an irreplaceable element of daily life; so that dependency on it deepens day by day.

Massification of the symbolic production and consumption dominate social reality into a cultural totality so that it leads into “mass deception” in the words of Horkheimer and Adorno.²⁰ Within the aura of this deception, according to Bauman the market is located as:

the pivotal institution of contemporary Western society - an institution which renders its own position unassailable through its ability to produce and reproduce a total dependency on itself – “consumer culture” becomes, in most analysts' view, an irremovable attribute of our times. Consumer culture is a culture of men and women integrated into society as, above all, consumers.²¹

Here, it would not be wrong to say that Bauman places hierarchy between the market and the people. The market seems as the ruling institution which holds the power. Its logic is internalized by members of the society. “The market, with price

¹⁸ G. Ritzer, introduction to *The Consumer Society: Myths and Structures*, by J. Baudrillard (Sage, 1998), 14-5.

¹⁹ Z. Bauman, *Legislators and Interpreters* (Cambridge: Polity, 1987), 165.

²⁰ T. Adorno & M. Horkheimer, “The culture industry: Enlightenment as mass deception,” in *Media and cultural studies: Keywords*, eds. Meenakshi Gigi Durham & Douglas Kellner (Wiley-Blackwell, 2001), 71-101.

²¹ Bauman, *Legislators and Interpreters*, 166.

and 'effective demand' holding the power of distinguishing between true and false, good and bad, beautiful and ugly.”²² But, the pivotal role of the market is based on the replacement of a prior hierarchy. This is called a “post-culture” era by Steiner. In this period the hierarchic differences between the high culture and low culture, the West and the others, upper and the lower strata diminishes.²³ The market constructs a totality and saturates all the differences within its logic. Bauman by citing Steiner, explains his conception as:

Not all sociologists studying modern culture would go all the way with Steiner's apocalyptic forebodings, but most would agree with the substance of his diagnosis: the once uncontested hierarchy of cultural values has crumbled, and the most conspicuous feature of Western culture today is an absence of grounds on which authoritative judgements of value can be made.²⁴

At this point, we can ask this question: What does the market really offer which makes it so dominant? The answer is simple: Signs and meanings. On one level, we can talk about the functions of products which make it easier for consumers to achieve some of the daily tasks, and these functions address directly to human needs. This is the functional aspect of a good, literally. On another level there are meanings of this product (under the tag of brand) which are not directly related with its bare function. In the consumer society, these signs, connotations and meanings drive how consumers evaluate the value of that product. Signs and symbols constitute a sphere of consumerist life. These signs and symbols shift the natural relation between the object and the need; consequently they leads to an irrational, “hysterical/psychosomatic conversion”:

Objects and needs are here substitutable, within reason, like the symptoms of hysterical or psychosomatic conversion. They obey the same logic of slippage, transference, limitless and apparently arbitrary convertibility. When an illness is organic, there is a necessary relation between symptom

²² Bauman, *Legislators and Interpreters*, 158.

²³ G. Steiner, *Extraterritorial: Papers on Literature and the Language Revolution* (London: Atheneum, 1976), 163-179.

²⁴ Bauman, *Legislators and Interpreters*, 156.

and organ (similarly, when taken as an appliance or tool, there is a necessary relation between the object and its function). In hysterical or psychosomatic conversion, the symptom is, like the sign, (relatively) arbitrary: there is a chain of somatic signifiers--migraine, bowel disorder, lumbago, throat infection, general fatigue--along which the symptom 'wanders', just as there is a long sequence of signs/objects or symbols/objects over which wander not needs (which are always linked to the rational finality of the object), but desire and a further determination which is that of the unconscious social logic.²⁵

This conversion generates a new economy which can be referred to as an "economy of symbolic or cultural goods."²⁶ In this economy, consumers primarily purchase the sign-values of commodities. Through these values, each individual can borrow temporal identities through consumerist practices. Mass media and in a broad sense culture industries serve as the platforms which offer an endless exchange of meanings, connotations and signs. Especially, advertising and marketing institutions are crucial factories of meaning generation and dissemination:

The world of goods in industrial society offers no meaning, its meaning having been "emptied" out of them. The function of advertising is to refill the emptied commodity with meaning. Indeed the meaning of advertising would make no sense if objects already had an established meaning. The power of advertising *depends* upon the initial emptying out. Only then can advertising refill this empty void with its own meaning. Its power comes from the fact that it works its magic on a blank slate.²⁷

Hereby, institutions like advertising agencies, televisions and marketing agencies steer the construction of the consumption culture. All objects of the "real" world are glamourized with loads of connotations. While a washing

²⁵ J. Baudrillard, *The Consumer Society: Myths and Structures* (Sage, 1998), 78.

²⁶ M. J. Lee, *Consumer Culture Reborn: The Cultural Politics of Consumption* (London: Taylor & Francis, 2003), 29.

²⁷ S. Jhally, "Advertising as Religion: The Dialectic of Technology and Magic," in *Cultural Politics in Contemporary America*, eds. I. Angus & S. Jhally (New York: Routledge, 1989), 221.

machine at first-hand serves as an equipment which helps to ease a particular part of daily housework; now, beyond its firsthand function, it carries elements of abstract values such as luxury, prestige, manifestations of gender roles etc. Baudrillard calls this second field as the “field of play” in which all objects “serve as a fluid and unconscious field of signification.”²⁸ Again, we can notice that in this conceptualization it is assumed that there is a hierarchy between these institutions and consumers. Appadurai barely claims the existence of hierarchy at the global setting and stresses that global advertising agencies disseminate images and the ultimate result is the distorted view of the world. And this is “so subtle that the consumer is consistently helped to believe that he or she is an actor, where in fact he or she is at best a chooser.”²⁹

1.2. TOWARDS THE PROSUMER/PRODUSER AGE

1.2.1. The Information Society

We can start this section of this chapter with a few questions, by linking the last sentences of the previous section: Does the consumer really not have any control, participation or contribution in sign-value production and dissemination in the culture industry? Is this a “caste system” in which consumers are helpless to recognize the subtle content delivered to them? Are they just passively receiving whatever the powerful send within the (so-called) vertical architecture of communication in the modern setting? Aren’t they able to differentiate the subtle content from the content on the surface? (Or is it better to put aside these binary oppositions and hierarchies which might be unable to explain the contemporary - postmodern- condition?)

For a better understanding of the contemporary condition of the consumer society and the role of communication technologies in this condition, we need to elaborate on the social change based on the developments in production and

²⁸ J. Baudrillard, *Selected Writings* (Cambridge: Polity, 1988), 44.

²⁹ A. Appadurai, “Disjuncture and Difference in the Global Cultural Economy,” *Theory, Culture & Society* 7, no. 2 (1990): 307.

technology. The developments in computer and information technologies are analyzed by several theorists to elaborate social, economic, cultural and political transformations. One of the prominent thinkers addressing the relationship between information technologies and transformations of the social structure is Manuel Castells. According to Castells, “we have entered a new technological paradigm, centered around microelectronics-based, information and communication technologies, and genetic engineering.”³⁰ What makes this new condition exceptional is the role of a new set of information technologies which drives a paradigmatic shift in the mode of production. If we refer to the Industrial Revolution to express the major changes in every aspect of life through industrialization, this one can be called the Information Revolution first phase of which was the impact of the printing machine on society.

According to Castells, the elements which are primary in supporting productivity in the production process are those that characterize modes of (socio-economic) development. In the agrarian mode of development (pre-industrialist), the increasing surplus in the production process was based on the increase in labor and natural resources (particularly land). Labor and natural resources were the elements defining the social condition related to production and consequently consumption. In the industrial period (or mode of development), the core source of productivity relied upon the new energy sources and its decentralized use throughout the processes of production and circulation. In that period production could be standardized through machines so that mass production could be achieved. With the significant reduction in costs to produce and distribute products, the massification of consumption emerged symbiotically with the emergence of mass production. For the contemporary condition, in the informational mode of development, the core element of productivity is based on the “technology of knowledge generation, information processing and symbolic communication.”³¹ Castells acknowledges that information was always critical in

³⁰ M. Castells, “Materials for an exploratory theory of the network society,” *British Journal of Sociology* 51, no. 1 (2000): 10-11.

³¹ M. Castells, *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, vol. 1 (Oxford: Blackwell, 1996): 16-17.

all prior modes of development because production and productivity need some level of knowledge, The point that makes the informational mode of development unique is the “action of knowledge upon knowledge itself as the main source of productivity.”³²

Another thinker, Manovich (who can be referred to as a “technological determinist”) addresses the introduction of new computer and media technologies particularly and names this process as a “revolution” by comparing the previous advancements in media:

This new revolution is arguably more profound than the previous ones, and we are just beginning to register its initial effects. Indeed, the introduction of the printing press affected only one stage of cultural communication – the distribution of media. Similarly, the introduction of photography affected only one type of cultural communication – still images. In contrast, the computer media revolution affects all stages of communication, including acquisition, manipulation, storage, and distribution; it also affects all types of media – texts, still images, moving images, sound, and spatial constructions.³³

This revolution constructs a new social structure: Information Society. Here, “the term ‘informational’ indicates the attribute of a specific form of social organization in which information generation, processing, and transmission become the fundamental sources of productivity and power because of new technological conditions emerging in this historical period.”³⁴

The new structure is tied to a new economy (namely *informational capitalism*) which has three fundamental features. Firstly, this economy is informational, because “the capacity of generating knowledge and processing/managing information determine the productivity and competitiveness of all kinds of economic units, be they firms, regions, or countries.”³⁵ Secondly, it is global. It has “the capacity to work as a unit on a planetary scale in real time or

³² Castells, *The Rise of the Network Society*, 17.

³³ L. Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001), 19-20.

³⁴ Castells, *The Rise of the Network Society*, 21.

³⁵ Castells, “Materials for an exploratory theory of the network society,” 10.

chosen time.”³⁶ Thirdly, the new economy is networked. “ At the heart of the connectivity of the global economy and of the flexibility of informational production, there is a new form of economic organization, the network enterprise [...] It is a network made from either firms or segments of firms, and/or from internal segmentation of firms.”³⁷ This is a version of the capitalist economy which is formed through the restructuring that took place around the late 1960s and 1970s.³⁸ Castells refers to this “new” form of capitalism as *informational capitalism*, which is a new techno-economic system.³⁹ In this computerized capitalist system, all the human knowledge (information, images, ideologies, symbols, cultures etc.) in the form of data, can be conceived as equal to commodity.⁴⁰ This commodification of human knowledge is assured via the information technologies which enable the high-speed information flow beyond geographical, spatial and temporal borders.

The *networked informational capitalism* constructs an extended version-form of the consumer society. Robins and Webster explain how home life is reigned by capital and how everyday life becomes more exploited:

[...] an increasing number of social functions and activities will be mediated by the domestic television console: not just entertainment, but also information services, financial and purchasing transactions, communication, remote working, medical and educational services. Through the television console, and it alone, we shall gain access to what has been called the "network marketplace." In order to become socially and culturally enfranchised, the individual household must necessarily become heavily capitalized, investing in the essential video, communications, videotex, and computing technologies. Technologies will proliferate in the homes to

³⁶ Castells, “Materials for an exploratory theory of the network society,” 10.

³⁷ Castells, “Materials for an exploratory theory of the network society,” 10.

³⁸ Castells, “Materials for an exploratory theory of the network society,” 16.

³⁹ Castells, “Materials for an exploratory theory of the network society,” 18.

⁴⁰ A. Toffler, *Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century?* (New York: Bantam, 1990), 66.

mediate the work of consumption and reproduction, to facilitate the increasingly demanding and complex experience of everyday living.⁴¹

In their analysis, Robins and Webster call the information revolution as “both an intensification and, in important ways, a reconfiguration of Fordism as a way of life.” The new information and communications technologies are “the filaments through which power and control will invade the social body as a whole.”⁴² They assure the same dissemination of power and control as in Bentham’s *Panopticon* but now there are no architectural constraints of its “stone and brick prototype.”⁴³

Conceptualizing information society as an intensified-extended version of the consumer society, or literally as “the consumer society v. 2.0” leads us to define consumers as passive actors and sketch them as more helpless and dominated in this new condition. This might not be the real case. It is better to prefer a balanced view which acknowledges the role of the consumer (the user) in text-meaning production. Fiske underlines this point of view:

A homogeneous, externally produced culture cannot be sold ready-made: culture simply does not work like that. Nor do the people behave or live like the masses, an aggregation of alienated, one-dimensional persons whose only consciousness is false, whose only relationship to the system that enslaves them is one of unwitting (if not willing) dupes. Popular culture is made by the people, not by the culture industry. All the cultural industries can do is to produce a repertoire of texts or cultural resources for the various formations of the people to use or reject in the ongoing process of producing their popular culture.⁴⁴

Fiske’s proposition can be claimed as an interpretation of de Certeau’s arguments about tactics as a form of resistance.⁴⁵ Consumers are adopting tactics against the strategies of the industry. They manipulate, modify, use or reject through various consumption practices. In this respect, “consumption is a tactical raid on the

⁴¹ Robins & Webster, “Cybernetic Capitalism,” 54.

⁴² Robins & Webster, “Cybernetic Capitalism,” 52.

⁴³ Robins & Webster, “Cybernetic Capitalism,” 59.

⁴⁴ J. Fiske, *Understanding Popular Culture* (London: Unwin Hyman, 1989), 23-4.

⁴⁵ Y. Gabriel, & T. Lang, *The Unmanageable Consumer* (Sage, 2015), 154.

system.”⁴⁶ From this perspective, consumers might be seen as the readers of texts but they also participate/contribute the meaning formulation process of texts. In this manner, reading is a form of rewriting contextually -and individually. This view reminds us also of the *Uses and Gratifications Theory* which suggests that media users are actually active in their selections of media products. They are “aware” while they’re consuming a cultural good (e.g. watching a talk show on TV). They simply seek to gratify their needs.⁴⁷ Fiske in another essay, in *The Commodities of Culture*, goes a step further and supposes that media consumers (the audience) are also producers. All commodities have not only functional values but also cultural values. This is a cultural economy in which meanings and pleasures circulate. Here, “the original commodity” is the text, it is the “discursive structure of potential meanings and pleasures.”⁴⁸ And the audience is the producer of these meanings and pleasures while they are consumers at the same time.⁴⁹

1.2.2 Prosumption, Prosumer/Produser in New Media

Literally, the actualization of consumers’ role as producers has been achieved through another revolutionary change: Introduction of New Media (particularly Web 2.0). This is not separated from *the Information Revolution* which is explained by Castells and Manovich above. Step by step, with the intensification of information and media technologies, the participation of users (the audience) in content (and/or text) production increased from the last decade of the 20th century to now. Indeed, this phenomenon was not new in theory. The concept of *prosumption* (and *the prosumer*) was coined by Alvin Toffler decades ago.⁵⁰ This concept refers to the interrelated/interdependent nature of processes of production and consumption. Ritzer clearly puts out this dialectic that “There is no such thing as either pure production (without at least some consumption) or

⁴⁶ Fiske, *Understanding Popular Culture*, 35.

⁴⁷ E. Katz & J. G. Blumler, *The Uses of Mass Communications: Current Perspectives on Gratifications Research* (Sage, 1974).

⁴⁸ J. Fiske, “The Commodities of Culture,” in *The Consumer Society Reader*, ed. M. Lee (Oxford: Blackwell, 2000), 283.

⁴⁹ Fiske, “The Commodities of Culture.”

⁵⁰ A. Toffler, *The Third Wave*. (New York: Bantam Books, 1980).

pure consumption (without at least some production); the two processes always interpenetrate.”⁵¹ With the increased proportion of self-service applications especially in the service industry, the contribution of consumers in finishing some consumption tasks is interpreted as a form *presumption*. Self-service gas stations, ATM machines, electronic check-in and ticketing kiosks in airports are some examples of these applications in which consumers “work” in the delivery of the services to them.⁵² But most of these applications can be conceived under the term of “working consumers” which refers to the collaboration of consumers to make the consumption experience easier, faster or more social. Additionally, these applications are mostly company-driven. Companies develop solutions, applications, interfaces and architectures for “working consumers,” such as self-service applications and try to encourage them to participate in production, design, delivery and after-service processes. The basic rationale is generally the same: maximizing sales while reducing production and delivery costs in collaboration with customers.

The participation of consumers in meaning generation is certainly beyond the concept of working consumers. Additionally, it can’t be explained only referring to the resistance of consumers through rewriting, modifying, manipulating the text by means of tactics –as Fiske puts out. Otherwise consumers gratifying their needs actively through various uses would be only a limited aspect of this phenomenon –as suggested by *Uses and Gratifications Theory*. Mostly, these theories conceptualize the responses of consumers at the secondary level: after-or-in consumption of a good (cultural or physical), not in-or-before the production. What makes the change paradigmatic in the role of consumers in the total production of cultural goods is their active, instant and major (pivotal) contribution in content (image and text) production.

The paradigmatic change can be understood by underlining briefly the transformation from mass media to new media; Web 1.0 to Web 2.0. This

⁵¹ G. Ritzer, “Automating Prosumption: The Decline of the Prosumer and the Rise of the Prosuming Machines,” *Journal of Consumer Culture* 15, no. 3 (2015): 408-9.

⁵² Ritzer & Rey, “‘Liquid’ prosumers,” 160.

transformation has led a new setting in which everyone can be a practitioner. Until the emergence of the internet and the first versions of interactive websites, mass media was the dominating force that steers the creative and cultural industries. Televisions, radios, newspapers and the film industry were at the core of the production of the text. This mode of media was based on centralized and one-to-many communication, from the center (the institution) to the periphery (the audience). As mentioned in previous sections, it was the media of the modern industrial society. With the introduction of the internet, people had the chance to create and disseminate content. But in the first years of the internet, there was not much opportunity for users to achieve this function. Consumers/users were mostly the readers of websites; or at the most they have the opportunity to comment/discuss in websites and forums under the permission of the webmasters, discussion boards and forum managers. This type of communication was an extension of the old/mass media in which gatekeepers direct the content production. Web 2.0 changed this setting. Straubhaar, LaRose and Davenport define Web 2.0 as:

Web 2.0 [...] is the trend in which ordinary users collaborate to create content by posting comments to blogs, maintaining personal profiles on Facebook, uploading their homemade videos to YouTube, contributing articles to Wikipedia, or sharing random thoughts on micro-blogs like Twitter.⁵³

New media is the infrastructure that serves users to enjoy producer role at the same time. This phenomenon is also called a *produser* which is strongly linked to the concept of *prosumer*, adopting the same interpretation that puts out combining the production and consumption roles of the user.⁵⁴

The media of the contemporary condition, which can be defined as – postmodern- *informational capitalism*, is new media. User-generated-content is at the core of the creative and cultural production of this media. The networked

⁵³ J. Straubhaar, R. LaRose & L. Davenport, *Media Now: Understanding Media, Culture and Technology* (Boston: Wadsworth, 2012), 252.

⁵⁴ A. Bruns, *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage* (New York: Peter Lang, 2008).

(nodal) mode of new media allows distributed architecture so that every user can share content collectively. New media are “digital, interactive, social, asynchronous, multimedia, and narrowcasted.”⁵⁵ Through social interaction people create content and this content is digitally reproduced and disseminated to millions in milliseconds.

1.3. DISCUSSION: FROM CULTURE 1.0 TO CULTURE 3.0 RETHINKING CULTURAL PRODUCTION AND CONSUMPTION

The transformation of society from the pre-industrial to industrial and lastly to the post-industrial condition can be described based on different focal points of any analysis. You can analyze the political, economic aspects or only technological advancements in time. While trying to elaborate the condition of consumerist culture in different periods, up to this point in this chapter we aimed to discuss the transition points in modes of developments in production in connection with the change in consumption by considering new technological opportunities in communication. This is also a story of the changing roles of audiences from consumers of the media content to contributors in cultural production. The parallel patterns which are pointed out here are the ones from the Fordist period of social condition to the contemporary condition; from mass media to new media; from manuscripts, paintings, printing machine and photography to radios and televisions; from radios and televisions to the internet and social media platforms.

The whole process can be conceived comprehensively by putting culture as the focal point of this discussion. In the pre-industrial form⁵⁶, culture was “the collective product and cherished possession of the intellectuals [...]”⁵⁷ For this period, we can’t describe culture as an economy or industry. Culture is an

⁵⁵ Straubhaar, LaRose & Davenport, *Media Now*, 21.

⁵⁶ As we cited Castells in previous sections, this period is also defined as the agrarian mode of development in which the core elements of productivity are labor and natural sources of the country.

⁵⁷ Bauman, *Legislators and Interpreters*, 154.

imagination of *les philosophes*. They dream of shaping a unified personality and individuality. This conceptualization of personality is far from the consumer or today's individual. It assumes to shape a cultivated man which is at the center of the civilization. This is a form of collective self that reaches perfection through cultivation. Arnold puts out this idea of perfection as:

[...] it is clear that culture ... has a very important function to fulfill for mankind. [...] Indeed nearly all the characters of perfection, as culture teaches us to fix them, meet in this country with some powerful tendency which thwarts them and sets them at defiance... The idea of perfection as a general expansion of the human family is at variance with our strong individualism, our hatred of all limits to the unrestrained swing of the individual's personality, our maxim of "every man for himself."⁵⁸

On the opposite side of Culture, Arnold puts anarchy. As a civilizing project, Culture is expected to humanize and reshape the life of the people of a country, and society as a whole.

Arnold's conceptualization of culture represents the ideology on the culture of the times of Culture 1.0 - in Sacco's words. The cultural/creative producers of that time are the intellectuals. They are part of the patronage system:

Patrons, namely, people with large financial possibilities and high social status, who derived their wealth and status from sources other than cultural commissioning in itself, but decided to employ some of their resources to ensure that cultural producers could make a living, thereby getting the possibility to enjoy the outcome of creative production and to share it with their acquaintances.⁵⁹

As Sacco states clearly, in this period there is not a "sector" that finances producers by gathering revenues from consumers. There is not a developed financial market between the production of cultural goods and consumption by

⁵⁸ M. Arnold, "From 'Culture and Its Enemies,'" in *The Broadview Anthology of Victorian Prose 1832-1901*, ed. Lisa A. Surridge & Mary Elizabeth Leighton (Peterborough: Broadview Press, 2012), 241.

⁵⁹ Pier Luigi Sacco, "Culture 3.0: A New Perspective for the EU 2014-2020 Structural Funds Programming," *OMC Working Group on Cultural and Creative Industries* (2011): 5.

ordinary people. The population of cultural producers was limited and they were also dependent on “the discretionary power of the patron, and very limited audiences.”⁶⁰ In other words, there is no “the consumer” of a developed industry. There is no market transaction as in the times of the industrial period, but the mutual exchange of gifts.⁶¹

With the comprehensive social, economic, political and cultural changes that emerged through industrialization, production and consumption modes of culture also alter. This phase is the period which is also called Fordism. However, Fordism refers to the whole production and manufacturing mode of the industrial society; if we limit our discussion to the production and consumption of cultural goods, we can define it as Culture 2.0. In this phase, we witness the emergence of the mass production of all goods including cultural goods as well as their mass consumption. Instead of the economic relations based on the limited and mutual exchange between privileged classes (as in Culture 1.0), here we witness the possibility that creative industries can generate economic value so that they can patronize the production itself. Thus, there is an emergence of a new patron: The market. Sacco defines this phase as “an explosion of the size of cultural markets.”⁶² There are thousands of customers; there is a huge sector in which advertising companies try to manipulate the preferences of the people so as to manage consumption. Popularity becomes one of the main determinants of production. The logic of the market is at the central point that defines what a cultural good should signify.

Here we need to think about this massive change by considering the role of the modern nation-states too. In the political domain consumers of cultural products are at the same time citizens of the modern nation-states. There is an explosion of demand at that time and not only the market but also the modern nation-state plays a role in defining culture and cultural production. As Sacco puts it:

⁶⁰ Sacco, "Culture 3.0," 5.

⁶¹ Sacco, "Culture 3.0," 5.

⁶² Sacco, "Culture 3.0," 7.

[...] with the development of the modern nation states one witnesses the emergence of forms of “public patronage”, with the state devoting public resources to the support of culture and the arts to the benefit of the society as a whole – and thus, it becomes possible to speak of cultural public policies, and of the corresponding cultural policy models.⁶³

In the Culture 2.0 phase there are major institutions that aim to drive production and consumption. On the one side, the nation-state has major regulating institutions to manage cultural/creative industries. Through laws, funding, supervising and its own public broadcasting firms, it tries to determine which content its citizens should access, which “culture” its citizens should consume. On another side (not the opposite though), there are huge mass media companies such as Time-Warner, Springer, Demirören Medya etc. These companies – by trying not to violate the national laws of the modern states – try to steer the cultural production and consumption globally. As a whole, the market is driven in negotiation by powerful-ruler actors: Nation-states and global capitalist corporations.

The paradigmatic change, particularly in the production side of this story happens with the emergence of Culture 3.0. According to Sacco, in Culture 2.0 “audiences expand significantly, whereas cultural production is still severely controlled by entrance barriers as the access to productive technologies is difficult and financially expensive.”⁶⁴ As underlined before, the huge institutions of this phase (Culture 2.0) control strictly what should be produced and disseminated to the masses. They have the power to define the shape and the content of the cultural goods through regulations (laws) and/or national and/or global capital. But “the Culture 3.0 revolution is characterized by the explosion of the pool of producers.”⁶⁵ In Culture 3.0 we witness the huge and significant expansion of production possibilities. The innovations in technology give opportunity for everybody to create his/her own content.⁶⁶ This is also the time in which the strict

⁶³ Sacco, “Culture 3.0,” 6.

⁶⁴ Sacco, “Culture 3.0,” 6.

⁶⁵ Sacco, “Culture 3.0,” 7.

⁶⁶ Here, the content should be understood as equal to text in broad sense.

distinction between producer and consumer; production and consumption are disappearing to a large extent.

In the Culture 3.0 phase, we can hear some concepts related to *prosumer/produser* which refer to the collective production of the text: “social media: co-creation, mass collaboration, social production, commons-based peer production, mass customization, prosumption, produsage, crowdsourcing, open source, social production, user-generated content, user participation, folksonomics, wikinomics.”⁶⁷ All of these concepts are related with different versions or layers of producer roles of consumers. There would be variations of these concepts which refer the contribution of “ordinary” people in the collective, the total accumulation of content on new media. This is not just elaboration of this phenomenon through the conceptualization of production and consumption; we may think of this new condition as a new social existence or culture. Inside this new condition, media can be seen as “infrastructures” which incorporate “the artifacts or devices used to communicate or convey information, the activities and practices in which people engage to communicate or share information, and the social arrangements or organizational forms that develop around those devices and practices.”⁶⁸ Here, everyday activities, feelings, opinions, daily happenings are all shared continuously. As an example, Facebook has an interface called “*News Feed*” in which you can see your friends’ photos from a trip, an advertisement of a fast-food company, an extract of an academic article, or a post by a classmate sharing his/her instant mood. *News Feed* is almost endless; it shows stories on a rolling basis if you go on scrolling down. Twitter has also a similar structure that shows tweets on a rolling basis. Within this limitless field, you can share and find content about almost every issue.

⁶⁷ E. Fisher, “The Political Economy of Social Media,” in *Encyclopedia of Social Media and Politics*, ed. K. Harvey (Thousand Oaks: Sage, 2014), 985.

⁶⁸ L. Lievrouw & S. Livingstone, *Handbook of New Media* (London, UK: Sage, 2004), cited in M. Deuze, “Living in Media and the Future of Advertising,” *Journal of Advertising* 45, no. 3 (2016): 326.

Social media as a speaker's corner or as a blank sheet makes it possible for users to converge all their experience in media. There are still other forms of mass communication but all information converges into each other. Mark Deuze calls this phenomenon as "living in media rather than with media":

Media are to us as water is to fish. This does not mean life is determined by media; it just suggests that, whether we like it or not, every aspect of our lives takes place in media and that our engagement with media in many ways contributes to our chances of survival.⁶⁹

This is a new cultural and social condition in which every aspect of life should be analyzed and conceptualized by considering the *mediatization* processes. The authenticity of the experience is disrupted. This cultural condition can be named as Culture 3.0 whereas Culture 1.0 is the typical model of pre-industrial society; Culture 2.0 is the model of industrial (Fordist) society and it is the condition of mass production and communication. In Culture 3.0 audiences perform their life as practitioners who can "develop their own capabilities to assimilate and manipulate in personal ways the cultural contents they are being exposed to."⁷⁰ For this new condition, we need to acknowledge that the institutions of the Culture 2.0 phase have not disappeared. Or they have not substituted totally by free, independent actors such as social media users. On one side nation-states are trying to regulate new media applications; additionally, they are performing as content creators on new media. State officials and the official subsidiaries of the state have verified social media accounts. Differently from the Culture 2.0 times, it is difficult to say that they are dominating nationally or globally the cultural production. States in this condition direct their capacities at best in surveillance applications to monitor created content more than participating as the pivotal content creator in cultural production. As a supplementary part, they might try to block content partially or attempt to ban all social media platforms. But it is not a suggested way to ban social media completely for a country that aims to be reputed as a democratic country.

⁶⁹ Deuze, "Living in Media and the Future of Advertising," 326.

⁷⁰ Sacco, "Culture 3.0," 7.

On the other side, instead of huge media corporations like Fox, CNN, shared content is mostly generated by individuals. The biggest media companies are the ones that construct platforms as spheres/interfaces which allow users to produce and disseminate their own content, e.g. Facebook, Twitter. From the daily happenings of an ordinary person to a detailed expert opinion you can find endless content that is generated through the efforts of individuals. This condition can also be conceived as the domination or sovereignty of the intellectuals, experts, gatekeepers, editors, and authors, which is shaken in Culture 3.0 phase. This hierarchy is broken in a parallel way to how the proportion of the produced content by huge institutions (nation-states and corporations) has decreased in the global cultural production. Everybody has a chance to access millions of people. An ordinary person can be followed by more people than a public intellectual, political figure, admired author or a popular singer. The center-periphery paradigm can't explain here the decentralized, distributed production of social media users.

As a concluding remark of this section, the popularity of a cultural good is not necessarily determined by a central, dominating actor; it can be random and unpredictable for a cultural good to emerge as a popular good. We can claim this phenomenon as *pop-up culture* instead of "popular culture." Any good can pop-up as a popular product. A tweet can climb to the highest place in the *trending topic* list on Twitter in a few minutes. A short video clip which is produced by an amateur user can be viewed by billions on Youtube in a few days. But this popularity may not last months. It might pop-down suddenly as it had popped-up suddenly. So, while in Culture 3.0 the possibilities of production expand enormously, fluctuations, uncertainties and irregularities in consumption also increase so that it becomes almost impossible to draw precise trajectories.

CHAPTER 2 CONCEPTUALIZATION OF WORK

2.1. WORK: ETYMOLOGY AND EARLY CONNOTATIONS

Work is related to many aspects of human experience. It is “basic to the human condition, to the creation of the human environment, and to the context of human relationships.”⁷¹ Because of its deep ties with cultural and historical domains of society, any attempts to define work will fall behind its various meanings in use throughout the history.

Exploring the etymological roots and the lexical correspondences of work will help us to initialize the investigation of the transformation of the meaning and the status of work over time. In its broadest (and simplest) sense, the word *work* means acting, doing that involves physical or mental activity, or “state of something done.”⁷² The word roots back to the Proto-Indo-European words *wergom*, *werg*, *werg-on* that all mean “to do.”⁷³ These words denote activity and correspond to the words *ergon* (ἔργον), *organon* (ὄργανον) in Greek, *weorc* or *worc* in Old English and *werk* in German.⁷⁴ Frayssé traces the oldest “occurrences” of the English word *work* and claims the oldest use of it occurred in *Beowulf* that is regarded as “the earliest European vernacular epic”⁷⁵ and was composed within a three-hundred-year period between the end of the 7th century and the year 1000 (the birth year of the oldest copy of the text).⁷⁶ In this epic poem *weorc* (coupled

⁷¹ Herbert A. Applebaum, *The Concept Of Work* (Albany: State University of New York Press, 1992), ix.

⁷² John W. Budd, *The Thought Of Work* (Ithaca, N.Y: ILR Press, 2011), 1; *Lexico*, s.v. “work,” accessed January 22, 2019, <https://www.lexico.com/en/definition/work>. *Oxford English Dictionary* (*Lexico*) lists nineteen definitions of *work* as a noun and twenty one definitions as a verb.

⁷³ “Werg-,” Etymonline, accessed 28 January, 2019, https://www.etymonline.com/word/*werg-?ref=etymonline_crossreference; Budd, *Thought of Work*, 1; Frederick C. Gamst, “Considerations of Work,” in *Meanings of Work: Considerations For The Twenty-First Century*, ed. Frederick C. Gamst (SUNY Press, 1995), 2.

⁷⁴ Olivier Frayssé, “Work and Labour as Metonymy and Metaphor”, *TripleC: Communication, Capitalism & Critique. Open Access Journal For A Global Sustainable Information Society* 12, no. 2 (2014): 475, <https://doi.org/10.31269/triplec.v12i2.546>.

⁷⁵ *Encyclopedia Britannica*, s.v. “Beowulf,” accessed January 28, 2019, <https://www.britannica.com/topic/Beowulf>.

⁷⁶ John D. Niles, “Locating Beowulf In Literary History,” *Exemplaria* 5, no. 1 (1993): 92, <https://doi.org/10.1179/exm.1993.5.1.79>.

with *word* as follows: “word ond weorc”⁷⁷) is used in relation to the “oath of loyalty” to the lord/king.⁷⁸ Here it can be claimed that the oldest uses of work originally emerge in hierarchal social connections and are linked to the sense of loyalty and obligation to a higher authority.⁷⁹ We can also interpret the usage of “work” together with “word” in *Beowulf* as the reflection of the understanding which reduces the human expression in practice to two deeds: speeches and acts. The earliest occurrences of both words (“word” and “work”) in English were in relation to responsibility, loyalty and/or subordination.

The German word for work is *werk* and it means doing, acting, performing.⁸⁰ This word is thought to have derived from the Indo-European word *uerg*, which means doing, acting, being effective; *werken* on the other hand indicates being creative and/or refers to the artistic/creative production.⁸¹ In German, there is another word which is related to work and that is *arbeit*. Here we find that the meaning of subordination and/or domination is similar to the way the word was used in *Beowulf*. *Arbeit* comes from *arba* which means servant or slave and it is related to the English word “orphan,” that is related to the Indo-European *orbho*.⁸² In addition to subordination, we find significant references to pain and even torture when we examine words related to work in French (and Latin). In French, the word *travail* is used to refer to work. This word dates back to the Old

⁷⁷ The word “ond” (means “and”) intentionally left in its original form as used in *Beowulf*.

⁷⁸ Peter Clemoes, *Interactions of Thought and Language in Old English Poetry* (Cambridge: Cambridge University Press, 2006), 159-60. Clemoes also proposes that both in *Beowulf* and the early 9th century Old Saxon epic *Heliand* the pairing of “words and works/deeds” have legal connotations. Similarly in *Guthlac* these two words were used in the pledge to St Bartholomew: “I shall carry his words and his deeds to the Lord in testimony. He will know his actions.” Clemoes concludes that they were used “to regularize the processes of oath-swearing, bearing witness and the like.”

⁷⁹ Frayssé, “Work and Labour,” 475-476.

⁸⁰ Gamst, “Considerations of Work,” 2; Christian Fuchs and Sebastian Seignani, “What is Digital Labour? What is Digital Work? What’s their Difference? And Why do these Questions Matter For Understanding Social Media?” *TripleC: Communication, Capitalism & Critique. Open Access Journal For A Global Sustainable Information Society* 11, no. 2 (2013): 276, <https://doi.org/10.31269/triplec.v11i2.461>.

⁸¹ Brigitte Weingart, “Arbeit - Ein Wort Mit Langer Geschichte,” accessed January 29, 2019, http://www.steffen-maerker.de/Arbeit/body_arbeit.html, quoted in Fuchs and Seignani, “What is Digital Labour?” 275.

⁸² Frayssé, “Work and Labour,” 480; Fuchs and Seignani, “What is Digital Labour?” 276.

Latin *tripalium* which literally means “three stakes.”⁸³ This is a torture instrument composed of wooden stakes on which a person can be hanged/nailed.⁸⁴ Thus in French the word for work denotes strong pain, agony and/or pain caused by exceedingly hard work.⁸⁵ Working as an arduous experience not only corresponds to torture in French, it also stems from the pain of giving birth. This experience might include a transcendent type of “travel.” In the Bible *travail* is associated with Jesus’s suffering and ascension to God.⁸⁶ It represents suffering, birth and death. According to Hammer, the *travail* of Jesus, “like the distress of a birthing woman, is resolved and redeemed in the joy and fulfillment of having accomplished an arduous, but vital task.”⁸⁷ The Greek concept for work too reflects the arduous side of work. Although there is not a particular word that means “work” in Ancient Greek,⁸⁸ one of the most commonly used words is *ponos* which is the god (spirit/daimon) of hard work/labour and toil or drudgery.⁸⁹ This word is also the ancestor of *pain* in English and derives from the Latin word *poena*, which denotes sorrow.⁹⁰ Hill claims that besides being interpreted as pain, work is also viewed as a curse in the Judeo-Christian belief: It was the “ideal work situation” for man to take care of the Garden of Eden,⁹¹ but after man was seduced by sin he was ejected from Eden to the world/earth where he now has to work to survive.⁹² This interpretation of work reflects the idea of divine punishment.⁹³ These examples of etymological references show us evident

⁸³ Gamst, "Considerations of Work," 1.

⁸⁴ To see a visual depiction of *tripalium*: <https://www.lepetiterudit.com/travail-rooted-torture>.

⁸⁵ Gamst, "Considerations of Work," 2.

⁸⁶ Margaret L. Hammer, *Giving Birth* (Louisville, Ky.: Westminster/John Knox Press, 1994), 66.

⁸⁷ Hammer, *Giving Birth*, 66-67.

⁸⁸ Keith Grint, *The Sociology of Work* (Cambridge: Polity Press, 2013), 14; Maurice Godelier, "Aide-Memoire for a Survey of Work and Its Representations," *Current Anthropology* 21, no. 6 (1980): 834, <https://doi.org/10.1086/202590>; Roger B. Hill, "Historical Context of the Work Ethic," accessed January 30, 2019, <http://workethic.coe.uga.edu/historypdf.pdf>.

⁸⁹ Godelier, "Aide-Memoire," 834.

⁹⁰ Hill, "Work Ethic," 1.

⁹¹ Hill, "Work Ethic," 1.

⁹² "Genesis 3 NIV - The Fall," Biblehub, accessed April 5, 2019, <https://biblehub.com/niv/genesis/3.htm>. In Genesis, work as human plight is described as: "By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return."

⁹³ Michael Rose, *Reworking the Work Ethic: Economic Value and Socio-Cultural Politics* (London: Schocken, 1985), 28. Rose states that the Hebrew belief system viewed work as

presence of pain, effort, punishment, subordination and obligation in the lexicon of work throughout history. But considering only these meanings in the analysis of work as a concept and a phenomenon would be a reductive interpretation. We need to look into various meanings, occurrences and forms of work in different periods in history. Through this analysis we can reach additional historically constructed aspects -such as creative and artistic attributions- that will help us understand what triggered work to develop into the myriad fields of modern society.

2.2. WORK IN THE HOMERIC SOCIETY, CLASSICAL GREECE AND THE ROMAN PERIOD

As a starting point to explore the transformation of the concept of work we should initially point out the early experiences of Homeric society (12th century to 8th century B.C.). There was not actually a specific word for work in Homeric society. Applebaum states that this was because work was a natural part of all social activities. Work was an ordinary part of life for all people:

[...] we find work is acceptable to all ranks and groups in Homeric culture, to nobles as well as commoners. Noble men and women did not disdain to participate in work. Odysseus built his own bedchamber. Paris helped with the construction of his home. Penelope spins and weaves and makes garments. Nausicaa washes clothes. Odysseus challenges the suitors to a ploughing contest, boasting that he could cut grass with a scythe, drive a pair of oxen, and plow a clean furrow.⁹⁴

There are similar examples that show that work was carried out by gods such as the walls of Troy, which were constructed by Poseidon or huge Mycenae which

a "curse devised by God explicitly to punish the disobedience and ingratitude of Adam and Eve."; Hill, "Work Ethic," 13. Hill also emphasizes the role of divinity in the pain accompanying work as follows: "For the Hebrews as well as for the medieval Christians, the unpleasantness of work was associated with Divine punishment for man's sin. The Protestant ethic maintained that work was a sacrifice that demonstrated moral worthiness, and it stressed the importance of postponed gratification."

⁹⁴ Herbert Applebaum, "The Concept of Work in Western Thought," in *Meanings of Work: Considerations For The Twenty-First Century*, ed. Frederick C. Gamst (SUNY Press, 1995), 48;

was built by the Cyclopes.⁹⁵ In this period work in society's point of view was not any different from ordinary acts of human beings. It was simply *ergon* and as natural as breathing or walking. Therefore connotations such as pain, toil or curse were not present for work at this moment of society. In this community, productive relations were formed around communal, reciprocal and gift-based practices. Bogucki simply defines this condition of social and economic life as:

The daily goal of early peoples was to ensure survival by having enough to eat. Accordingly, most labor involved the search for or production of food. Other chores were probably done communally, such as the building of huts for shelter or the construction of a boat or raft. In agricultural societies it would have been impossible for one person or one family to carry out the labor-intensive tasks necessary for agricultural production. Thus, ancient societies learned to pool their efforts in such public works projects as terracing agricultural land, building canals and dikes, irrigating fields, and draining swamps.⁹⁶

Within this small-scale and reciprocal mode of economy, since there was no aim to produce more than was needed by community members, there was no need for excessive or hard work or any word to represent it.

From the Homeric period to the classical period of Ancient Greece and in the Roman period work began to be differentiated and gained additional meanings. It is significant that in classical Greece (5th century to 323 B.C.) a hierarchy emerged between two forms of work: mental and manual. Mental work was literally work performed purely through thinking. Art, philosophy and politics were the principal mental activities which could be carried out only by people who had leisure time in their daily life. These people were highly esteemed free men, nobles, philosophers and rulers of society. Seneca in *Of a Happy Life* clearly defines the qualitative distinction between the two forms of work as follows:

⁹⁵ Christopher Blackwell, "Greece - Employment and Labor," in *Encyclopedia of Society and Culture in the Ancient World*, ed. Peter Bogucki (New York: Infobase Publishing, 2008), 431.

⁹⁶ Peter Bogucki, "Employment and Labor – Introduction," in *Encyclopedia of Society and Culture in the Ancient World*, ed. Peter Bogucki (New York: Infobase Publishing, 2008), 425.

Wisdom does not teach our fingers, but our minds: fiddling and dancing, arms and fortifications, were the works of luxury and discord; but wisdom instructs us in the way of nature, and in the arts of unity and concord, not in the instruments, but in the government of life; not to make us live only, but to live happily.⁹⁷

Mental work was evidently valued more than manual work, which was considered as “brutalizing the mind.”⁹⁸ So it was deplored to spend time and effort for mechanical arts and hard work in general rather than pure/abstract argument. Regarding this distinction, Tilgher asserts that, “the Greeks had the greatest respect for pure science and were the first true creators of exact science...”⁹⁹ Contemplation and philosophy were not for craftsmen, artisans and slaves whose bodies, according to Aristotle, “became cramped and warped by the monotonous movements of their trades.”¹⁰⁰

In addition to the distinction between mental and manual work, there was also a hierarchical distinction among types of work which need manual effort. The most obvious one was the distinction between craftwork and farming. As noted earlier, although it requires physical effort, cultivating land was valued and not considered apart from the ordinary and *natural* aspects of human life. “Work on the land is participation in an order both natural and divine that is superior to man.”¹⁰¹ Here, nature was interpreted as the domain of divine powers. We could say that worshipping and farming were accepted as ontologically connected. It was believed that gods through nature reveal secrets to humans when they were in cooperation with land (nature). Unlike agriculture, artisan work was not interpreted as natural and divine. The relation between body and mind (and between work and its subject) in craftwork lacked divine spirit as well as drive for

⁹⁷ Seneca, “Of a Happy Life,” in *The Wisdom of the Stoics: Selections from Seneca, Epictetus, and Marcus Aurelius*, trans. Henry Hazlitt and Frances Hazlitt, accessed February 2, 2019, <https://mises.org/library/wisdom-stoics-selections-seneca-epictetus-and-marcus-aurelius/html/p/1660>.

⁹⁸ Adriano Tilgher, *Work: What It Has Meant to Men Through the Ages* (New York: Arno Press, 1977), 4.

⁹⁹ Adriano Tilgher, *Homo Faber: Work through the Ages*, (New York: Harcourt Brace, 1930), 7.

¹⁰⁰ Applebaum, “The Concept of Work in Western Thought,” 49.

¹⁰¹ Jean-Pierre Vernant, *Myth and Thought Among Greeks* (New York: Zone Books, 2006), 282.

devotion and passion for the knowledge revealed through transcendental interaction. Besides this fundamental spiritual distinction between agriculture and artisan work we can refer to two more significant features of artisan work, which place it on a material-earthly level: the need for specialized knowledge (*techne*) and the existence of commercial interests. Firstly, craftsman differed from farmers because they instrumentalized their practical knowledge to make goods. According to Vernant, this type of particular knowledge, which can be called *techne*, “implies specialized knowledge, apprenticeship, and secret ways to ensure success.”¹⁰² Xenophon, in *Oeconomicus*, states that “craftsmen (the race, I mean, in general of artists) are each and all disposed to keep the most important features of their several arts concealed...”¹⁰³ A smith, a potter or a weaver was one who accumulated his/her “know-how” over time, through experience, not in direct cooperation with nature (divine forces) but through apprenticeship to a master (to another mortal individual). Moreover, apprenticeship was compulsory for craftsmen to be accepted into the professional network and gain a reputation in society. The second aspect of this distinction was about the dependency of craftsmen on clients and -correspondingly- the existence of commercial interests. Craftsmen were not able to make ends meet independently as farmers were. Their subsistence was dependent on demands from clients. It was not the land or nature but the commercial relationship which enabled them to feed themselves and their families. So “Any member of society was a potential patron of those who performed these activities, but their principal clients were the powerful and wealthy, who surrounded themselves with craftsmen making luxury articles, musicians, etc., to enhance their status.”¹⁰⁴ Therefore, although artisans had some value in the social setting and were regarded as higher in the social order in comparison to slaves, they were not considered free or independent.

¹⁰² Vernant, *Myth and Thought*, 280.

¹⁰³ Xenophon, *Oeconomicus* trans. H. G. Dakyns (Macmillan and Co., 2014), 15:8, accessed February 10, 2019, <https://ebooks.adelaide.edu.au/x/xenophon/x5oe/complete.html#chapter15>.

¹⁰⁴ Godelier, “Aide-Memoire,” 834.

In the Roman period (2nd century B.C. to 4th century A.D.) many of the concerns from the early Greek period about forms and conditions of work continued to be valid. Still, manual work was central for the survival of the -relatively- industrious Roman civilization. Slave work was the basic type of manual work to be needed for administration and construction, e.g. the building and maintenance of the famous water system; mining; work for households and landholders etc. It is essential to note that in the Roman period with technical/industrial advancements, increased city population and sophisticated organization in state administration, slave work was organized and utilized more efficiently.¹⁰⁵ Waged work and craftwork were still disdained when it was compared with agriculture and mental work. But at the same time, it is significant that in Roman society there were *collegia*, which can be described as clubs for craftsmen, that enabled their members “to compensate for their low status in society.”¹⁰⁶ Applebaum highlights the function of *collegia* as follows:

Collegia gave commoners a sense of importance. They could run for and elect *collegia* officers, worship *collegia* patron gods, and attend *collegia* dinners and festivals. They were not unions or guilds since they did not try to control wages or prices. The *collegia* were active in city ceremonies. They were important politically, as Roman statesmen sought to mobilize their vote during elections.¹⁰⁷

It can be claimed that there was not any dramatic change in the value of artisan work based on the form and the essence, but the emergence of artisan organizations such as *collegia*, made it possible for its members to be addressed, at least in the political domain. Inline with the development of Roman cities, fields of work diversified and the need for workforce increased significantly. Nevertheless, the main principle which stipulated a hierarchical distinction between waged workers and independent workers didn't change substantially. Still, most of the onerous and physical work was done by slaves and prisoners.

¹⁰⁵ Hill, “Work Ethic,” 2.

¹⁰⁶ Kirk H. Beetz, “Rome - Employment and Labor,” in *Encyclopedia Of Society And Culture In The Ancient World*, ed. Peter Bogucki (New York: Infobase Publishing, 2008), 434.

¹⁰⁷ Applebaum, “The Concept of Work in Western Thought,” 50.

And wage-earners still had a low status when compared with statesmen, philosophers, administrators and farmers. But there were levels in value regarding different fields of waged work. For instance, mechanics, artists, bakers and weavers were higher in status than construction workers and musicians.¹⁰⁸

Lastly, another type of work we will examine in this part of our discussion is military work. Warfare was certainly always a natural duty for the survival of communities, but as a result of increased sophistication in social order some new forms of work were created through differentiation so that warfare became a separate and institutional occupation. During this period, despite being a form of manual work, military work was interpreted as a more dignified form of work in comparison to other types of manual work such as trading, craftwork etc. As farming was regarded a divine task of free man, fighting for the land was also considered as a supreme duty. Farming and waging war were linked to each other already in early Greek times; Vernant highlights this link with the artisan work as follows:

Seen as the antithesis of the artisans' work, farming now becomes associated with military activity in the sphere of virile occupations- work (*ereia*), in which neither fatigue nor effort (*ponos*) is feared. Cyrus declared to Lysander: "I never yet sat down to dinner when in sound health, without first working hard at some task of war or agriculture, or exerting myself somehow."¹⁰⁹

Although there was already a bond between work and military tasks, in Roman society this bond was strengthened by the idea of citizenship/patriotism. "In the ideal, farm work was linked to citizenship and citizenship linked to

¹⁰⁸ Beetz, "Rome," 433. Beetz depicts the hierarchy as: "There was a hierarchy among Rome's laborers. At the bottom were town criers and undertakers, who were forbidden by law to hold public office. At its top were construction workers and musicians. In the middle were mechanics, artists, bakers, weavers, among others. Barbers were feared because their iron razors were difficult to control and could cut. Clothes washers were avoided because the chemicals they used not only made them permanently smell awful but gave them skin diseases. Physicians fell into two categories, one being wage earners, who had to go visit patients, and the other consultants, to whom patients had to come. Greeks were generally regarded as crazy and immoral, but Greek doctors were well respected. All doctors were excluded from having to pay taxes. Roman laws dealt more harshly with laborers than with other Romans. Where a patrician might be fined for stealing, a laborer could expect to be whipped and sentenced to years of hard labor."

¹⁰⁹ Vernant, *Myth and Thought*, 280.

military service.”¹¹⁰ Cincinnatus’ epic is an example of a holy marriage of these tasks. As a legendary hero, he gave up plowing to “save the State” and turned back to farming once the war was over.¹¹¹

2.3. WORK IN THE MEDIEVAL PERIOD AND THE TRANSFORMATION OF WORK WITH REFORMATION

During the Medieval period (5th century to 15th century), ideas regarding work which were inherited from Hebrew, Greek and Roman beliefs survived into Christian thinking which lay behind the organization of daily life and the definition of social structure.¹¹² The belief which denotes work as *ponos* and/or (divine) punishment continued to be embraced in part. According to this conception, “people (including monks and nuns) worked, not because work had inherent dignity in the sight of the God, but for the opposite reason –it was painful and humiliating and therefore meritorious as an act of atonement or penance.”¹¹³ Besides, there were also relatively positive or neutral attitudes attributing benefits/functions to work. Working, particularly farming, was still considered to liberate people from being directly dependent on others.¹¹⁴ Work was thought of as a minimal requirement of life to afford the physical needs of the material world. In addition to this thought, a new approach regarding the function and meaning of work developed which considered it as a way of keeping people from idleness. Although working was not intrinsically supreme or valuable (and being idle was not intrinsically worthless or mean) it was worthwhile due to its role limiting the idle time in which people might be seduced by the Devil and fall into sin. According to *The Rule of St. Benedict*, “Idleness is inimical to the soul; and therefore the brethren ought to be occupied, at fixed seasons, with manual work

¹¹⁰ Applebaum, “The Concept of Work in Western Thought,” 51.

¹¹¹ Diana Bowder, *Who Was Who In The Roman World* (Oxford: Phaidon, 1980), 58, quoted in Applebaum, 51.

¹¹² Hill, “Work Ethic,” 3.

¹¹³ Leland Ryken, *Redeeming the Time: A Christian Approach to Work and Leisure* (Grand Rapids, Mich.: Baker Books, 1995), 74.

¹¹⁴ Hill, “Work Ethic,” 3.

and again at fixed seasons with spiritual reading (...)”¹¹⁵ This attitude towards working applied also to leisure. Here we can point out the role of the ascetic principle that preaches people to deny earthly pleasures. Contrary to the early Greek thought, exemplified by Aristotle’s view that leisure was a “human quest for happiness”, in medieval Christian thought the time exempt from work or worship might prevent people from taking an “otherworldly” life-course.¹¹⁶ The two conceptions, one which perceived work as part of divine punishment and the other which depicted it as an ascetic instrument, didn’t negate each other but were in mutual interaction. Work was both a curse and an advantage so that an excess/surplus of work could be conceived as both extra amends paid for the original sin and increased constraints on wicked behaviors or thoughts.

In the medieval period, work also had another function which guaranteed the sustainability of the church as an institution:

Monasteries were formed where monks performed the religious and intellectual work of the church (reading, copying manuscripts, etc.), but lay people tended to the manual labor needed to supply the needs of the community.¹¹⁷

It would be better to interpret this function of work with regard to the two ways of life, sacred and secular, by highlighting their interdependence. The sacred-secular dichotomy divided work as monastic (or spiritual) and other (or worldly). This division was also posited as “divine” and “human” in St. Thomas Aquinas’s encyclopedic interpretation.¹¹⁸

There were three interdependent orders which were based on whether their work consisted fundamentally of sacred or secular tasks. These orders were “priests (*oratores*), warriors/nobles (*bellatores*), and workers (*laboratores*).”¹¹⁹ The ideal life of priests was based on devotion to the service of God alone, to

¹¹⁵ Saint Benedict, *The Rule of St. Benedict* (London: S.P.C.K., 1931), 70.

¹¹⁶ Ryken, *Redeeming the Time*, 88-89.

¹¹⁷ Hill, “Work Ethic,” 3-4.

¹¹⁸ Hill, “Work Ethic,” 4.

¹¹⁹ Georges Duby, *Three Orders, Feudal Society Imagined* (Chicago: University of Chicago Press, 1980), quoted in Applebaum, “The Concept of Work in Western Thought,” 54; Budd, *The Thought of Work*, 6.

contemplation. Monastic work was considered a higher category than secular work, but was also dependent to it. “In the family, in the market place, in the field and on the seas, the others [*bellatores* and *laboratores*] kept the wheels of the work of the world running, at the cost of condemning their souls to a second-best spiritual life.”¹²⁰ Based on this division, ordinary workers were reduced to “second-class spiritual citizens.”¹²¹ While other people laboured for their daily needs and kept their business to survive, the surplus of their efforts was shared/donated for the sacred/divine work of the church. The wealth was shared for the good of the church:

People who were wealthy were expected to meet their own needs, but to give the excess of their riches to charity. Handicraft, farming, and small scale commerce were acceptable for people of moderate means, but receiving interest for money loaned, charging more than a ‘just’ price, and big business was not acceptable.¹²²

This relationship could be identified as a type of financial support (fund-raising) model between lay people and the “corporate” church. Here, over-working was welcomed only if it served to keep people from being idle; the aim should not be to gain excessive wealth over and above one’s needs or conspicuous consumption but to contribute to the capacity development of the church as a “professional” organization.

During the medieval period, with the discovery of “favorable” aspects of work, the status of work -especially of manual work- was upgraded. The promotion of the status of work was closely related to the Christian authorities’ new approach. Prior to the influence of Protestantism and Calvinism the elevation of work had already begun concerning its theological (minimizing idle time) and economic function (maximizing surplus for the charity). Weber argued that with the influence of Christianity, “for the first time in Western history a specific mentality, ideological attitude or ethic could emerge that paved the way towards

¹²⁰ W. R. Forrester, *Christian Vocation* (New York: Scribner, 1953), 45.

¹²¹ Ryken, *Redeeming the Time*, 73.

¹²² Hill, “Work Ethic,” 4; Tilgher, *Homo Faber*, 34.

the rise of capitalism.”¹²³ But the elevation of work became evident especially with the influence of Protestant and Calvinist movements and the way was paved for the upcoming capitalist society.

The first significant stage (in the progression of work) began with the spread of Martin Luther’s doctrine in Christian thought. Through Luther’s doctrine attitudes towards work moved substantially in a positive direction. According to Luther, similarly to the medieval Christian thought, work was an asset for charity and a tool against idleness. But Luther differed from the Catholic Church regarding the privilege of some forms of work over others. He emphasized that monastic work was being overvalued and claimed that this hierarchy led to the discrimination of others and their work. Furthermore, Luther regarded monastic (contemplative) life as being egotistic and accused monks of “evading their duty to their neighbors.”¹²⁴ According to Luther’s idea of *calling*, everyone was invited to work. The *calling* was universal and had equal spiritual dignity for all people.¹²⁵ There were no higher or lower forms of *calling* as was the case in the Catholic belief. Luther’s doctrine shifted work from being a curse or punishment to a more positive -and ordinary- human deed,¹²⁶ “affirmed manual labour”¹²⁷ and equated all forms of work in terms of value.

The fundamental change in thinking which led to the establishment of the modern capitalist form of work arose especially following the introduction of the Calvinist doctrine. John Calvin encouraged all people to work because this was believed to be the will of God. As a part of the endless process of God’s creation all people should work in order to reshape the earth in this way. Calvinists and Protestants were not different from each other in terms of diminishing the hierarchy between mental/monastic work and other types of work; they glorified work as a superior task and a religious duty enabling man to perform stewardship of nature. But Calvin differed from Luther in two aspects particularly. Firstly,

¹²³ Josef Ehmer and Catharina Lis, *The Idea of Work in Europe from Antiquity to Modern Times* (New York: Routledge, 2016), 7.

¹²⁴ Hill, “Work Ethic,” 4-5; Tigher, *Homo Faber*, 47.

¹²⁵ Hill, “Work Ethic,” 4-5; Applebaum, “The Concept of Work in Western Thought,” 54.

¹²⁶ Applebaum, “The Concept of Work in Western Thought,” 54.

¹²⁷ Hill, “Work Ethic,” 5.

Luther believed that everybody should “work diligently” by confining themselves to their inherited occupation.¹²⁸ This conceptualization regarded work as a static act of a temperate man who was expected to be satisfied with their station in life and which they could maintain by meeting their fundamental needs. According to Luther everybody was assigned by God to their place in the social hierarchy.¹²⁹ People overstepping their class/tradition were not praised. But, unlike Luther, Calvin interpreted work as a continuing, dynamic process that was open to change and upgrade. Contenting oneself with one’s work was not worthy according to Calvin; and everyone, even the rich, should not limit themselves to easy living. Applebaum claims that “Calvin freed work from the hampering ideas of caste. In his hands, work became mobile, fluid, and manmade rather than Godgiven.”¹³⁰

The second aspect which strongly differentiated Calvin from Luther was about generating profits. According to Calvinists, pursuing any work to achieve maximum profits was more than acceptable, it was considered a religious duty.¹³¹ So if a traditional or family trade was not profitable enough it could be changed or modified in line with better ventures and higher wealth. Applebaum explains the difference between Luther and Calvin as:

Work was rationalized by Calvin, who viewed life from the standpoint of the peasant. Unlike Luther, Calvin praised trade, profits, and finance, considering them as on the same level as the earnings of workmen when based on diligence, industry, and hard work. Calvin believed that profit was a sign of God's blessing.¹³²

With the adoption of Calvin’s thoughts by many followers, attitudes towards work improved a little more, on the way to glorification. Hill highlights that Calvin’s propositions paved “a radical departure from the Christian beliefs of the Middle

¹²⁸ Hill, “Work Ethic,” 4.

¹²⁹ Hill, “Work Ethic,” 4; Seymour Martin Lipset, “The Work Ethic, Then and Now,” *Public Interest* (1990): 67; Tilgher, *Homo Faber*, 47-8.

¹³⁰ Applebaum, “The Concept of Work in Western Thought,” 55.

¹³¹ Hill, “Work Ethic,” 5.

¹³² Applebaum, “The Concept of Work in Western Thought,” 55.

Ages” especially concerning the encouragement of people in “the pursuit of unlimited profit.”¹³³

2.4. THE RISE OF CAPITALISM AND THE INVENTION OF THE MODERN NOTION OF WORK

The transformation in the attributes of work can be interpreted as a story of promotion throughout history. As explained in the former section, in the Reformation period the concept of work was elevated in status and thus it expanded within life through theological concerns influencing material life. Consequently, work gained favorable meanings in conjunction with its expansion. In the first stage, the expansion happened through Luther’s touch: Responsibility to work -particularly manual work- spread to all members of society, including monks. This intervention also helped to diminish the degrees between different types and forms of work -such as mental, monastic, manual, artisan etc. But working people were still prohibited to recast or extend beyond their traditional, old-style business. They were expected to confine themselves to the family business as well as to their pre-existing caste. The second expansion happened through the influence of Calvin. His doctrine encouraged people to pursue alternatives for commercial growth and diversification. Thus, people were able to shift to different fields of business and move beyond their self-contained environment. As Hill points out, “With the Protestant Reformation, and the spread of a theology which ordained the divine dignity of *all* occupations as well as the right of *choosing* one's work, the underpinnings of an emerging capitalist economic system were established.”¹³⁴ It was a qualitative extension/expansion, because -theologically- for the first time all members of society were permitted to try and to invest in diverse forms and fields of work. In addition to its qualitative expansion, work spread also quantitatively as a consequence of the freedom of development, so that generating profits and capital growth were welcomed for the

¹³³ Hill, “Work Ethic,” 5.

¹³⁴ Hill, “Work Ethic,” 7.

sake of improvement and enlargement of the business. As Yankelovich explains, the Reformation and its Calvinist contribution, in particular, resulted in the establishment of "moral sanction to profit-making through hard work, organization, and rational calculation."¹³⁵ This also encouraged the adoption of progression as an idea and the application of quantification to all forms of work, and to life as well. Progression was realized through its immanent element, which is the quantitative assessment of human deeds (life in general). Through this logic, the volume of work, in terms of time and effort, increased and spread gradually into all areas of life.

We can read the story of this expansion in line with the sublimation of the division between sacred and secular work. As Ryken claims:

The main contribution of the Middle Ages to the history of attitudes toward work was to divide work into two great categories—the sacred and the secular. The roots of such an attitude were already present in the classical social distinction between free people and slaves. The Middle Ages simply gave this hierarchy a spiritual cast.¹³⁶

The already established distinction between monastic and all other works was broken with the Protestant way of thinking. The first result was seen in the sacred area, for the idea that defined all work as God's blessing for all people began to spread. Thus the Protestant work ethic, the fundamental principles of which were praising hard work, rationality¹³⁷ and growth of wealth, became predominant in this period. However, after the end of the Protestant movement, this break affected the secular area as well and the spread began in a reverse direction. But the fundamental principles of the work ethic remained the same: Hard work, rationality and accumulation of wealth/profits. This change is explained by Lipset as follows:

¹³⁵ Daniel Yankelovich, *New rules: Searching for self-fulfillment in a world turned upside down* (New York: Random House, 1981), 247.

¹³⁶ Ryken, *Redeeming the Time*, 73.

¹³⁷ Applebaum, "The Concept of Work in Western Thought," 55. Applebaum reminds us that rationality was present in monasticism which preached people to put "order in one's life" but it was especially reflected the separate, monastic life in which "the monks sought to achieve their goals within their self-contained communities."

These [Protestant] beliefs were secularized, as Robert Merton notes, into a system of "socially patterned interests, motivations and behavior"¹³⁸ that were functionally related to emphases on rationality, hard work, and the accumulation of wealth. These values in turn led to increased productivity and capital growth.¹³⁹

The secularized thought, mentioned by Lipset, was adopted and functionalized in the following period, the Industrial Revolution. Thus, this transformation faded into the formation of the modern concept of work with the introduction of industrial capitalism.

Until the end of the 18th century the nature of work, as Budd asserts, "largely reflected the Neolithic Revolution's agricultural settlements and (later) cities."¹⁴⁰ Although there were some precursors of the modern factory system¹⁴¹ the production and organization processes were predominantly based on the organic capacities of human power. Admittedly the spirit of work had already started to be transformed into the secular version of the Catholic sacred essence but the dominance of machinery over production, organization and management was beyond that transformation and shifted completely the nature of work.

As an example of the transformation of work, we can focus on the changing nature of cotton-work: technological developments in textile production that are associated with the Industrial Revolution represent the transformation of work (particularly advancements in British cotton mills in the last decades of the 1700s).¹⁴² In this period, early modern examples of production units were built to utilize the stream power for increased output and maximized profits. For this

¹³⁸ Robert K. Merton, *The Sociology of Science: Theoretical and Empirical Investigations* (repr., Chicago, IL: The University of Chicago Press, 1973), 175. Merton's original quote is: "socially patterned interests, motivations, and behavior established in one institutional sphere—say, that of religion or economy—are interdependent with the socially patterned interests, motivations, and behavior in other institutional spheres—say, that of science."

¹³⁹ Lipset, "The Work Ethic," 63.

¹⁴⁰ Budd, *The Thought of Work*, 7.

¹⁴¹ Budd, *The Thought of Work*, 7. Budd remarks that "complex business organizations and trading systems existed by the fourteenth century, brewers exported nearly one hundred million liters of beer from Holland in the late fifteenth century, silver mines in Saxony employed several thousand wage laborers in the early sixteenth century, and the putting-out system in Britain was quite extensive in the early eighteenth century."

¹⁴² Budd, *The Thought of Work*,

purpose, it was attempted to synchronize human power with machine power in time and space. The aim was to realize the synchronization process by driving people to comply with the working environment which was designed based on machine-friendly standards. This transformation also meant “improved” and increased control on work -and on people in general- as Budd asserts:

The Industrial Revolution, however, was as much organizational as technical. The shift from the household-based putting-out system to the factory system was not simply to take advantage of new power-based machinery, but was also to increase the employer’s control over the speed, quality, regularity, and security of the production process through direct supervision and monitoring of the workforce.¹⁴³

The disappearance of the putting-out system and the increased proportion of modern production paved the way for the supremacy of working-time over leisure. This mode of expansion into life led to the separation of daily life into two domains and built work as a distinct consciousness-level -or existence- which was defined, determined and monitored on rational and organizational principles. This could be considered the emergence of the modern concept of work and workplace in the daily life of ordinary people. This meant the loss of independence, for people previously determined their work schedules and alternated autonomously between idle time and working time during the day. Budd emphasizes that with the launch of modern factories individuals were forced “to conform to factory work schedules. It was at this time, then, that individuals went from ‘doing jobs’ —working on ‘shifting clusters of tasks, in a variety of locations, on a schedule set by the sun, the weather, and the needs of the day’ —to ‘having jobs,’ working exclusively for someone else.” The point Budd makes is very illuminating in that work was more mundane and organically embedded in life before the domination of modern factories; it was not institutional and thereby was not experienced as a consolidated act in a specific time and place. In the end, this distinction resulted in a strict organization of life that oriented the definition of work in a more static direction, which equated it broadly with “employment” in an organization, and

¹⁴³ Budd, *The Thought of Work*, 7-8.

gave it a more technical aspect, as in the “processes” monitored in a workplace and evaluated on the basis of performance scales.

While the meaning and the nature of work were changing, the economic structure was shifting this transformation into industrial capitalism, focusing on “producing goods and services for profit” from merchant capitalism and on “trading household -or plantation-produced goods.”¹⁴⁴ In parallel to this phenomenon, the modern, waged form of work became a primary source for people to make a living. Wages began to be seen as the fundamental source of income and subsistence. Through this transformation, while the meaning of work narrowed down into the modern form, its field of dominance eventually stretched into the social and economical domains of life. With the expansion of work progressively into life, work began to play a central role in many relations between both individuals and institutions. This condition of work acquired elementary importance in the organization of modern society. According to Gorz, “‘work’ as we know it,” was invented and normalized soon with the establishment and proliferation of capitalism.¹⁴⁵ He explains the modern form of work as follows:

‘Work’, in the modern sense, bears no relation to the tasks, repeated day after day, which are indispensable for the maintenance and reproduction of our individual lives. Neither should it be confused with the toil, however demanding it may be, which individuals undertake in order to complete tasks of which they, or their family, are the sole beneficiaries; nor with what we undertake on our own initiative, without counting the time and effort it takes us, for a purpose of no importance to anyone other than ourselves and which no one can do in our place.

This form of work doesn’t necessarily relate directly and apparently to any subsistence-oriented job. Thus, it is quite different from the previous forms of “work” (that prevailed in earlier periods) which can be thought of as an

¹⁴⁴ Budd, *The Thought of Work*, 8.

¹⁴⁵ André Gorz, *Critique of Economic Reason* (London: Verso, 1989), 13.

“anthropological category.”¹⁴⁶ The former versions of work in pre-modern societies were saliently and concretely linked to urgent human needs. In other words, they were not abstracted from their relation to the exchange of products and services between people and/or to any harvesting from nature. In its modern form, work is an end in itself to be accomplished. Because of this altered nature of work in the modern era, it is now common to use phrases such as “have work”, “seek work”, “offer work”, which all point to, or are even equal to the meaning occupation, employment, profession or job.¹⁴⁷

Two characteristics of work -according to Gorz- are especially descriptive of the modern form of work. One of them is its being “an activity in the *public* sphere.”¹⁴⁸ It is a visible activity that is recognized by others and approved as useful by all. The modern form of work is publicly accredited and/or institutionally registered. The second is its being an activity rewarded with any form of payment. It should be admitted that paid work is certainly not new and there were already various applications/forms of compensation and payment for work in history. For instance, in Ancient Rome salt was used to preserve food and because of this “special” *use-value*, it was regarded as a way of payment for workers -particularly for slaves.¹⁴⁹ But unlike pre-modern forms of work, wage, salary, or any other modern solution of payment are considered an inseparable aspect of the modern conceptualization of work. Moreover, it is by payment that work can make us “belong to the public sphere, acquire a social existence and a social identity (that is, a ‘profession’), and [be] part of a network of relations and exchanges in which we are measured against other people and are granted certain rights over them in exchange for the duties we have towards them.” It is inseparable from the modern notion of work because a publicly performed activity and waged activity are complementary to each other. On one part, work operates as a domain for social integration -besides as a social existence- and on the

¹⁴⁶ Gorz, *Critique of Economic Reason*, 14.

¹⁴⁷ Gorz, *Critique of Economic Reason*, 13.

¹⁴⁸ Gorz, *Critique of Economic Reason*, 13.

¹⁴⁹ Bogucki, “Employment and Labor – Introduction,” 425. Regarding this usage, it is claimed that the word *salary* which is commonly used as substitute of wage/payment, is derived from the Latin word for salt.

complementary side, this function of work can only be evaluated on the basis of economic rewards it can generate so that the worker can gain sustenance -socially and economically- in modern society. As Adam Smith states it, “A man must always live by his work, and his wages must at least be sufficient to maintain him.”¹⁵⁰ Thus, wage becomes the “total currency” for public existence that can be basically realized by working, in other words, by belonging to “a society of workers.”¹⁵¹

2.5. DISCUSSION: TOWARDS AN OPERATIONAL DEFINITION

At the beginning of this chapter, we have preferred to start our analysis by investigating the etymological roots of the word *work* or any related word which might address similar practices within the lexical field of similar denotations. We aimed to trace clues in languages (English, Latin, French and German) that might shed light on the transformation of work and its representations in time. From this point of view, it should be briefly stated that the direction of the meanings related to work has been positive throughout the ages. In Godelier’s words:

In summarizing the direction which the meanings of the words for work have taken in the last few centuries, we could say, [...] that there has been a shift in meaning from words which first connoted painful activities bringing little merit to those who performed them, and even degraded them and placed them in a condition of social inferiority, while today the right to work, and the dignity of the worker, have positive meanings, at least in certain types of discourse.¹⁵²

But although the lexical shifts and the inter-linguistic variations could tell us of different interpretations of work, it would be more explanatory to support this investigation with an inquiry regarding work as a historical category/concept.

¹⁵⁰ Adam Smith, *The Wealth of Nations, Books I-III* (London, Penguin, 1999), 170.

¹⁵¹ Gorz, *Critique of Economic Reason*, 13.

¹⁵² Maurice Godelier, "Work and Its Representations: A Research Proposal," *History Workshop Journal* 10, no. 1 (1980): 166, doi:10.1093/hwj/10.1.164.

We aimed to support this argument with an exploration of the change in meanings, representations and applications at particular moments in history. These changes are closely related to socio-economic changes, such as the transformation of production from the domestic forms within the feudal period, between the 12th to 13th centuries to the development of “international trade, colonial expansion, banking and the further expansion of urbanism” in the 15th century and finally to the birth of the modern form of production and work at the end of the 18th century.¹⁵³ This analysis has shown us that once there was no word -or concept- to denote work as we know it, but today, in addition to its several meanings and connotations, work is now situated as an indispensable “institution” of modern capitalist society. Marx highlights the position of work in the society of his time as follows:

work may seem to be a simple category ... however, when seen from an economic point of view, even this simple category is as historical a concept as the social relations which have given birth to it. It is only when work has become, not only at a theoretical level but in reality itself, a means of creating wealth in general and has ceased to operate as a determination in its singular and particular forms that the abstraction 'work in general' becomes conceivable as a practical reality, as the point of departure of modern economics.

Therefore, work seen as the “point of departure of modern economics” functions as a default element in many aspects concerning sustenance for the individuals of modern society. Furthermore, we can also claim that work “defines both the character of modern, capitalist society in ever more intrusive and comprehensive ways, while it also comes to define our sense of identity; we are identified socially, economically, culturally by the kind of work we do.”¹⁵⁴

The domination of work in modern life was built through the process that we have defined as *expansion*. *Expansion*, which can also be referred to as

¹⁵³ Valerie Mainz and Griselda Pollock, “Introduction,” in *Work and the Image: v. 1: Work, Craft and Labour-Visual Representations in Changing Histories*, eds. Valerie Mainz and Griselda Pollock (Routledge, 2019), 5-6.

¹⁵⁴ Mainz & Pollock, “Introduction,” 7.

qualitative progress or elevation, brought the modern form of work into its central position in terms of many relations, so that it is intermingled with psychological, economic, political, cultural patterns; work has the potential to structure even mundane concerns of daily life. Due to the interrelations of work with many facets of modern life it has gained new connotations by also inheriting former meanings from ancient times. Budd, considering the various meanings of work in *The Thought of Work*, presents key conceptualizations of work, which are formed over time, based on encounters with different intellectual roots such as Western theology, individualism, feminism and utilitarianism. According to Budd, today, work can be examined under these conceptualizations: curse, freedom, commodity, occupational citizenship, disutility, personal fulfillment, social relation, caring for others, identity and service (see table 3.1.).¹⁵⁵ These concepts indicate that work has a fruitful nature to be explored and they also highlight the need for a comprehensive investigation of work.

Table 2.1. Conceptualizing Work¹⁵⁶

WORK AS . . .	DEFINITION	INTELLECTUAL ROOTS
1. Curse	An unquestioned burden necessary for human survival or maintenance of the social order	Western theology, ancient Greco-Roman philosophy
2. Freedom	A way to achieve independence from nature or other humans and to express human creativity	Western liberal individualism, political theory
3. Commodity	An abstract quantity of productive effort that has tradable economic value	Capitalism, industrialization, economics
4. Occupational Citizenship	An activity pursued by members of a community entitled to	Western citizenship ideals, theology, industrial

¹⁵⁵ Budd, *Thought of Work*, 14.

¹⁵⁶ Budd, *Thought of Work*, 14.

	certain rights	relations
5. Disutility	A lousy activity tolerated to obtain goods and services that provide pleasure	Utilitarianism, economics
6. Personal Fulfillment	Physical and psychological functioning that (ideally) satisfies individual needs	Western liberal individualism, systematic management, psychology
7. Social Relation	Human interaction embedded in social norms, institutions, and power structures	Industrialization, sociology, anthropology
8. Caring for Others	The physical, cognitive, and emotional effort required to attend to and maintain others	Women's rights, feminism
9. Identity	A method for understanding who you are and where you stand in the social structure	Psychology, sociology, philosophy
10. Service	The devotion of effort to others, such as God, household, community, or country	Theology, Confucianism, republicanism, humanitarianism

It is obvious that today the major definition of work for the great majority of people refers to its formal and paid versions. So on the one hand the meanings of work have been widened, as Godelier states, “to include all of the activities for which we achieve payment”¹⁵⁷, and very different forms of economic relations, within this encompassing perspective, have been kept under the typology of modern work. But on the other hand, this expansion means that many types of

¹⁵⁷ Godelier, “Work and Its Representations,” 167.

work are dismissed from the definition that fits modernity. Raymond Williams, in *Keywords*, refers to this reduction as “the specialization of work to paid employment” and adds that this limited conceptualization is “the result of the development of capitalist productive relations. To be in work or out of work was to be in a definite relationship with some others who had control of the means of productive effort.” While work becomes “the predominant social relationship” covering many different conceptualizations (as described by Budd in Table 3.1), the updated contemporary definition ceases to correspond to the authentic, productive nature of work in itself.

While the modern form of work operates as the principal representative of the meanings that relate to any productive act and effort, it is also institutionalized in practice based on concrete organizational standards. So, any form of productive effort is entitled “work” only if it is measured and monitored under corporate (institutional) mechanisms. The precursor of this practice was *scientific management*, which was suggested by Frederick Winslow Taylor in the early 1900s for managers of modern workplaces; this was an attempt to decompose each act of workers into repetitive tasks so that managers would inspect the precise form of every single task.¹⁵⁸ When the precise components of any work were determined, workers were imposed to finalize them within the defined performance scales. This was the reflection of the *mechanistic view* which regards the universe as a clock-work mechanism¹⁵⁹ and considers the workplace as a machine-work body containing -human- workers.

The Taylorist mode of management coexisted with the Fordist model of production, i.e. mass manufacturing with efficient use of assembly line. As we discussed in 2nd Chapter, Fordism was not only an invention in production

¹⁵⁸ Frederick Winslow Taylor, *Scientific Management* (Routledge, 2013).

¹⁵⁹ Duane Schultz and Sydney Ellen Schultz, *A History Of Modern Psychology*, 7th ed. (Fort Worth, Texas: Harcourt, 2000), 25. The seeds of the view that conceives the universe as based on scientific principles were planted in the 17th century and many considerations, such as the conceptualization of work, were influenced by it. “The zeitgeist of the 17th to 19th century” as the “intellectual soil” that nourished many domains of positivist applications in modern society was defined by Schultz & Schultz as follows: “The underlying philosophy —the basic contextual force —of the seventeenth century was the spirit of mechanism, the image of the universe as a great machine. This doctrine held that all natural processes are mechanically determined and are capable of being explained by the laws of physics and chemistry.”

technology and administration, but it was a social system that intruded in all levels of life with capitalist social relations.¹⁶⁰ The extension and proliferation of Fordism resulted in the massification of production and of consumption. Whether a worker or a consumer, people were increasingly taken into consideration on the basis of quantitative, mechanic measures, through the rhythm of the machine and metrics (in the workplace); and the price ranges (in the market), and the logic of capital -in total. This was the quantitative dimension of the *expansion* of work into life. With this quantitative mode of *expansion* “the capital has sought to impose its rhythm and tempo upon time and time-consciousness.”¹⁶¹ Zimmermann interprets this as “the invention of abstract work, quantifiable and measurable in time and money: the invention of labor as a founding principle of capitalism.”¹⁶²

In the last instance, we can reach two main concepts of work in this discussion. One is the modern form of work as we commonly know and experience it. It is best defined by Gorz who highlighted it as an activity in the public sphere, rewarded with payment. As discussed before in this chapter, while work is elevated in meaning and reputation through the ages and it arrives to the central and vital position in modern life, the definition of work is also consolidated (reduced) into the activities performed only in certain conditions. To explain these conditions, we should reply to the following questions (*5 Ws and 1 H*): *what* work is, *where* it is done, *when*, *by whom*, *why*, *how*. For the modern form of work the replies are as follows: work is a productive activity which is performed in workplaces, by employees, within determined working hours, under measurement and control by corporate mechanisms; on the one hand for the subsistence of employees -via money- and on the complementary side to generate capital for the corporation.

In addition to our effort to clarify the conditions of the modern version of work, we need to add one more significant question which might help us better

¹⁶⁰ Robins and Webster, “Cybernetic Capitalism,” 49.

¹⁶¹ Robins and Webster, “Cybernetic Capitalism,” 54.

¹⁶² Bénédicte Zimmermann, “Work, Labor: History of the Concept,” in *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright (Elsevier, 2015): 676, <http://dx.doi.org/10.1016/B978-0-08-097086-8.03124-X>.

investigate blindspots in further discussions to understand the meaning and the scope of work (and/or labour) for the users of social media. The question is: What is excluded from the definition of the modern form of work or what is neglected in the conceptualization of the modern form of work? The answer is related to the two aspects of the modern concept: *visibility* and *value*. *Visibility* refers to its being publicly and apparently recognized as an occupation. Thus, informal and casual work is not included in the conceptualization of modern work. The most significant such example is unpaid household-based work, particularly women's work in the household, which is considered as invisible.¹⁶³ Regardless of its being productive or not, any activity which is performed in private places by individuals is within the invisible field and thereby off the record. This aspect is related not only to space but also to time. Work that is carried out in "our own time" or "leisure-time" also falls within the invisible field, especially if the working time or the piece of work is not measured and/or controlled. The need for measurement is closely related to the second aspect, that is, *value*. In addition to being carried out in the visible field, the modern form of work is an activity that produces economic goods and value above all else. So, to determine the optimal reward/payment for the work done and the desired performance level of the worker, employers need a scale, deadline or control mechanism to guarantee the final product. Therefore work needs to be transparent to employers so that they can measure variables and conditions such as space and time, for the sake of increased efficiency. Consequently, any work the products or outcomes of which are not referred to as "valuable" in the market and if invisible, not priced/paid and thereby not measured or monitored, is considered as a casual activity lying outside the modern conceptualization of work. This is the *reduction of work to labour*¹⁶⁴, keeping all invisible, unmeasured, informal and unpriced activities out of the definition of work as well as excluded from the status, respect, legitimacy and approval which modern versions of work are thought to deserve.

¹⁶³ Budd, *Thought of Work*, 8.

¹⁶⁴ Zimmermann, "Work, Labor," 675.

The second main concept of work is the reduction to paid employment, which is more inclusive when compared with the consolidated, reduced definition of work to labour.¹⁶⁵ Here, we can adopt the conceptualization of John W. Budd in *The Thought of Work*, which defines work as any activity that “involves the production of something of value, even if the producer is not paid and has motivations that extend beyond making a living.”¹⁶⁶ Within this understanding, we can claim that the value is interpreted as relative, relational, contextual and singular. It might not be converted into economic value. The efforts to obtain value don’t need to have a pre-defined end in the form of a product or any outcome to be exchanged for money or for another commodity. However we don’t mean that all human activity should be considered under a “grand definition” of work. Budd points out that “work is purposeful human activity involving physical or mental exertion that is not undertaken solely for pleasure and that has value when viewed from a broadly inclusive perspective.”¹⁶⁷ In this statement, we should emphasize the “purposeful activity”. An activity can be carried out without an intention to produce an economic good or without any purpose to reach a material/immaterial end. Moreover, there might be no conscious involvement and no effort to regard it as a work, task or job to be done, but it still might create a result that could be recognized as valuable in economic terms. Can we still refer to this activity as work? To reach a conclusion, again we can refer to Budd’s explanation:

...work should not be defined too broadly. Work always involves doing something, but so do many leisure activities. A meaningful definition of work, therefore, needs to lie somewhere between the overly narrow focus on paid employment and the excessively broad inclusion of all human activity. (...) To be clear, employment is included within the definition of work, but work and employment are not synonymous, because work is broader. Also,

¹⁶⁵ Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press, 1983), 335.

¹⁶⁶ Budd, *Thought of Work*, 3.

¹⁶⁷ Budd, *Thought of Work*, 2.

work is commonly seen as producing economic value, but it can also have symbolic value, as in cases where work serves to create a sense of identity.

On the basis of the discussion thus far on the transformation of the meaning of work and the scope of its conceptualizations, we need to admit that it would be limiting to chase a strict definition of work to be used for almost all conditions. Our aim is firstly to identify the different understandings of work and mark the dominating ones that have historically emerged in different ages. In the last instance, we will investigate this transformation to point out which characteristics are inherited from the antecedents to our contemporary understanding of work. We have explained that the “evolution” of work has resulted in it operating as an institution in a capitalist society and as an essential element of individual identity. It is obvious that modern conceptualizations -which began to form around the last decades of the 18th century- still dominate our interpretations of work with minor modifications in time.

CHAPTER 3

LABOUR AND ABSTRACTION

3.1. FROM WORK TO *LABOUR*

The connotations of work have undergone transformations through the ages and the definition of work has been consolidated into the framework of occupational deeds. Productive human activities are encapsulated within the modern form of work dominated by the modern capitalist economy. In the previous chapter we traced this transformation broadly and ended by describing the modern concept of work. Throughout our previous analysis we have consciously not used the words *work* and *labour* interchangeably. Our intention was to depict the overall change in the meaning of work (in general) and the conceptualization of productive deeds into categories, not to clear up the confusion about the lexical differences between these words. But at this point of our analysis we need to explain briefly the distinction between the two terms and state our understanding concerning the discussion on this distinction so that it will preface our use of the word *labour* in the forthcoming analysis of *digital labour*.

The presence of the words *work* and *labour* in English leads to misunderstandings and confounding interpretations in works related to work as a phenomenon. Frayssé claims that “[w]hile there is no commonly accepted lexical distinction between the words work and labour, as words, in general, in the English language, there are distinctions arising from the contexts.”¹⁶⁸ Work might be used more comprehensively for all human *productive activities*¹⁶⁹ but its modern mode is simply restricted to employment (as explained in the previous chapter). However, in some contexts we can’t substitute these words for each other. When we need to say “labour union” we can’t use word *work*; and in the same manner, we can’t replace the word *work* with *labour* when we want to mean “going to work.” In fact, when we dive into the etymological or lexical distinctions we see that there are no significant gaps in the roots of these words in

¹⁶⁸ Frayssé, “Work and Labour,” 489.

¹⁶⁹ For the moment we will use “productive activity” which is a generic term that will prevent ambiguity due to variable connotations of the words *work* and/or *labour*.

terms of their reference to the onerous experience of working. The origin of the Latin word *labor* (*labor, lapsi, lapsus sum*) lies in the arduous experience of carrying heavy loads. This word is also the ancestor of the French *labeur* and *labour* (ploughing) and the Italian *lavoro*. The sibling word *labor* also means to slip (*lapsus*: a slip of tongue) under a heavy burden.¹⁷⁰ So it can be claimed that it is not the lexical and linguistic disparity between these words that makes the distinction so contested. The distinction may arise from the contexts, sub-texts as well as translators' and writers' theoretical views and approaches as well as, because of particular/random choices.¹⁷¹ As a case, Frayssé inspects texts by Adam Smith to trace the altered uses of both words:

In *Wealth of Nations* (1999), Smith uses the word work to mean several different things: in Book I, chapter I, "Of the Division of Labour", it means alternatively the productive tasks to be done in a manufacture, the nature of the tasks performed by individual workers, the amount produced, the labour power or capacity of individuals, the type of work or employment, the product of work, qualitatively and quantitatively.[...] labour and work are almost synonymous, since division of labour consists in parcelling work. In chapter VII, "Of the Natural and Market Price of Commodities", labour is defined as "work to be done", whereas commodities are "work done". In chapter VIII, "Of the Wages of Labour", work means production, and labour means the use of labour power [...] But in the same chapter, the wages of "labour" are equated with the price of "work" [...] And, still in the same chapter, work means waged employment [...] The distinction between work and labour becomes sharp when Smith's focus is on labour as the measure of (exchange) value, as in chapter V, "Of the Real and Nominal Price of Commodities, or their Price in Labour, and their Price in Money."¹⁷²

¹⁷⁰ Frayssé, "Work and Labour," 477.

¹⁷¹ Frayssé, "Work and Labour," 468-469. Frayssé adds "A subtext is a text to which another text refers, usually implicitly. Just like contexts, subtexts are often indispensable for us to ascertain the precise meaning of a word for which there exists a variety of lexical definitions."

¹⁷² Frayssé, "Work and Labour," 470-471.

Unlike Adam Smith, for Hannah Arendt the distinction between work and *labor*¹⁷³ is consistently underlined and these words are not used arbitrarily or interchangeably. Arendt proposes the term *vita activa* to “designate three fundamental human activities: labor, work and action.”¹⁷⁴ According to Arendt, each of these elements “corresponds to one of the basic conditions under which life on earth has been given to man.” Within the galaxy of these conditions, work and *labor* are separated from each other:

Labor is the activity which corresponds to the biological process of the human body, whose spontaneous growth, metabolism, and eventual decay are bound to the vital necessities produced and fed into the life process by labor. The human condition of labor is life itself. [...] Work is the activity which corresponds to the unnaturalness of human existence, which is not imbedded in, and whose mortality is not compensated by, the species' ever-recurring life cycle. Work provides an "artificial" world of things, distinctly different from all natural surroundings. Within its borders each individual life is housed, while this world itself is meant to outlast and transcend them all. The human condition of work is worldliness.¹⁷⁵

Based on Arendt's explanation we can say that *labor* is located at a lower or baseline level in comparison to work in the troika of the human condition. *Labor* is a necessary activity to maintain and reproduce life at a basic level. The natural/biological constraints define the character and complexities of these activities but whether it is farming or shopping, they are all in essence limited to the life and death cycle. From this point of view, the products of *labor* are used to repeat this cycle and consumed within a period of time and leave no permanent human signature on earth. Arendt admits that this distinction might sound familiar because she draws it from Locke who speaks of "the labor of our body and the work of our hands."¹⁷⁶ This reference also evokes the difference between the

¹⁷³ Arendt prefers the word *labor* in her writings to refer to the necessary productive activities of *animal laborans* and separates it from the term *labour* as used by Marx, Smith or Locke.

¹⁷⁴ Hannah Arendt, *The Human Condition* (University of Chicago Press, 1998), 7.

¹⁷⁵ Hannah Arendt, *The Human Condition*, 7.

¹⁷⁶ Hannah Arendt, "Labor, Work, Action," in *Amor Mundi: Explorations in the Faith and Thought of Hannah Arendt*, ed. James W. Bernauer (Boston: M. Nijhoff, 1987), 31.

bodily work of slaves and craftsman and the mental and creative activities of philosophers, statesmen and artists. This distinction definitely overlaps with another divide or dualism: nature and man-made world (culture). Based on this dualism, Arendt places *homo faber*, who is the “creator of the human artifice”, distorts and masters nature including the animal¹⁷⁷ part within itself on the work-side; on the other side, on the labor-side, there is *animal laborans* which belongs to the animal/natural/biological environment. In other words, it is subject to nature because of the bodily necessities that bind it to the life-cycle on earth.¹⁷⁸

Arendt’s conceptualization of diverse productive activities plays as a unique contribution that refers to “natural” and “unnatural” formations of work. Arendt prefers to use the words *work* and *labor* in her analysis but her wording signifies a different meaning from the terminology used in the key discussion on work-labour distinction which is the value-based taxonomy in Marxist terminology. The source of the major controversy on this distinction arises from the original texts of Marx and the Marxist literature revisits his discussions.

For Marx, participating in productive action is vital for the determination of a living being as human. But Arendt criticizes Marx’s perspective, particularly his “consistent naturalism” that assumes labour is a “metabolism between man and nature” and thus a labouring man is an “essentially natural being endowed with the faculty of action.”¹⁷⁹ In other words, according to Marx, man is in interaction with nature through his labour and transforms nature so that he can satisfy his needs and afford subsistence. This is the process in which both nature and man undergo changes and create through this dialectical interaction:

Through this production, nature appears as *his* work and his reality. The object of labor is, therefore, the *objectification of man’s species-life*: for he duplicates himself not only, as in consciousness, intellectually, but also

¹⁷⁷ Arendt, *The Human Condition*, 118. Arendt points to the link of this distinction with freedom by reminding us of the Ancient understanding, particularly Plato: The *animal laborans*, driven by the needs of its body, does not use this body freely as *homo faber* uses his hands, his primordial tools, which is why Plato suggested that laborers and slaves were not only subject to necessity and incapable of freedom but also unable to rule the “animal” part within them.

¹⁷⁸ Arendt, *The Human Condition*, 118, 139.

¹⁷⁹ Hannah Arendt, *Between Past and Future* (Harmondsworth: Penguin Books, 1968), 39.

actively, in reality, and therefore he sees himself in a world that he has created.¹⁸⁰

According to Marx, labour is incorporated with its subject.¹⁸¹ This incorporation is coupled with the amalgamation of all human productive activities (both *work* and *labor*) and ends up in “the production of material life itself.”¹⁸² Marx regards labour as the most important activity of man that distinguishes it from other creatures. It is eternal as well as natural. As Marx stresses: “Labour, then, as the creator of use-values, as useful labour, is a condition of human existence which is independent of all forms of society; it is an eternal natural necessity which mediates the metabolism between man and nature, and therefore human life itself.”¹⁸³ This perspective leads us to think of labour (whether farming or any modern form of work encoded as employment such as accounting) as a grand or meta-activity including the very forms of productive activities.

Surprisingly, Marxist terminology is not well-understood and still needs to be grasped sensibly.¹⁸⁴ According to Arthur, “literal reading” is one of the reasons leading to misunderstandings when commentators neglect to analyze sensitively the contextual usage of terms in Marx’s texts. Then there is also the “textual problem” which is caused by “the difficulty of reading Marx’s early work through spectacles acquired by a knowledge of the later work, thus imposing anachronistically the meanings of *Capital* on the young Marx.”¹⁸⁵ This problem is also partly caused by misreadings in the secondary literature that breed a sequence of confusion in the terminology of further analyses.¹⁸⁶ Besides, we can’t claim that Marx always uses terms consistently throughout his works, so these terms

¹⁸⁰ Karl Marx, *Economic & Philosophic Manuscripts of 1844* (Moscow: Progress Publishers, 1959), 77.

¹⁸¹ Arendt, *The Human Condition*, 99.

¹⁸² Karl Marx & Friedrich Engels, *The German Ideology* (London: Lawrence and Wishart, 1982), 48.

¹⁸³ Karl Marx, *Marx: Selected Writings*, ed. Lawrence H. Simon (Hackett Publishing, 1994), 227.

¹⁸⁴ C. J. Arthur, *Dialectics of Labour* (Oxford: Basil Blackwell, 1986), 16.

¹⁸⁵ Arthur, *Dialectics of Labour*, 16.

¹⁸⁶ Arthur, *Dialectics of Labour*, 17. Arthur goes further: “It is a testimony to the incapacity of people to read what is written in the 1844 text that when Lukács takes from it the appropriate distinction he does not use Marx’s own terminology. Instead, he elevates the term ‘*Arbeit*’ to an ahistorical universal [...]. If Lukács can overlook the point, it is not surprising that lesser thinkers do so.”

might need to be interpreted and explained by his followers or specialists of the related literature.¹⁸⁷ Nevertheless, we can easily understand that Marx differentiates working in capitalist conditions from all other modes of productive activities.

The controversy in the usage of different terms and notions can be resolved by pointing out two types of confusion: 1. Connotations lost in translation 2. Fallacies in differentiating “labours.” Regarding the first confusion, Engels’ footnote to the fourth German edition of Marx’s *Capital* can illuminate us: “The English language has the advantage of possessing two separate words for these two different aspects of labour.”¹⁸⁸ *Arbeit* in German refers both to work as a generic term and *labour* as a manifestation of work in capitalism. Fuchs and Seignani point out that there is also *werk* (and *werktätigkeit*) that is a more general and comprehensive concept which means an activity of creating (doing a simple act).¹⁸⁹ But Marx’s preference of the word *arbeit* for both complicates this issue further in various translations and reviews. This “insufficient sensibility” in the interpretation of Marx’s works has caused floods of errors in texts concerning the *labour theory*.¹⁹⁰

Secondly, we still need to explain “sensibly” the difference between different types of “labour” in Marxist theory. Primarily, we suggest to use “value” as a determinant at the point of division in this discussion. There are qualitative and quantitative modes of value which divide “labour” into two axes as defined by Marx:

¹⁸⁷ Arthur, *Dialectics of Labour*, 18. Arthur claims that “In the *Economic and Philosophical Manuscripts*, Marx as a rule opposes 'labour' to 'praxis' and explicitly describes 'labour' as 'the act of alienation of practical human activity', but he is sometimes inconsistent, using 'labour' synonymously with 'praxis'.”

¹⁸⁸ Karl Marx, *Capital: A Critique of Political Economy - Volume I* (London: Penguin, 1976), 138. In this volume of *Capital*, Ben Fowkes (translator) objects to Engels and adds in the footnote that: “Unfortunately, English usage does not always correspond to Engels’ distinction. We have tried to adopt it where possible.”

¹⁸⁹ Fuchs & Seignani, “What Is Digital Labour?” 240.

¹⁹⁰ Arwid Lund, “Playing, Gaming, Working and Labouring: Framing the Concepts and Relations,” *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 12, no. 2 (January 2014): 738, <https://doi.org/10.31269/triplec.v12i2.536>.

Coats and linen, however, are not merely values in general, but values of definite magnitude, and, following our assumption, the coat is worth twice as much as the 10 yards of linen. Why is there this difference in value? Because the linen contains only half as much labour as the coat, so that labour-power had to be expended twice as long to produce the second as to produce the first. While, therefore, with reference to use-value, the labour contained in a commodity counts only qualitatively, with reference to value it counts only quantitatively, once it has been reduced to human labour pure and simple. In the former case it was a matter of the ‘how’ and the ‘what’ of labour, in the latter of the ‘how much’, of the temporal duration of labour.¹⁹¹ This division indicates the dual character of commodity as well as of labour under capitalism. On one side there is use-value which is determined qualitatively through the need-based relation between man and material (product/commodity). This is what John Locke calls the “natural worth of anything” which is valued in line with its capacity to “supply the necessities, or serve the conveniences of human life.”¹⁹² Physical properties of any material contain potential use-values, man manifests this value and reveals materials’ necessary, useful side. But their use-value can only be realized during use or consumption.¹⁹³ So use-value is qualitatively determined in particular moments of production and consumption individually. On the other side of this duality there is *value*, in other words, “exchange-value”, which is defined by Marx as:

Exchange-value appears first of all as the quantitative relation, the proportion, in which use-values of one kind exchange for use-values of another kind. This relation changes constantly with time and place. Hence, exchange-value appears to be something accidental and purely relative, and consequently an intrinsic value [...].¹⁹⁴

¹⁹¹ Marx, *Capital*, 136.

¹⁹² John Locke, “Some Considerations on the Consequences of the Lowering of Interest, and raising The Value of The Money,” The Online Library of Liberty, accessed March 1, 2020, <https://oll.libertyfund.org/titles/locke-the-works-of-john-locke-vol-4-economic-writings-and-two-treatises-of-government>.

¹⁹³ Marx, *Capital*, 126.

¹⁹⁴ Marx, *Capital*, 126.

At the moment of exchange of two different commodities with two separate use-values, we need a common element or a reciprocal denominator to match them. This is the moment we create the “third thing, which in itself is neither the one nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third thing.”¹⁹⁵ It is an abstraction that serves to equate identically the magnitudes of diverse commodities to be exchanged with each other. In other words, it is a reduction by quantifying their unique values. It becomes a third thing, “a common factor” between commodities independent of their use-values.¹⁹⁶

The labour-aspect of the division between use-value and exchange-value (*value*) can be analyzed by referring to Marx’s conceptualization of concrete labour (useful labour) and abstract labour. In simple terms, concrete labour refers to the work which generates use-value evaluated qualitatively. Abstract labour is the quantitative aspect of work which generates exchange-value. Concrete, useful labour is the generic notion of work which is referred by Marx as “the condition of human existence which is independent of all forms of society.”¹⁹⁷ On the basis of this definition, concrete labour is also trans-historical. It is namely “work” that is eternal and natural for all people of all ages. But abstract labour is the mode of work realized only in capitalism. It is namely *labour*. So, the word *arbeit* used by Marx in one context refers to work as a generic, trans-historical category that is concrete/useful work; in another context, it refers to work arisen with capitalism. Thus abstract labour is indicated as a historical category or notion which is specific for the capitalist mode of productive activities.

Engels attempts to clarify the lexical ambiguity of this division by adding the following footnote: “Labour which creates use-values and is qualitatively determined is called 'work' as opposed to 'labour'; labour which creates value and is only measured quantitatively is called 'labour', as opposed to 'work'.”¹⁹⁸ However, in our analysis we suggest to consider work and labour as

¹⁹⁵ Marx, *Capital*, 127.

¹⁹⁶ Marx, *Capital*, 128.

¹⁹⁷ Marx, *Selected Writings*, 227.

¹⁹⁸ Marx, *Capital*, 138.

complementary to each other rather than in downright opposition. They represent the dual aspect of any human productive activity in the capitalist mode of production.¹⁹⁹ Work is the activity that creates commodities with use-value and then the commodities in exchange are “radiated” with exchange-value. This “radiation” is the key process which “abstracts” *value* from the commodity as well as (abstract) *labour* from its concrete constituent. This could also be conceptualized as the objectification or materialization of *labour* in a “useful article” -that is commodity.²⁰⁰

3.2. ABSTRACTION

Abstraction, which we have just conceptualized as a process that diffuses like radiation, is at the center of our forthcoming analysis which will shed light on the mechanism behind the transformation of work/labour towards its contemporary form. To develop further the analysis towards a precise deconstruction of *labour* as a capitalist manifestation, we need to discuss briefly the layers of abstraction by keeping our scope of analysis within the limits of the relation between *work* and *labour*. Moreover, this part of our analysis will help us read and investigate -without confusing “useful” and/or “abstract” aspects of productive activities- different forms of work/labour emerging in the production and/or *prosumption* of media products -including social media content and data in general.

Firstly, it needs to be highlighted that *abstraction* arises in multiple modes. If we can explain these modes we will be able to separate *labour* from *work* not only lexically but also conceptually. The preliminary questions we can ask are as follows: What are the modes/moments of *abstraction*? And how does *abstraction* arise? Once we have asked these questions we need to inquire into the outcomes of *abstraction* as well.

¹⁹⁹ Simon Mohun, “Abstract Labour,” in *A Dictionary of Marxist Thought*, ed. Tom Bottomore (Cambridge, MA: Harvard University Press, 1991), 2.

²⁰⁰ Marx, *Capital*, 129.

Primarily, we analyze the modes/moments of *abstraction* by dividing them into three groups: (a) *abstraction* from the physical properties (use-values),²⁰¹ special qualities or unique characteristics of the goods, (b) *abstraction* from concrete work (as a generic category), (c) *abstraction* from authentic individual(ity).

Firstly, the *abstraction* from physical properties of goods (a) can be regarded as a side-explanation of how exchange-value arises. The commodity can't be considered in terms of its conditions of existence as if it was any other ordinary goods. It is not an equivalent of mundanely produced goods. It is a result of reification that makes exchange-value the ultimate representative of the goods in the market. Through *abstraction* exchange-value becomes the "necessary mode of expression, or form of appearance."²⁰² What is left is not principally to be evaluated qualitatively but as a numeric, intangible, immaterial representation. Marx explains this extraction as follows:

If we make abstraction from its [commodity's] use-value, we abstract also from the material constituents and forms which make it a use-value. It is no longer a table, a house, a piece of yarn or any other useful thing. All its sensuous characteristics are extinguished.²⁰³

Complementarily to the *abstraction* from use-values, productive deeds by workers are permeated ("radiated") with this *abstraction*. This is the second mode/moment of *abstraction* (b) and it is *ipso facto* corollary to the first. Commodification embodies both categories of values (use- and exchange-value) and labour (abstract and concrete labour) in itself. Once again, Marx emphasizes the dual character of the commodity as follows:

Initially the commodity appeared to us an object with a dual character, possessing both use-value and exchange-value. Later on it was seen that labour, too, has a dual character: in so far as it finds its expression in value, it no longer possesses the same characteristics same as when it is the creator

²⁰¹ Fuchs & Seignani, "What is Digital Labour?" 248.

²⁰² Marx, *Capital*, 128.

²⁰³ Marx, *Capital*, 128.

of use values. I was the first to point out and examine critically this twofold nature of the labour contained in all commodities.²⁰⁴

The “twofold nature of the labour” and the binary existence of values in the commodity are outcomes of the *abstraction* that emerges along the exchange process. Circulation or a presupposition of circulation generates exchange-value which preserves and multiplies itself by means of labour.²⁰⁵ So, we need to elaborate abstraction (a) and (b) in close relation to each other as mutual phases in a sequence. And it should be stated that they are indispensable for commodification. Any product which is produced to be exchanged in the market becomes a form of commodity. The *value* of the commodity is an abstract, quantitative entity which founds its reality only in exchange relations. The *abstraction* is “the process whereby ‘abstract labour’ is obtained; far from being a mere mental abstraction of the investigator’s, [it] is one which takes place daily in the *reality of exchange itself*.”²⁰⁶ Therefore it could be claimed that *value* has a tautological existence. It is generated within the dynamics of self-referential market logic.²⁰⁷ This logic is self-referential because it defines the criterion to evaluate *values* of commodities based on the ranges that arise all abstractly through the ongoing exchange itself. All of the elements inherent in a product to be exchanged in the market are subordinated by this logic. These elements might be useful qualities of the product as well as any natural material used to create it but most importantly they consist of all the efforts/activities of the people that shape it. But within this order they are no longer represented by themselves based on their unique qualities. Consequently, while exchange-value dominates use-value, it also subsumes concrete characteristics of the particular labour as reified into the abstract form of labour that is -literally- *labour* in Marxist sense. Abstract labour hereafter is flattened or saturated, attributed as an ordinary calculable input which is aimed to be controlled for higher efficiency in the mass generation of

²⁰⁴ Marx, *Capital*, 131-2.

²⁰⁵ Karl Marx, *Grundrisse* (London: Penguin, 1857/58b), 264, as cited in Fuchs & Seignani, “What is Digital Labour?” 244.

²⁰⁶ Lucio Colletti, *From Rousseau to Lenin. Studies in Ideology and Society* (New York etc.: Monthly Review Press. 1972), 84.

²⁰⁷ It could also be called “market calculus.”

surplus. Therefore Rubin refers to exchange as “above all a form of production process, a form of social labor.”²⁰⁸ It makes homogeneous and abstract what is heterogeneous and concrete. Here, the expressions “social” and “homogeneous” require to be linked with the analysis of the third mode/moment of *abstraction*, i.e. the *abstraction* from authentic individual(ity).

The third mode of abstraction can be seen as the necessary end of the former two modes (a) and (b), but particularly (b) which refers to the *abstraction* of concreteness of the work for the sake of exchange-value. The transformation from heterogeneous to homogeneous domains is another dimension of what we refer to as the transformation from the qualitative to the quantitative domain. Together with these transformations, in a sense as their result, the last (but not least) *abstraction* arises at the heart of the individualities.

As the time and efforts of individual workers at this mode of *abstraction* are converted into the external being, that is into *value*, the relationship between the workers and their own experience is disturbed. Labour-time is in fact personal time of the individual worker at base level.²⁰⁹ Therefore, “the working capacities or labour-power of the various producers are in fact different and unequal, just as are the individuals to whom they belong.”²¹⁰ But individual capacities and time(s) turn out equal units of labour-power in commodity production:

The labour-time expressed in exchange-value is the labour-time of an individual, but of an individual in no way differing from the next individual and from all other individuals in so far as they perform equal labour; the labour-time, therefore, which one person requires for the production of a given commodity is the *necessary* labour-time which any other person would require to produce the same commodity. It is the labour-time of an

²⁰⁸ I. I. Rubin, “Essays on Marx's Theory of Value - Chapter Fourteen Abstract Labor,” Marxists.org, accessed March 5, 2020, <https://www.marxists.org/archive/rubin/value/ch14.htm>.

²⁰⁹ Karl Marx, “The Commodity,” in *A Contribution to the Critique of Political Economy*, Marxists.org, 1999, accessed March 5, 2020, <https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/ch01.htm>.

²¹⁰ Colletti, *From Rousseau to Lenin*, 84.

individual, *his* labour-time, but only as labour-time common to all; consequently it is quite immaterial *whose* individual labour-time this is.²¹¹

Through the mediation of exchange, while *labour*-time reduces to a necessary measure, individual time(s) and efforts of each worker towards productive activities are all equalized. As a whole, innumerable equal individual units of *labour*-time constitute the total *labour power*. This is “one homogenous mass of human labour-power” which is counted for the total values of commodities.²¹²

The qualitative and unique meaning of an experience for the individual vanishes under the subsumption of the standardized experience. Separate individual *labour* does not present any distinctive value. What is singular and personal becomes no different when it comes to value (assess) the contribution to total *labour power*. This is the mode/moment of *abstraction* which shakes the “solid” ground for workers in their attempt to interpret their necessary contribution to total production. The productive activities of workers are defined within super-mechanisms which are beyond their control. “Labour designates specific organization forms of work, in which the human subject does not control his/her “labour power” (s/he is compelled to work for others) and/or there is a lack of control of the objects of labour and/or the instruments of labour and/or the products of labour.”²¹³

Consequently the objectification of *labour* results in *alienation* in the whole productive experience. This condition could be conceived as a crisis in individualities that emerges as a confrontation of what is subjective with what is objective that substitutes and subsumes the former: “the merely subjective presence of the labour capacity confronted by its own conditions gives it a merely indifferent, objective form as against them [.]”²¹⁴ Individual workers are estranged

²¹¹ Marx, “The Commodity.”

²¹² Marx, *Capital*, 39.

²¹³ Christian Fuchs and Marisol Sandoval, “Digital Workers of the World Unite! A Framework for Critically Theorising and Analysing Digital Labour,” *TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 12, no. 2 (January 2014): 495, <https://doi.org/10.31269/triplec.v12i2.549>.

²¹⁴ Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy* (Penguin, 1973), 389, accessed March 3, 2020, <https://www.marxists.org/archive/marx/works/download/pdf/grundrisse.pdf>.

for the sake of “submission of labour to capital.”²¹⁵ This is more than substitution or appropriation, it is a metamorphosis which radically changes the very nature of the production process itself and “all beings” which constitute it: “The material on which it works is *alien* material; the instrument is likewise an *alien* instrument; its labour appears as a mere accessory to their substance and hence objectifies itself in things not *belonging to it*.”²¹⁶

The mechanism which causes *alienation* as such depends on the mechanical -and numerical- equalization of the living being (“living” as well as “authentic”) with the machinery. This happens as a coercive conversion of the qualities that make us human into indifferent fragments of commodity production. Here, machines can be considered much more than an analogy, but they are actually the envisagement of the capitalist who aspires to maximize the potential *surplus*. This clockwork model of production (in fact model of society) presupposes the confrontation and/or binary opposition as: the machine and the “living” human being. Marx in *Grundrisse* clearly explains this opposition in relation to *alienation* as follows:

Labour appears, rather, merely as a conscious organ, scattered among the individual living workers at numerous points of the mechanical system; subsumed under the total process of the machinery itself, as itself only a link of the system, whose unity exists not in the living workers, but rather in the living (active) machinery, which confronts his individual, insignificant doings as a mighty organism. In machinery, objectified labour confronts living labour within the labour process itself as the power which rules it; a power which, as the appropriation of living labour, is the form of capital. The transformation of the means of labour into machinery, and of living labour into a mere living accessory of this machinery, as the means of its action, also posits the absorption of the labour process in its material character as a mere moment of the reSalization process of capital.²¹⁷

²¹⁵ Ernest Mandel, introduction to *Capital*, by Karl Marx (Penguin, 1976), 34.

²¹⁶ Marx, *Grundrisse*, 389.

²¹⁷ Marx, *Grundrisse*, 615.

This mode of production is the reflection of *mechanism* -as explained in relation to Taylorism and Fordism in Chapter 2. The reorganization of production around machinery transforms all processes, including the actors in production, into the mechanized components of the machinery. Eventually, not only the rhythm but also the *aura* of the human worker -and human *labour*- is subject to the mechanical needs of the machinery itself.²¹⁸ So this makes *alienation* penetrate in all veins of the production. Hence together with *labour*, its products and forms and contents of the work itself all become part of this abstract machinery.²¹⁹

For workers, the experience of production at the factory base is disrupted in terms of teleological coherence. Once the segregated workplace displaced the workers' experience of producing from the authentic and reciprocal social relations based on concrete necessities, and now with the *alienated* and subordinated mode of this working experience, individuals lose the necessary connection between their activities and the final product. The explicit (rational and causal) flow throughout the production process becomes complex and mystified for the individual worker. This makes conscious involvement of the worker who is supposed to consciously involve whole process a merely *abstract* subordination. Moreover, the working experience begins to mutate into a non-conscious involvement. In conditions of commodity production, work arises as a form of *autonomous labour* which lacks "any conscious assignment or distribution on the part of society."²²⁰ *Labour* is separated from the individuals who generate it. So *labour* can be considered "a process in itself, independent of the man who carries it out."²²¹ Together with *abstraction* from use values and concrete characteristics of work, in this mode of *abstraction* we find that there is an "inversion whereby labour no longer appears as a manifestation of man but man as a manifestation of labour assumes here a real and palpable existence."²²² That's why we refer to it as *autonomous* or independent *labour* which is built

²¹⁸ Mandel, introduction to *Capital*, 34.

²¹⁹ Mandel, introduction to *Capital*, 34.

²²⁰ Colletti, *From Rousseau to Lenin*, 83.

²²¹ Colletti, *From Rousseau to Lenin*, 85.

²²² Colletti, *From Rousseau to Lenin*, 85.

upon negation of the objective reality of individuals and their authentic experience. This is substitution of individual *labour* with labour-power or human energy which is regarded only as a property in commodity production. Colletti explains this condition as:

Labour-power, in other words, which is a property, a determinant or an attribute of man, becomes an independent subject, by representing itself as the 'value' of 'things'. The human individuals, on the other hand, who are the real subjects become determinations of their determination, i.e. articulations or appendages of their common, reified labour-power...

This inversion does not only cause rupture from use-values of the product or concreteness of *labour*. The whole experience based on relations between individuals with instruments of production, the content and the context become indexed to another autonomous "subject" which is constituted by references to abstract, self-referential and self-generating mechanisms of exchange processes. This could be conceived as a total negation of the subjectivities which are reduced through equalization. In other words, as Marx points out, it is what "obliterates" the individual characteristics of workers.²²³ Together with the *expropriation*²²⁴ of *human labour*, individuals find themselves ignored or negated and dominated under the regime of commodification. Humans are "factually" separated or *abstracted* from their subjectivity and "transformed into a separate essence."²²⁵ "It has fixed human energy as such in the 'crystal' or 'congelation' of *labour* (which is *value*), turning it into a distinct entity, an entity which is not only independent of man, but also dominates him."²²⁶ This separation through estrangement or *alienation* is what we prefer to conceptualize as the 3rd mode/moment of *abstraction* in this analysis. It could also be considered as the fragmentation of the individual into a *dividual*. The equalization of human energy into equal fragments of value converts individuals into a mathematical relation with reality. For instance, it can be claimed that workers with their labour are

²²³ Karl Marx, "The Commodity."

²²⁴ Colletti, *From Rousseau to Lenin*, 87.

²²⁵ Colletti, *From Rousseau to Lenin*, 86-7.

²²⁶ Colletti, *From Rousseau to Lenin*, 87.

worth by reference to *labour*-time which is the primary coefficient to measure the *value* of their existence in and contribution to the production process. That is why Marx stresses that “one man during an hour is worth just as much as another man during an hour. Time is everything, man is nothing; he is at the most time’s carcass.”²²⁷ On this logic is based the thought which not only evaluates the worth of the individual within limits of numeric values at the moment of production but also pervades into life beyond the walls of the factory so that it designates our relation with everything. What is *authentic* becomes ready to be divided and assembled as discrete variables into an alternate domain. Deleuze refers to this mechanism as “numerical language of control” and adds that it “mark[s] access to information, or reject[s] it.” The cumulative entity, that is society with the individuals and institutions in it, is encoded with abstract numerical inferences. We continuously reach interpretations based on the assemblages within this numerical language so that we are subject to be designated within it. Hence “we no longer find ourselves dealing with the mass/individual pair. Individuals have become *dividuals* and masses, samples, data, markets, or ‘banks.’”²²⁸ This language is formed with the syntax of *abstraction* as we have already explained.

3.2.1. Industrial Capitalism and *Abstraction 1.0*

Work as a generic category denotes a vast range of productive activities, but as we investigated in Chapter 2 in the modern age it is limited to “paid employment”. This definition of work is -as supposed- “the highest position” that it has ever gained over the ages until modern times. This *elevation* brought about its own specialization and presented the highest level in cumulative production that man has ever achieved, so that it legitimated its indisputable sovereignty. Marx’s *labour* reflects this elevated, specialized manifestation of work. But at the same time it could be conceived as a confirmation of this definition of work. And this might be the reason why Arendt accuses Marx:

²²⁷ Karl Marx, *The Poverty of Philosophy* (New York: International Publishers, 1969), 54.

²²⁸ Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 5, accessed April 18, 2020, www.jstor.org/stable/778828.

The very reason for the elevation of labor in the modern age was its "productivity," and the seemingly blasphemous notion of Marx that labor (and not God) created man or that labor (and not reason) distinguished man from the other animals was only the most radical and consistent formulation of something upon which the whole modern age was agreed.

In Marxist inquiry *labour*, as a meta-category, is assumed to be the essential element in "the economic law of motion of modern society."²²⁹ Here, *labour* (of capitalist economy) is functional as a conceptual container of modern connotations to explain this law rather than work (as a generic-anthropological category) as an encompassing and/or loose concept that embraces several forms and conditions of productive activities. From the Marxist perspective, the focal discussion is not about dividing productive activities into two as work or *labour* just because it doesn't differ when it comes to understanding the capitalist mode of accumulation particularly and at the individual level. Additionally, we understand that *labour*, in the Marxist sense, is the product of the elevation of work from the Reformation and the Enlightenment to the modern capitalist order of society. It inherits the thinking formed through the transformation undergone in these periods that considers human beings as superior due to their ability to manipulate and organize nature. We can therefore conclude that the reduction of work to *labour* is this transformation's legacy in the modern age. The modern mode of glorification of *labour* is thought to create both man and material reality in total. Therefore, the Marxist notion of *labour* was not totally new for his age as Marx acknowledges:

Labour seems a quite simple category. The conception of labour in this general form—as labour as such—is also immeasurably old. Nevertheless, when it is economically conceived in this simplicity, 'labour' is as modern a category as are the relations which create this simple abstraction.²³⁰

From this perspective, *labour* could be well suited to be considered as the manifestation of modern work. It could be conceived as teleologically modern.

²²⁹ Marx, *Capital*, 92.

²³⁰ Marx, *Grundrisse*, 36.

When we use the word *labour* by reference to Marxist terminology we mean the reduced/consolidated definition of work as a modern, capitalist and economic category. Under this category, diverse productive activities, distinct personal preferences to conduct them and varying forms of production are all insignificant when it comes to their core function, which is the accumulation of capital. It does not matter as long as they produce commodities on an expanded scale.²³¹ By ignoring the lexical, etymological or contextual differences, diverse activities are represented under one rubric (*labour*) that signifies “not to the specificity of the activity but to its central role in maintaining order.”²³²

Here *labour* arises as an *abstraction* that covers various mental and material forms of productivity. Thus, the distinction between work (as a generic, anthropological category) and *labour* (as a modern category born into and within capitalism) doesn’t relate to types and forms of activities, and seems obsolete for the capitalist. As discussed in this chapter, *labour* that is actually *abstract labour*, is the only remaining manifestation of the productive activities that are all converted into the domain of exchange-value in commodity production. Thus Negri points out that “we can only define work on the basis of the relations of exchange and of the capitalist structure of production.”²³³ Just after this statement Negri also adds by reference to Marx, particularly *Grundrisse*, that it can be claimed that “We can find no concept of work in Marx that is not that of waged work, of work that is socially necessary to the reproduction of capital, thus no concept of any work to restore, to liberate, to sublimate, only a concept and a reality to suppress.”²³⁴ So, at this juncture, we need to underline that this (truly Marxist) conceptualization of *labour* is specific to the age of capitalism, particularly to *industrial capitalism*. Therefore *abstract labour* is regarded as a “historical” category which originates under conditions of capitalism.²³⁵ Together

²³¹ Harry Cleaver, “Work is Still the Central Issue! New Words for New Worlds,” in *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work*, ed. Ana Dinerstein and Michael Neary (Hampshire: Ashgate), 150.

²³² Harry Cleaver, “Work is Still the Central Issue!” 150.

²³³ Antonio Negri, *Marx Beyond Marx* (New York: Autonomedia, 1991), 10.

²³⁴ Negri, *Marx Beyond Marx*, 10.

²³⁵ Rubin, “Essays on Marx's Theory of Value.”

with *abstract labour*, exchange-value, the valorisation process and surplus labour are all referred by Fuchs and Seignani as “historic categories” to emphasize that the conditions which give birth to them are built -for the first time in the history- only in capitalism.²³⁶ On the opposite side, there are categories such as work, use-value, concrete labour, labour process and necessary labour. Fuchs & Seignani suggests to locate them as “essential categories.” They are also conceptualized as “trans-historical categories” that exist throughout human history and constitute “the essence of all economies and therefore also exist in capitalism and interact dialectically with capitalism’s historic reality.”²³⁷ However, it would be more analytical to elaborate on the qualitative difference of capitalism in relation to these categories rather than to line up them in binary and rival oppositions. Also, seeking and coining “essential” categories as all-encompassing concepts to be instrumentalized for explaining economies of the societies of thousand-year periods would lead us to neglect the ever-changing relations in the economy and society. Moreover, this approach will lead us to reach an anachronistic conclusion. Whether they are named as “essential” or “historical”, all of the categories are evaluated depending on the conceptual *répertoire* we currently have. Thus, we conclude that all of these categories are historical just because they are reformed, revisited and rethought in response to developments in contingency. But with particular developments and in particular periods we witness “new” forms of relations which also bring out “new” categories and concepts to define the mechanism and outcomes of these relations. From this perspective we can analyze the varying aspects of capitalism in relation to our discussion. Here, Postone offers an explanation to help us:

Although the circulation of commodities and money certainly antedate capitalism, according to Marx, it is only in capitalism that labor power becomes a commodity, that labor takes on the form of wage labor. Only then does the commodity form of the product of labor come universal, and money become a real universal equivalent. This historical development, for

²³⁶ Fuchs & Seignani, “What is Digital Labour?” 248.

²³⁷ Fuchs & Seignani, “What is Digital Labour?” 248.

Marx, signifies an epochal historical transformation: it "embraces a world history." Capitalism marks a qualitative break with all other historical forms of social life.²³⁸

We accept *abstraction* as the key process to explain this radical shift. In our investigation of *abstraction* it is obvious that the central argumentation is formed around the Marx's *labour*. In our analysis we regard *abstraction* (as explained in this section) as a significant -but not necessarily an essential- phenomenon of capitalism. In this respect we agree with Colletti who emphasizes the "real significance" of *abstraction* in the theory of *value*:

The crucial point here is again quite simple. Unlike those interpreters who think it is obvious and non-problematical that in commodity production each individual labour-power is considered as a 'human labour-power identical to all others' or as 'average social labour power', and hence have never asked themselves what this equalization of labour signifies — unlike them, I believe that this is precisely where the significance of 'abstract labour' and the entire theory of value is to be found.²³⁹

And it needs to be emphasized that *abstraction* is not single and static and features as an all-encompassing process of capitalism. Through the change in the formation of *value* and *value* generating mechanism in different periods of capitalism, *abstraction* evolves too but its significance for commodification remains. We name the primary level/version of abstraction as *abstraction 1.0* to indicate it as the early form of the abstraction that co-emerged with the invention of *labour* in the early period of capitalism. This version of *abstraction* emerged in this period as a consequence of the elevation/glorification of work and the corollary expansion/pervasion of work into life throughout history, so that ended up as *labour* as we know it. So, while we acknowledge that "capitalism marks a

²³⁸ Moishe Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory* (Cambridge: Cambridge University Press, 1993), 270-271.

²³⁹ Colletti, *From Rousseau to Lenin*, 84.

qualitative break”²⁴⁰ just as Postone claims, we also regard *labour* and *abstraction* in general in connection with antecedent processes that paved the way for them.²⁴¹

Capitalism’s qualitative break does not refer only to the transformation of work into *labour*. By building large machinery and factories that are separate from other places of daily life it created spaces for a disrupted experience for individuals. Above all, workplace and home were segregated from each other through the construction of industrial units apart from other domains of life. The *abstraction* which leads to *alienation* and estrangement is established and consolidated through the daily “migration” of individuals between home and workspace. This divide doesn’t only work at a spatial level. It also marks an authentic temporal experience. With this divide “a new sense of time” was fostered.²⁴² “Working hours were distinguished from leisure and in accordance with the repetitive tasks of factory work they were governed by the repetitive rhythm of the clock, not as before by the varying rhythms of the tasks at hand.”²⁴³ The meaning of spaces and experience in general -for individuals- was marked by a range of segregations: work from life; production from reproduction;²⁴⁴ creation from recreation; workplace from home; working time from leisure; paid employment from informal work; employed from unemployed; useful from useless (or idle); “worthy efforts”²⁴⁵ from idleness etc. It needs to be underlined that these segments were not neutral to each other. The first term in each of these pair of words had a higher status in comparison to the latter. For instance; paid employment had a better reputation than informal work; or working was appreciated and more respectable than leisure. This segregation created relations of subordination between two compartments of life. Moreover, we can claim that

²⁴⁰ Postone, *Time, Labor, and Social Domination*, 271.

²⁴¹ See Chapter 3 for the narrative of transformation of work throughout history.

²⁴² Christian Strümpell, “The Anthropology of Work and Labour: Editorial Note,” *Ethnoscripts* 19, no. 2 (2017): 6.

²⁴³ Strümpell, “The Anthropology of Work and Labour,” 6.

²⁴⁴ Jürgen Kocka, “Work as a Problem in European History,” in *Work in a Modern Society: The German Historical Experience in Comparative Perspective*, ed. Jürgen Kocka (Berghahn Books, 2010), 9; Andreas Eckert, “Why all the fuss about Global Labour History?” in *Global Histories of Work*, ed. Andreas Eckert (Berlin; Boston: De Gruyter, 2016), 6.

²⁴⁵ Catharina Lis and Hugo Soly, *Worthy Efforts. Attitudes to Work and Workers in Pre-Industrial Europe* (Leiden: Brill, 2012), 13.

these compartments were determined -ontologically- by reference to the subordination/subsumption or domination of one over another. Together with these hierarchies and oppositions there emerged a taxonomy which was indeed a construct designating a prescription of “meaningful life” principally formed around *labour*²⁴⁶ for any individual (who is supposed to earn respect from others). Again we should remember that this *labour* was an abstract and quantitative category in itself. This was particularly valid for the industrial period of capitalism. It could also be claimed that rather than a prescription, this was a norm or order of life. It became a mainstream expectation for people in developed countries of the West as Strümpell stresses:

In mid-20th century, the expectation was widespread that people would primarily work in large enterprises, earn a living wage (usually also a family wage), enjoy relatively good social benefits and working conditions governed by labour laws and protected by trade unions, and that they would have such employment until retirement. This “formalisation” of work had taken place in the advanced industrialised countries and was to be exported into the Third World by modernisation and development.²⁴⁷

Through the exportation of this economic structure and its complementary life-style, the aim was to form a flow of commodities at a universal level. At this point of our discussion, we need to emphasize that this flow doesn’t only concern material products but also ideas, images, cultural products, standards, titles, etc. Thus, all of the “things” of life are subject to be converted as commodities. Hence, Arendt accuses the industrial revolution of “replacing all workmanship with labor” and adds that the result of this replacement is that “the things of the modern world have become labor products whose natural fate is to be consumed, instead of work products which are there to be used.”²⁴⁸

Consequently, the new capitalist order of life depends on *abstract*, quantitative, mechanical, mathematical relations between individuals and all beings of life including themselves (their own body, social existence, and

²⁴⁶ *Labour* is the “abstract labour” which exists in dependence to the commodity production.

²⁴⁷ Strümpell, “The Anthropology of Work and Labour,” 7.

²⁴⁸ Arendt, *The Human Condition*, 124.

subjectivity in total). This is more than a simple transformation of production and productive activities into *value-based labour*. As stated by Marx, “Capitalism did not invent surplus labour.”²⁴⁹ The answer of Harry Cleaver -by reference to Marx- in “Work is *Still* the Central Issue! New Words for New Worlds” to the question of “If not surplus labour, then what?” helps us in this discussion to reach the conclusion that *abstraction 1.0* (in the three modes as explained here) compounds a novel individuality encapsulated with and by endless commodification:

[What capitalism invented is] the endlessness of the process of extraction within the context of commodity production and expanded reproduction. So surplus labour appears as a means to an end (more work, wider social control) and not just an end in itself.²⁵⁰

So, under the total control of commodity production, there is an attempt to designate each individual as an item of the capitalist mechanism. In Rubin’s words: “We would not be exaggerating if we said that perhaps the concept of man in general and of human labor -in general- emerged on the basis of the commodity economy.”²⁵¹ The imposition of work progressively on human activities in all domains also makes them subject to the accumulation of capital. It can be claimed that through this way society is organized under a new structure. The aim is through this strategy is to “organize the totality of society.”²⁵² Cleaver underlines that society is controlled in many ways “including military violence, starvation and the violence of incarceration as well as spectacle (television, films, sports) and brainwashing (formal politics, school) but all of these are geared to either getting people into work or getting rid of those who won’t.”²⁵³ Thus, all individuals need to participate in *labour power* in order not to find themselves marked as obsolete. The accumulated participation of individuals in commodity production serves to achieve total control over the time and energy of society by glorifying *labour* and setting *being busy* as an end in itself. As a consequence, the

²⁴⁹ Marx, *Capital*, 344.

²⁵⁰ Cleaver, “Work is Still the Central Issue!” 152.

²⁵¹ Rubin, “Essays on Marx’s Theory of Value.”

²⁵² Cleaver, “Work is Still the Central Issue!” 153.

²⁵³ Cleaver, “Work is Still the Central Issue!” 153.

mundane and authentic determinations of individuals are effaced by an external, *abstract* and superior mechanism -that is the logic of the market.

The subsumption of *value* over society (and individuals one by one) by abstracting people's experience and subjectivity in exchange relations has reached a significant level in the early years of industrial capitalism and matured to reach the contemporary condition. Its power was diffused initially with the imposition of work but proliferated with the progressive conversion of human activity to the *labour power* in many domains of life. "Man, whose activity has historically been determined by the blind forces of nature, by other men and, under capitalism, by the dictates of the market economy, finally takes control of his life and labour."²⁵⁴ Here *labour* appears more than a simple productive activity as any calculable effort, contribution or -even- existence which feeds generation of exchange-value. Hence, today what we face is beyond imposition of work or exploitation with the maximization of working hours for the workers. "Today we know that this trend has become almost omnipresent, reaching into every nook and cranny of our lives, to an extent that perhaps not even Marx anticipated."²⁵⁵ It could be claimed that the pervasion of *labour* into life is still in progress. And it is obvious that we need to elaborate the new stage(s)/level(s) of *abstraction* in the contemporary conditions by considering recent -technological- advancements.

3.3. BEYOND LABOUR: ABSTRACTION 2.0

3.3.1. Post-Industrialist Production and *Social Factory*

The proliferation/pervasion of work into life reached a stage with industrial capitalism that brought it into a key position in society. It is at this moment of history that *labour* arose. In our analysis, we have explained the trajectory of work towards *labour* and defined it as a modern capitalist category. In the last instance, we conceptualized *labour* by putting *abstraction* in the center of our analysis. *Abstraction 1.0* was its early modern and preliminary stage. Here, we

²⁵⁴ Jan Kandiyali, "Freedom and Necessity in Marx's Account of Communism," *British Journal for the History of Philosophy* 22, no. 1 (2014): 110.

²⁵⁵ Cleaver, "Work is Still the Central Issue!" 152.

propose that in the follow-up periods the reach and penetration of *abstraction* has been amplified through the introduction of new procedures, regulations, applications and technologies in various fields of life/world. So, we conclude that *abstraction* is becoming a phenomenon that has an influence beyond work (“waged work” as we know it) and it can’t be comprehended by only appealing to notions that refer to productive activities of a modern worker. We conceptualize this version of abstraction as *abstraction 2.0* that arose with the shifts in capitalism in the post-industrial period. Firstly, we need to explain briefly what we mean when we say “shifts” that accompanied the expansion of *abstraction* to the new level.

Production, reproduction and consumption are the spheres that were regarded as distinct or segregated realms of life in the industrial-fordist mode of capitalism.²⁵⁶ Although they were connected to each other naturally, their correspondence to each other was not blurred and spontaneous (and liquid). The formal production sphere of life evidently consisted of workplaces such as factories, offices, stores. As we stated in the previous sections, work as a modern category was also limited to formal, purposeful and paid productive activity. Production of goods and services took place within organizational boundaries.²⁵⁷ In the sphere of consumption, goods and services were exchanged so that *value* emerged as a key category which initiated *abstraction 1.0* within the boundaries of production spaces. The sphere of reproduction was the “domestic and thus private realm, located beyond spaces of production and consumption and, hence, attempts of valorization.”²⁵⁸ With the rise of post-industrial capitalism, it is believed that the boundaries between these spheres became blurred. Particularly the realm of consumption expanded its influence into the sphere of production and consumption, where market logic featured as central designator which assigned *value* to the beings of the world. As we discussed in Chapter 2, this transformation is also theorized by reference to the cultural and economic

²⁵⁶ E. Chertkovskaya & B. Loacker, “Work and Consumption: Entangled,” *Ephemera* 16, no. 3 (2016): 6.

²⁵⁷ Chertkovskaya & Loacker, “Work and Consumption,” 6.

²⁵⁸ Chertkovskaya & Loacker, “Work and Consumption,” 6.

transition of society and the “new” condition of society was regarded as a result of consumer culture,²⁵⁹ post-culture,²⁶⁰ Culture 2.0,²⁶¹ and culturalization of the economy (and/or economization of culture)²⁶² and culture industry.²⁶³ At this point of our analysis our focus is to inquire into the expansion of *abstraction* (and *value* in relation with it), rather than interpret the total cultural transformation in a hundred-year period. For the moment we emphasize the significance of consumption as a *value*-producing mechanism that not only is limited to the sphere of the classical exchange of concrete commodities but also mutates all domains of life. Thus the exchange of meanings, ideas, identities, signs generates value so that culture -in general- gets entangled in consumption. Chertkovskaya and Loacker sum up this shift as:

Concurrently, a shift is observed from a focus on the material-functional value of goods and services to the intensification of their symbolic-cultural value, wherein the social signification of goods and services becomes more important than their specific content. To wit, consumption is consolidated as a signifying process rather than a primarily utilitarian one. At the same time, we observe that consumption is brought into the work and organisational realm where it becomes an integral part of production. [...] Consequently, workers are asked to approach work – and themselves – as a site of consumption itself, so that the distinction between producer and consumer becomes increasingly blurred.²⁶⁴

Here, this mode of society is considered as a site of total consumption (and production indirectly). Although work and other spheres of daily life were still distinct from each other physically, all spaces were “colonized” under total consumption so in the last instance society was re-organized to serve the

²⁵⁹ Bauman, *Legislators and Interpreters*.

²⁶⁰ Steiner, *Extraterritorial*.

²⁶¹ Sacco, “Culture 3.0.”

²⁶² Alan Warde, “Production, Consumption and ‘Cultural Economy,’” in *Cultural Economy*, eds. Paul du Gay & Michael Pryke (London: Sage, 2002): 185-200.

²⁶³ Adorno & Horkheimer, “The Culture Industry.”

²⁶⁴ Chertkovskaya & Loacker, “Work and Consumption: Entangled,” 6.

accumulation of *value*. This condition is conceptualized as “social factory”²⁶⁵ or “factory without walls”²⁶⁶ that denotes deterritorialization, dispersion and decentralization of *labour*.²⁶⁷ We need to underline that this shift can’t be regarded as a stage in expansion of modern work into life or glorification of work. *Abstract labour* had dominated work at the mode of *abstraction 1.0* so that work was replaced by *labour*. In the *social factory*, *labour* extended from concrete factories to “firms without factories”²⁶⁸ and spread into daily life without the need to be assigned to any formal productive activity. It was only subjected to the abstract and self-referential category of capitalism, i.e. to *value*. This was a new level of abstraction that expanded *value*’s scope of influence beyond work and individual workers. According to Negri this was a form of society that was “placed at the disposal of profit.”²⁶⁹ We conceptualize this shift as migration from *abstraction 1.0* and *2.0*. The *labour* dimension of this shift is explained by Witherford (by reference to Negri) as a move from “formal subsumption”²⁷⁰ to “real subsumption”:

‘Subsumption’ designates the degree to which labour is integrated into capital’s processes of value extraction. In ‘formal subsumption’—roughly the early stages of the industrial revolution —capital simply imposes the form of wage labour on pre-existing modes of artisanal production. But in the subsequent phase, ‘real subsumption,’ the drive to generate surplus results in a wholesale reorganisation of work aimed at reaping economies of scale and cooperation.²⁷¹

²⁶⁵ Mario Tronti, “Social Capital,” *Telos* 17 (1973): 98–121.

²⁶⁶ A. Negri, “Capitalist Domination and Working-Class Sabotage,” in *Working Class Autonomy and the Crisis*, ed. Red Notes (London: Red Notes, 1979), 92–137.

²⁶⁷ R. Gill, & A. Pratt, “In the Social Factory?: Immaterial Labour, Precariousness and Cultural Work,” *Theory, Culture & Society* 25, no.7-8 (2008): 7, <https://doi.org/10.1177/0263276408097794>.

²⁶⁸ A. Negri, *The Politics of Subversion: A Manifesto for the Twenty-first Century* (Cambridge: Polity Press, 1989), 79.

²⁶⁹ Negri, *The Politics of Subversion*, 79.

²⁷⁰ N. Witherford, “Autonomist Marxism and the Information Society,” *Capital and Class* 52 (1994): 93, <https://doi.org/10.1177/030981689405200105>. Sure, this conceptualization is reading of Marx by Negri and Witherford. Witherford, -by reference to Negri- cites Marx’s statement: “formal subsumption of labour under capital.”

²⁷¹ Witherford, “Autonomist Marxism and the Information Society,” 93-4.

Here, “real subsumption” denotes the extended level of subsumption beyond formal productive activities. We would prefer not to use “real” to indicate this expansion because it might lead to the interpretation that this stage of subsumption is absolute and connected with what is real or reality in general. Also, real(ity) is a controversial term which is open to various meanings. But we can understand from this proposed analysis that the domination of *value* over society as totality was for the first time “realized” through the post-industrial organization of production and consumption. Sure, this does not mean that this is the ultimate stage in this process. Moreover, we claim that subsumption (through *abstraction*) proceeded to work in the *hyperreal* domain. The share of the “real” industrial commodities in the cumulative generation of capital was gradually replaced with immaterial commodities. This was regarded as “the decline of the industrial factory”, desindustrialisation and the “demise of the mass worker.”²⁷² Although periodization in the analysis of this transformation might produce some pitfalls, for a glimpse of the paradigmatic change we can point out to the 1970s as a key moment or “the site of a temporal shift in the capitalist organization.”²⁷³ New policies and applications certainly created influences of varying magnitudes and featured in distinct timings for different countries.²⁷⁴ But to understand the paradigm shift it would be a valid analysis to focus on “developed” or “industrial” countries of the OECD, particularly the G7. This structural change was later the scene of long-term change in modes of production: ²⁷⁵ “The structural composition of the OECD economies has drastically changed during the past decades, moving first from agriculture to manufacturing and later to services²⁷⁶ within the process of structural change [.]” (Figure 3.1). ²⁷⁷

²⁷² Witheford, “Autonomist Marxism and the Information Society,” 94.

²⁷³ Gill & Pratt, “In the Social Factory?” 7.

²⁷⁴ Stephen Nickell, Stephen Redding & Joanna Swaffield, “Patterns of Gx”rowth,” *Centrepiece* 7, no. 3 (2002): 3.

²⁷⁵ As we discussed in Chapter 2, Castells interpreted transitions as happening from the agrarian mode of society to the industrial and lastly to the informational mode.

²⁷⁶ K. De Backer, I. Desnoyers-James and L. Moussiégt, “‘Manufacturing or Services - That is (not) the Question’: The Role of Manufacturing and Services in OECD Economies,” *OECD Science, Technology and Industry Policy Papers*, no. 19 (Paris: OECD Publishing, 2015), 28, <http://dx.doi.org/10.1787/5js64ks09dmn-en>.

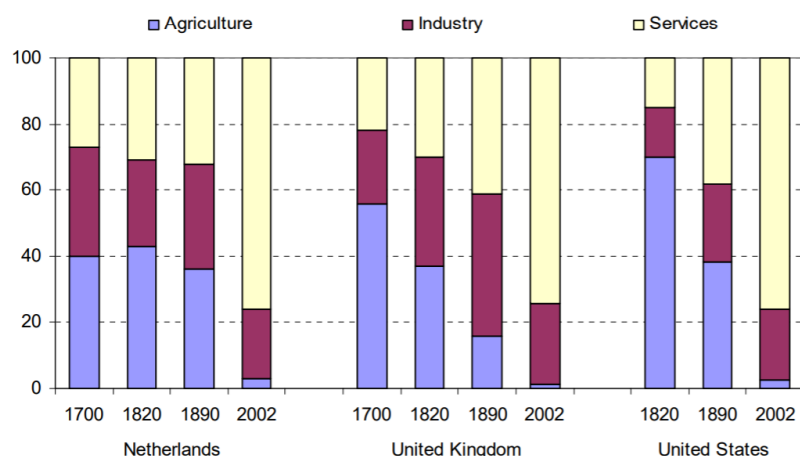


Figure 3.1. Share of Main Activities in Employment, selected OECD economies, 1700-2002, in %²⁷⁸

The influence of this change can be seen openly in a diminishing proportion of the manufacturing sector in GDP and employment. Especially the significant decrease in the share of employment in the G7 since 1970 indicates that the prominence of the *labour power* to produce material commodities was replaced by *labour* of immaterial, cognitive or abstract commodities (Figure 3.2).

“Services have traditionally been considered as a ‘residual’ sector, including everything that is not ‘agriculture, manufacturing, construction and mining’. This ‘residual’ category of services is composed of a wide variety of different activities. Services sectors differ widely in their labour-intensity, knowledge intensity, etc.; they span both the public and the private sectors, and can be market and non-market in nature. Because of this strong heterogeneous character, services lack a widely accepted definition or classification and have in general been analytically and statistically elusive.”

²⁷⁷ De Backer, Desnoyers-James & Moussiégt, ““Manufacturing or Services - That is (not) the Question,”” 7.

²⁷⁸ Dirk Pilat, Agnès Cimper, Karsten Olsen & Colin Webb, *The Changing Nature of Manufacturing in OECD Economies* (OECD, STI Working Paper, 2006/9), 6.

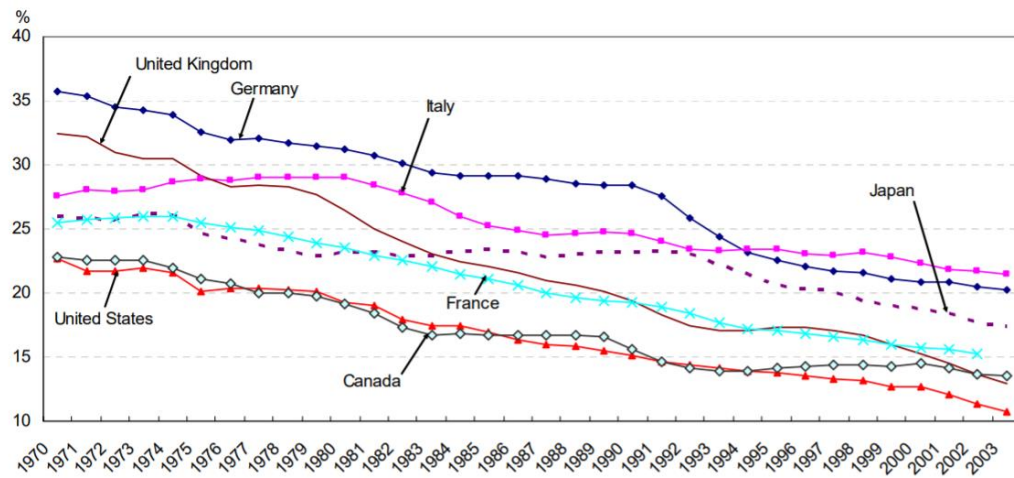


Figure 3.2. Share of manufacturing in total employment, G7 countries, 1970-2003, in %²⁷⁹

It needs to be stressed that the *value*-based economy did not vanish, but extended its capacity as a result of the increasing centrality of new sectors such as marketing, retail, finance and banking. These areas became meshed with former conventional production activities and they reached the dominant arena for profit extraction.²⁸⁰ This transformation is explained by Lazzarato as:

The product "service" becomes a social construction and a social process of "conception" and innovation. In service industries, the "back-office" tasks (the classic work of services) have diminished and the tasks of the "front office" (the relationship with clients) have grown. There has been thus a shift of human resources toward the outer part of the business. As recent sociological analyses tell us, the more a product handled by the service sector is characterized as an immaterial product, the more it distances itself from the model of the industrial organization of the relationship between production and consumption. The change in this relationship between production and consumption has direct consequences for the organization of the Taylorist labor of production of services, because it draws into question both the contents of labor and the division of labor (and thus the relationship

²⁷⁹ Pilat, Cimper, Olsen & Webb, *The Changing Nature of Manufacturing*, 6.

²⁸⁰ Witheford, *Autonomist Marxism and the Information Society*, 94.

between conception and execution loses its unilateral character). If the product is defined through the intervention of the consumer, and is therefore in permanent evolution, it becomes always more difficult to define the norms of the production of services and establish an "objective" measure of productivity.²⁸¹

Regarding this mode of development, Witheford adds that “[o]ne can no longer speak of a punctual site of production—the factory—as the privileged location for the extraction of *surplus value*, which instead proceeds at proliferating nodes within a giant metabolism of capital.”²⁸² Thus *value* and capital reached the level of meta-category that designated the end of all other beings’ actions that were supposed to work for their endless circular generation. This resulted in a whole separation within life-spaces indifferent in terms of the roles that were ultimately expected to feature in the accumulation of the capital. The typical separation between work and worker was also “gone by the wayside” as Marazzi states:

Today the capitalist organization of work aims to overcome this separation, to fuse work and worker, to *put to work the entire lives* of workers. Skills, rather than professional qualifications, are put to work and with them workers' emotions, feelings, their after-work lives, we might say the whole life of the *linguistic community*.²⁸³

The disappearance of segregations of the former order meant also a break of mutuality between the departments of production and consumption. Both melted into an abstract domain. This fusion resulted in a new way of totality which was not experienced as solidly as in the former “heavy” mode of industrialization.

Through this mutation society stepped into a new symbolic -and *liquid*- mode of experience encompassing production and consumption in an upgraded version of *abstraction*.

²⁸¹ Witheford, *Autonomist Marxism and the Information Society*, 94.

²⁸² Witheford, *Autonomist Marxism and the Information Society*, 94.

²⁸³ C. Marazzi, *Capital and Language: From the New Economy to the War Economy* (Los Angeles, CA: Semiotext(e), 2008), 50.

3.3.2. Symbolic Production and *Abstraction 2.0*

When Marazzi uses the term “*linguistic nature*”²⁸⁴ he highlights the proliferation of symbolic production in the post-industrial society. Thus, labour in this period cannot be identified by formal and concrete criteria which were defined based on the conditions of Fordist production. Consumption becomes the site of a new mode of production of the global factory. Within this “factory” *value* is generated through the production of immaterial commodities such as symbols, status, identities, and subjectivities. Lazzarato defines *labour* of this global and social factory as *immaterial labour* which “finds itself at the crossroads (or rather, it is the interface) of a new relationship between production and consumption.”²⁸⁵ Especially audiovisual production, advertising, fashion, the production of software, photography, cultural activities and management are listed as the classic forms of immaterial production.²⁸⁶ *Immaterial labour* is diffused through activities, applications and products (particularly cultural products) that are distributed by these sectors. The result is the production of “the informational and cultural content of the commodity.”²⁸⁷ So the commodity is encapsulated with the content which assigns meanings over it so that they are attached to the subjectivities and identities of the consumers who use them. It “gives form to and materializes needs, the imaginary, consumer tastes, and so forth, and these products, in turn, become powerful producers of needs, images, and tastes.”²⁸⁸ Their production could be interpreted as “biopolitical production, the production of social life itself, in which the economic, the political, and the cultural increasingly overlap and invest one another.”²⁸⁹ This is a new form of production that is concealed within consumption.²⁹⁰ The consumer is transformed through the

²⁸⁴ Marazzi, *Capital and Language*, 89.

²⁸⁵ Maurizio Lazzarato, “Immaterial Labor,” in *Radical Thought in Italy: A Potential Politics*, eds. P. Virno and M. Hardt (Minneapolis, Minnesota: University of Minnesota Press, 1996), 137.

²⁸⁶ Lazzarato, “Immaterial Labor,” 136.

²⁸⁷ Lazzarato, “Immaterial Labor,” 133.

²⁸⁸ Lazzarato, “Immaterial Labor,” 137.

²⁸⁹ Michael Hardt & Antonio Negri, *Empire* (Cambridge, Massachusetts/London: Harvard University Press, 2000), xiii.

²⁹⁰ Chertkovskaya & B. Loacker, “Work and Consumption: Entangled,” 7.

social and capital relation that is produced by this form of *labour*.²⁹¹ Hence, we conclude that the *labour* of post-industrial economy is beyond *labour* as Marx defined it. It “worked out in the context of the industrial society that was newly emerging at the time.”²⁹² The *labour* of post-industrial of society has arisen through a new mode in *abstraction* that manipulates *exchange value* through immaterial, symbolic appropriations. It is *abstraction 2.0* that results in a novel, *sublime* version of *labour* that operates ubiquitously over society, saturates former separations and segregations of production. Moreover, it has the power to produce “prescriptions of subjectivities”²⁹³ so that it features as a total mechanism (over society) imprinting each individual consumer. This trajectory is regarded as “invasion” by Lazzarato:

The production of subjectivity ceases to be only an instrument of social control (for the reproduction of mercantile relationships) and becomes directly productive, because the goal of our postindustrial society is to construct the consumer/communicator — and to construct it as "active." Immaterial workers (those who work in advertising, fashion, marketing, television, cybernetics, and so forth) satisfy a demand by the consumer and at the same time establish that demand. The fact that immaterial labor produces subjectivity and economic value at the same time demonstrates how capitalist production has invaded our lives and has broken down all the oppositions among economy, power, and knowledge.²⁹⁴

This manifestation of *labour* became dominant over all productive activities as well as over culture as a whole. Apparently, this was a “qualitative transformation”²⁹⁵ rather than a quantitative one and its pattern could be assessed by analyzing the change in symbolic domains and meanings in relation to production and consumption. *Symbolic labour* became central in the *social factory* that “produces ideas, symbols, codes, texts, linguistic figures, images, and other

²⁹¹ Lazzarato, “Immaterial Labor,” 142.

²⁹² A. Sayers, “The Concept of Labor: Marx and His Critics,” *Science & Society* 71, no. 4 (2000): 442.

²⁹³ Lazzarato, “Immaterial Labor,” 134.

²⁹⁴ Lazzarato, “Immaterial Labor,” 142.

²⁹⁵ Hardt & Negri, *Empire*, 281.

such products.”²⁹⁶ *Symbolic labour* is primarily linguistic and it resembles commercial, communicative, administrative and service work.²⁹⁷ It is a form of *immaterial labour* but this doesn’t mean that it has no material results or only creates symbols and ideas.²⁹⁸ While it creates or alters subjectivity and builds the *language* of consumption it is at the last instance headed for the generation of *value*. Here, we mean *language* (or as stated by Marazzi, the *linguistic nature* of post-industrial production) and Hardt and Negri define it as follows: “Language, as it communicates, produces commodities but moreover creates subjectivities, puts them in relation, and orders them.”²⁹⁹ Therefore, we can regard consumption as a *language* and as a production site of *abstraction 2.0*. Here we can refer to Jean Baudrillard’s theory of consumption to develop our analysis of *abstraction 2.0*. Consumption can be thought as a system of communication and exchange through which signs are continually being produced, processed, sent and received.³⁰⁰ From this perspective, as Ritzer explains, “The world of consumption is treated like a mode of discourse, a language (and even, following Levi-Strauss, like a kinship system). As a language, consumption is a way in which we converse and communicate with one another. [...] As a result, instead of Marxian use-values and exchange-values, consumables become sign-values.”³⁰¹ Here, we need to emphasize that this is not the disappearance of *exchange-value*, rather there is an emergence of a new type of *value*, that is the *sign value* that coexists with *exchange-value* but features as a manipulating *value* (or leverage) over it. Moreover, unlike *exchange value* it doesn’t work only in relation to production but also spreads into many facets of life. As a *language* it becomes the site of exchange for signs which are attributed to the commodities. Thus, “[c]ommodities are no longer defined by their use, but rather by what they signify. And what they signify is defined not by what they do, but by their relationship to the entire

²⁹⁶ Michael Hardt & Antonio Negri, *Multitude: War and Democracy in the Age of Empire* (London: Hamish Hamilton, 2005), 108

²⁹⁷ Sayers, “The Concept of Labor,” 445.

²⁹⁸ Sayers, “The Concept of Labor,” 445.

²⁹⁹ Hardt & Negri, *Empire*, 33.

³⁰⁰ Baudrillard, *The Consumer Society*, 93.

³⁰¹ Ritzer, introduction to *The Consumer Society*, 6.

system of commodities and signs.”³⁰² So the market logic is actualized in this post-industrial mode of production as “the logic of significations”³⁰³ so that it self-referentially denotes what is *necessary* and *valueable*. This is the moment in which the *abstraction* from *use-value* to *exchange-value* transcends into a new domain. It arises not only in the exchange of concrete commodities but predominantly in the immaterial domain. Bolin summarizes Baudrillard’s perspective regarding *sign value* as follows:

To Baudrillard, sign value is the result of the development of the fetish character of the commodity (i.e. the abstracted reified labour). If use value is the quality of the good (i.e. that product that is outside of the market economy) or the commodity, and the exchange value is the price set on the market of a commodity, then sign value is that value that gives status when it is consumed or spent. [...] Sign value, then, is involved in the production of difference; for example, social difference. Sign value is also, for Baudrillard, related to and structurally parallel to exchange value. If, for example, I buy a car, it obviously has a use value for me: I can move between different places that I need to be at, say between my home and my work. But it could simultaneously be used for other reasons. Any car would take me from my home to work, but it would make different impressions on my fellow colleagues if I drive a Bentley or a Toyota. Seen in this way the sign value would be a part of, and contribute to, the exchange value (i.e. the economic value that I am prepared to pay in order to choose the Bentley before the Toyota). But it can also be extracted as a value of its own: the value that differentiates me from other car owners. It therefore also has a relative autonomous relation to exchange value.³⁰⁴

Here, we consider *sign value* more than an extension of *exchange-value* but as a new mode of *value* which “upgrades” the capacity of *abstraction* and commodification. Unlike *exchange-value*, this new level of *abstraction* is

³⁰² Ritzer, introduction to *The Consumer Society*, 7.

³⁰³ Ritzer, introduction to *The Consumer Society*, 7.

³⁰⁴ G. Bolin, “Notes From Inside the Factory. The Production and Consumption of Signs and Sign Value in Media Industries,” *Social Semiotics* 15, no. 3 (2005): 292.

immersed into the cultural and cognitive structures of people. Therefore it is more difficult to capture its concrete ends and measure its productivity quantitatively. The exchange in *abstraction 2.0* works in unlimited ways and it shifts objects, needs, *values*, identities so that it becomes obsolete to calculate “rationally” the value of things in this mode. It could be interpreted as the introduction of a world in which everything can be imprinted with signs and connotations so that it results in a fluid, unstable, *liquid* (dis)order of life. Bauman defines it as *liquid modernity* “in which deliberately unstable things are the raw building material of identities that are by necessity unstable.”³⁰⁵ In a similar vein Baudrillard points out this fluidity with regard to the substitution of needs and objects:

[O]utside the field of its objective function, where it is irreplaceable, outside the field of its denotation, the object becomes substitutable in a more or less unlimited way within the field of connotations, where it assumes sign-value. Thus the washing machine serves as an appliance and acts as an element of prestige, comfort, etc. It is strictly this latter field which is the field of consumption. All kinds of other objects may be substituted here for the washing machine as signifying element. In the logic of signs, as in that of symbols, objects are no longer linked in any sense to a definite function or need. Precisely because they are responding here to something quite different, which is either the social logic or the logic of desire, for which they function as a shifting and unconscious field of signification.³⁰⁶

In the reign of consumption, *sign value* arises as a separate and independent category from the conditions of production hence indirectly from the *use-value* of the real product. For instance, the brand, that is the image that is created through advertisements and *myths*³⁰⁷ about the product, might alter its *value*. All of these

³⁰⁵ Zygmunt Bauman, *Liquid Modernity* (Cambridge, UK: Polity, 2006), 85.

³⁰⁶ Baudrillard, *The Consumer Culture*, 76-7.

³⁰⁷ Baudrillard, *The Consumer Society*, 193. Actually, Baudrillard considers the whole (dis)order of consumption as a *myth*; singular mythological narratives about products and brands are only part of this meta-myth and build its *ambivalence* continuously. Baudrillard explains this as follows: “Consumption is a myth. That is to say, it is a *statement of contemporary society about itself*, the way our society speaks itself. And, in a sense, the only objective reality of consumption is the idea of consumption; it is this reflexive, discursive configuration, endlessly repeated in everyday speech and intellectual discourse, which has acquired the force of *common sense*.”

categories lie outside the production unit and they function in the site of consumer culture –in other words in the *social factory*.

At this point of our analysis we can revisit the moments/modes of *abstraction* that we explained in the previous chapter to propose *abstraction 1.0* so that we can update and re-formulate them on the basis of the arguments and concepts we've used in this section. In this way we'll wrap up the discussion by embedding Baudrillard's value theory within our explanation and in the last instance, we'll conclude with a combined description of *abstraction 2.0*. Firstly we refer to Baudrillard's value theory as explained in *For a Critique of the Political Economy of the Sign*. Here Baudrillard formulates a *logic of signification*³⁰⁸ which could also be regarded as the logic of consumption and he expressly distinguishes it from other 3 logics:

1. A functional logic of use value;
2. An economic logic of exchange value;
3. A logic of symbolic exchange;
4. A logic of sign value.³⁰⁹

The first one is *use-value* as referred to in the Marxist *value theory* and here it is regarded as “a logic of practical operations” or utility.³¹⁰ Consistently with *the value theory*, the second one is the *exchange-value*. We've regarded it as a central category of *abstraction 1.0* in the industrial mode of production which reduces *use-value* into a quantitative category and here it is regarded by Baudrillard as “a logic of equivalence” or the market.³¹¹ The third one could be understood as “logic of ambivalence” or gift that also is based on exchange mechanisms in society that prevailed before the industrial (and post-industrial) periods and could be referred to as an anthropological category as well as an “irrational”, affective

³⁰⁸ Jean Baudrillard, *For a Critique of the Political Economy of the Sign*, trans. Charles Levin (Telos Press, 1981), 66.

³⁰⁹ Baudrillard, *Political Economy of the Sign*, 66.

³¹⁰ Baudrillard, *Political Economy of the Sign*, 66.

³¹¹ Baudrillard, *Political Economy of the Sign*, 66. Here “the market” denotes the site of commodity exchange in industrial society. So it needs to be understood as the logic of direct exchange in this mode of economy in which concrete goods are evaluated in exchange through abstract quantifications. And this is different from “the market” of post-industrial society in which immaterial significations designate the valorisation of commodities.

and unconscious category.³¹² The fourth one is our focal point in our discussion on the logic of consumption. It is referred to as the logic of difference or status.³¹³ It targets social difference in the global *social factory*, generated through *immaterial labour*. It differentiates users/consumers of any material or immaterial goods based on fluid/liquid significations/connotations of the *language* (consumption as a *language*) and is placed as the exterior, “relatively autonomous”³¹⁴ and superior to *value* (*exchange-value*). Thus we can now revise the modes/moments of *abstraction* by considering these new notions and categories we’ve explained in this section (Figure 3.3):

- (a) abstraction from the physical properties (use-values) at *abstraction 1.0* is upgraded to extended *abstraction* with domination of *sign value* over both *use-value* and *exchange-value* at *abstraction 2.0*;
- (b) abstraction from concrete work (as a generic category) at *abstraction 1.0* resulted in the rise of *labour* which mutated into *immaterial labour* at *abstraction 2.0*;³¹⁵
- (c) the individual existence and contribution of the worker in production were abstracted into quantified *labour power* at *abstraction 1.0* which lead to *alienation in individuality* (at production); at *abstraction 2.0* the focus shifts from the factory (production) to the market (consumption) and from

³¹² P-O Zander, “Baudrillard’s Theory of Value - A Baby in the Marxist Bath Water?” *Rethinking Marxism* 26, no. 3 (2014): 387. Zander interprets Baudrillard’s symbolic value as: “Baudrillard designates the symbolic as ambivalent, excessive, superfluous, prelogical, and unconscious. Its paradigmatic example is the gift, but not just any gift: only gifts that fit the aforementioned mechanisms suffice, and Baudrillard takes examples from potlatch literature in order to illustrate this. Potlatch may include gift exchange that sometimes proves disastrous for the givers, and it is certainly not economically rational. Symbolic values are defined as ambivalent, and this ensures that it would be misleading to speak about maximum symbolic values.”

³¹³ Baudrillard, “*Political Economy of the Sign*,” 66.

³¹⁴ Bolin, “Notes From Inside the Factory,” 292.

³¹⁵ Lazzarato, “Immaterial Labour,” 136. Here, we need to emphasize that we mean *immaterial labour* to denote both its classical definition which refers to productive activities in audiovisual production, advertising, media and so on; and also we mean the by-production (triggered/derivative production) of significations (attitudes, images, beliefs that build *difference*) which are collectively formed in and with media. Its “collective” character is defined by Lazzarato as follows: “This immaterial labor constitutes itself in forms that are immediately collective, and we might say that it exists only in the form of networks and flows. The organization of the cycle of production of immaterial labor (because this is exactly what it is, once we abandon our factoryist prejudices — a cycle of production) is not obviously apparent to the eye, because it is not defined by the four walls of a factory. The location in which it operates is outside in the society at large, at a territorial level that we could call ‘the basin of immaterial labor.’”

the individual worker to the individual consumer whose subjectivity becomes “raw material” of *immaterial labour*.³¹⁶

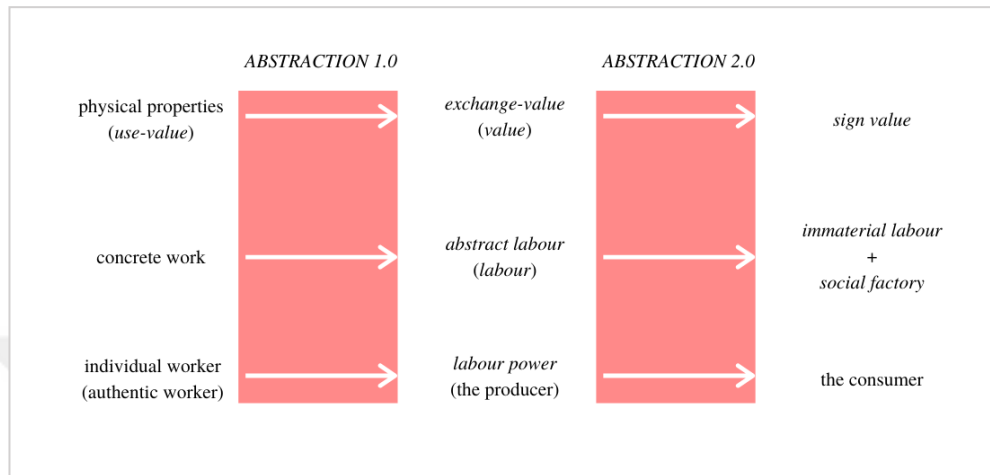


Figure 3.3. Upgrade of *Abstraction 1.0* to *Abstraction 2.0*

Here we claim that not only production but also consumption are encompassed within a new level of *abstraction*. We can assert that insistently considering generic productive activities to analyze the production of *value* in this mode will lead us to redundant generalizations. The central site of *value* production is not dependent on “‘heavy”, ‘bulky’, or ‘immobile’ and is ‘rooted’ on ‘solid’ spaces and phases.”³¹⁷ Here the connection between human, the object and (productive) actions is not easy to capture and formulate as a rational mechanism. As Bauman asserts, “Life organized around consumption, on the other hand, must do without norms: it is guided by seduction, ever-rising desires and volatile wishes - no longer by normative regulation.”³¹⁸ We consider this mode of *abstraction* in relation to the “fluidity” of the new mode of modernity. Just as “fluids do not

³¹⁶ Lazzarato, “Immaterial Labour,” 142. Here we adopt the perspective of Lazzarato, who asserts that: “If production today is directly the production of a social relation, then the ‘raw material’ of immaterial labor is subjectivity and the ‘ideological’ environment in which this subjectivity lives and reproduces. The production of subjectivity ceases to be only an instrument of social control (for the reproduction of mercantile relationships) and becomes directly productive, because the goal of our postindustrial society is to construct the consumer/communicator - and to construct it as ‘active.’”

³¹⁷ Bauman, *Liquid Modernity*, 57.

³¹⁸ Bauman, *Liquid Modernity*, 78.

keep to any shape for long and are constantly ready (and prone) to change it; and so for them it is the flow of time that counts, more than the space they happen to occupy: that space, after all, they fill but 'for a moment'";³¹⁹ *abstraction 2.0* behaves similarly. It shifts categories of determination continuously through speculations on *sign value*. Here, advertising and marketing play key roles to maintain this speculation. Thus in flux speculation makes *value* and *labour* arise in a volatile exchange which could not be evaluated through quantitative categories. But we need to add to this conclusion that in the next mode of *abstraction* this qualitative extension will meet with a pure quantitative form (data) through ubiquitous algorithms so that its fluidity will be extended into a new domain.

³¹⁹ Bauman, *Liquid Modernity*, 2.

CHAPTER 4 BEYOND DIGITAL LABOUR³²⁰

Production in the post-industrial mode of society was characterized by the *logic of signification* as we discussed in the previous chapter. And the main production site of signs was basically cultural and communications industries. Particularly the mass media was the locomotive of immaterial production in the post-industrial mode of the economy. It functioned as the factory to settle “the system of needs” in which needs are produced so that “‘consumption’ takes over logically and necessarily from production.”³²¹ On the political/ideological aspect it served to “manufacture consent” through the “propaganda model” of communication to “mobilize bias” and create (and maintain) patterns of “new” choices.³²² It was a one-to-many, vertical model of communication that dominated needs, choices, images and attitudes of individuals as consumers, producers or citizens. Hence, “the biopolitical production of order” consisted “in the immaterial nexuses of the production of language, communication, and the symbolic that are developed by the communications industries.”³²³ Baudrillard too asserts that it could be achieved by technostucture extending its grasp.³²⁴ From the industrial capitalism to post-industrial and *informational capitalism*³²⁵ this pervasion became more diffused and sophisticated. In Chapter 1, we discussed the major economic and cultural transformation and analyzed the contemporary condition by reference to *informational capitalism*, *Culture 3.0* and *prosumption*. We believe that it has built sufficient theoretical infrastructure to understand the transformation towards society’s current digital mode. On the strength of the inquiry in that discussion (in Chapter 1) here we will keep our

³²⁰ Here, the word labour is not written in italic form because it is controversial whether it always does or does not mean *labour* as defined by Marx. For a discussion of “genericity” of this term: Alessandro Gandini, “Digital Labour: An Empty Signifier?,” *Media, Culture & Society* (August 2020): 1-12, <https://doi.org/10.1177/0163443720948018>.

³²¹ Baudrillard, *The Consumer Culture*, 74-5.

³²² Edward S. Herman & Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media* (London: The Bodley Head, 2008).

³²³ Hardt & Negri, *Empire*, 32.

³²⁴ Baudrillard, *The Consumer Culture*, 74.

³²⁵ M. Castells, “Materials for An Exploratory Theory of the Network Society,” 18.

scope within the subject of *value* production, *abstraction* (v.3.0) and digital labour in contemporary conditions.

4.1. DIGITAL LABOUR AND BLINDSPOT DEBATE

Value production by digital media users, particularly social media users, is discussed by various theorists who focus on aspects of this phenomenon on the basis of their own theoretical orientations, such as classical Marxism, autonomist Marxism, postmodernism. One of the most cited theorists in this field is Christian Fuchs. According to Fuchs, social media users pay attention and time to view online advertisements. These advertisements are then sold to advertising companies based on view count, impression metric, time spent by social media users. According to Fuchs, this is obviously a form of commodification. Therefore social media users' online activity can be referred to as "digital labour."³²⁶

Another commodity which is traded through capitalist relations between users, companies and the market, in general, is the informational content which users leave while they are socializing online.³²⁷ From location information to favorite soap operas; from birthdays to the last visited café, as a data-form all are documented under an ID number and through surveillance all users are profiled. These profiles are used as raw materials to make projections of users' behaviors (what to buy, where to eat, when to travel etc.); Andrejevic calls this "the work of being watched."³²⁸ Social media users are encouraged to self-disclosure and this turns into a reciprocal "play" between all members of the social media world. As a consequence of this play, while people share their personal information with *friends* and others, accumulated data about them is continuously processed into valuable information. These processes can be thought of as "harvesting" data from the land of user activities.

³²⁶ Christian Fuchs, "Labor in Information Capitalism and on the Internet," *The Information Society* 26 (2010): 179-196.

³²⁷ Christian Fuchs, "With or Without Marx? With or Without Capitalism?: A Re-joinder to Adam Arvidsson and Eleanor Colleoni," *TripleC* 10, no. 2 (2012): 633-45.

³²⁸ M. Andrejevic, "The Work of Being Watched: Interactive Media and the Exploitation of Self-Disclosure," *Critical Studies in Media Communication* 19, no. 2 (2002): 231.

Indeed, both Fuchs and Andrejevic follow the Marxist approach of Dallas Smythe who applied *labour theory* to the political economy of mass media. In *Counterclockwise*, Smythe claims that television watchers pay attention to and spend time in front of the white screens. While they voluntarily watch the TV programs that they demand, they are exposed to advertisements in exchange for these TV programs they are willing to watch. In relation to concepts of use-value and exchange-value, Dallas proposes that the time audiences spend to willingly watch TV shows can be considered as time during which they produce *use-value* to gratify their own needs. On the other hand, advertisement watching time is the time spent to produce surplus value for capitalist institutions.³²⁹ This is regarded as a form of commodification where the audience's watching activity is production. Moreover, the audience in this process turns into an "audience commodity."³³⁰ Here, the audience is considered not free to choose not to be exposed to the advertisements, so it's forced to "work" to attain what it really demands. Similarly, Jhally & Livant add that we can call the time watchers spend while they're watching the program they're willing to consume (e.g. to entertain or to obtain information) "necessary watching time"; on the opposite side, while they're exposed to advertisements the time they spared for this is "surplus watching time." This part of the experience also corresponds to *alienation* for the watchers.³³¹

Based on Dallas Smythe's theory it is claimed that banners on websites, sponsored posts and stories in Facebook, Twitter and Instagram, or Youtube advertisements that interrupt the video are all dependent on a new, upgraded digital form of what Dallas Smythe conceptualized as *audience labour*. This is merely digital *labour*. Here, users don't have right to choose which advertisement they will be exposed to and there is no possibility to get away from them without

³²⁹ Dallas W. Smythe, *Counterclockwise* (Boulder, CO: Westview Press, 1994).

³³⁰ Dallas W. Smythe, "Communications: Blindspot of Western Marxism," *Canadian Journal of Political and Social Theory* 1, no. 3 (1977): 5.

³³¹ S. Jhally & B. Livant, "Watching as Working: The Valorization of Audience Consciousness," *Journal of Communication* 36, no. 3 (1986): 132.

making a special effort (e.g. installing external add-ons, ad-blocker plug-ins or specialized softwares).

Fuchs & Trottier admit the complexity and indistinguishable nature of *labour* in relation to social media use and state the difficulties of separating *labour* and “affect”, play and entertainment as:

There is a tendency in contemporary capitalism that in some companies and in the organization of life the boundaries between play and work collapse. During Fordist capitalism, there was a clear separation between work time and spare time. [...] The difficulty is that labour feels like play and that exploitation and fun thereby become inseparable. Play and labour are today in certain cases indistinguishable.³³²

Here, they still emphasize that although the distinction is difficult, it is just a manifestation of *labour* that is being converted into an unrecognizable form so that exploitation has become more cynical. Fuchs and his colleague claim by reference to Smythe that today social media users contribute to the market value of the companies through their increased engagement with social media platforms. They regard social media users as similar to the TV audiences whose watching activity features as *audience labour*. Engagement levels may differ from user to user: from only signing up to the platform without any engagement or to performing as “heavy user” who participates in *value* generation through overloaded participatory surveillance, being exposed to different forms of advertisements, cross-connecting other accounts (e.g. signing-up to Spotify using Facebook account). We need to admit that each user contributes to some degree.

By rejecting the Marxist revisiting of the audience/user participation in *value* generation, Arvidsson & Colleoni claim that investigating social media users’ activities only by considering metrics like *labour* time and watching time constitutes a limited approach.³³³ They add that “Fuchs’s analysis is extreme in

³³² Christian Fuchs & D. Trottier, “The Internet as Surveilled Workplace and Factory,” in *European Data Protection: Coming of Age*, eds. S. Gutwirth, R. Leenes, P. de Hert & Y. Pouillet (Dordrecht: Springer Netherlands, 2013), 38–41.

³³³ A. Arvidsson & E. Colleoni, “Value in Information Capitalism and on the Internet,” *The Information Society* 28 (2012): 135–50.

pushing the theoretical consequences of the application of the Marxian labor theory of value in informational capitalism.”³³⁴ We agree that there is a “weak” relation between users’ “productive time” and *value* generation in social media platforms. From this perspective, we can use the application and revisiting of Marx’s *labour theory* simply to explain the complex structure of *value* generation in contemporary conditions as over-stretching *value theory*. In other words, this approach seems to patch the concept of *labour* to the newborn and sophisticated processes in social media.

Apart from Marxist readings there are also other significant contributions in the field such as the investigation of Rigi & Prey, who aim to comprehensively regard the revenue model of social media by stressing new “regimes of pricing.”³³⁵ Rigi & Prey summarizes them as:

[...] regimes of pricing in relation to advertising on the Internet: the “hit,” the “click,” the “link,” and the “like.” Of these four, only with the “hit” does time, they claim, correspond to the value of advertising space. Since the determination of the price of advertising on contemporary social media is dominated by the other three regimes, there is no direct relation between time spent on social media and the price of an ad.³³⁶

Here we can notice that Rigi & Prey acknowledges that only the “hit” regime is directly related with classical Marxist *labour* time. Instead of *labour* time as a determinant of *value* generation, affective bonds are to be regarded as specially constructive in this analysis because they “underpin the network centrality of valueable ‘influencers’”³³⁷ These affective relations generate *value* for social media corporations. By using “like,” “share,” “retweet” buttons, people conduct affective relations and this activity can’t just be conceptualized simply as a form of *labour*. Here, affection, trust and shared emotions construct *philia*³³⁸ which is

³³⁴ Arvidsson & Colleoni, “Value in Information Capitalism,” 136.

³³⁵ Jakob Rigi & Robert Prey, “Value, Rent, and the Political Economy of Social Media,” *The Information Society* 31, no.5 (2015): 397.

³³⁶ Rigi & Prey, “Value, Rent,” 397.

³³⁷ Arvidsson & Colleoni, “Value in Information Capitalism,” 136.

³³⁸ A. Arvidsson, “The Ethical Economy: Towards a Post-Capitalist Theory of Value,” *Capital & Class* 33, no.1 (2009): 20.

difficult to be interpreted as a productive activity of *labour*. Arvidsson explains *philia* as:

The currency of value is thus what we, with Aristotle in mind, could call *philia*: friendship, positive affective bonds. Your standing in the community and your experience of *philia* with the community are a reflection of your ability to create *philia*, or community bonds. [...] *Philia* — affectively significant social relations — is emerging within social production as a new embodiment of value. [...] In other words, *philia* circulates in social production as a currency for community standing or esteem and as a resource — as social capital that can be mobilised in order to achieve things and make things happen. If money is liquid capital, *philia* is liquid organisation: a dispensable embodiment of one's ability to create community. In many cases, *philia* is monetised: connections and goodwill are cultivated in order to achieve something that can be marketed for money.³³⁹

Within this mechanism, the fourth regime is conceptualized as a new type of economy which Gerlitz & Helmond coins as “like economy” driven by affective relations.³⁴⁰ Online communication technologies have progressed from informational web to social web -in other words from Web 1.0 to Web 2.0- so that this development has constructed a sophisticated connection among all actors (e.g. people, goods, brands, institutions) and it is currently mapping relations through protocols built with “social buttons” such as like, retweet and share. What we need to emphasize here is that the added-value of this structure does not depend only on social relations or the social exchange in these relations; the software, algorithms and the logic of social buttons are the central production units that make it possible for the whole interaction to be efficiently commodified digitally through social media. This aspect is explained as follows:

The Social Web is not just about relationships, but about the applications and innovations that can be built on top of these relationships. Social-

³³⁹ Arvidsson, “The Ethical Economy,” 20-23.

³⁴⁰ Carolin Gerlitz & Anne Helmond, “The Like Economy: Social Buttons and the Data Intensive Web,” *New Media & Society* 15 (8): 1348–65, <https://doi.org/10.1177/1461444812472322>.

networking sites and other user-generated-content services on the Web have a potential to be enablers of innovation [...].

This perspective leads us to understand the production of *values* in terms of a techno-social construction, but we still need to clarify the exact mechanism of the social media in which commodification and the new mode of *abstraction* feature in a sophisticated way.

As a starting point of our inquiry we can initially adopt Rigi & Prey's explanation and then we'll expand this approach to our analysis of *abstraction*.
3.0. According to Rigi & Prey "social media generate revenue from four primary sources":

1. by leasing advertisement space to generate advertisement rent,
2. by selling information,
3. by selling services to advertisers,
4. by generating profits from fictitious capital and speculative windfalls.³⁴¹

Value can be generated at multiple levels at each source but within the concern and the scope of our analysis, assessing the contribution of social media users -if it exists- at each of these points of sources needs special consideration so that we can precisely determine the *human labour* aspect and isolate it from other portions within *value* generation.

4.2. INQUIRY INTO DIGITAL MODE OF ABSTRACTION

4.2.1. Rationale and Methodology

Scholars who address *digital labour* -particularly *labour* that emerges through social media activities- comprehensively theorize the audience/user commodity and its relationship with the *value theory*. Marxist and post-Smythe considerations dominate definitions regarding *value* and productive activities of social media users. However these works -such as the articles revisiting the blindspot debate as mentioned in previous paragraphs- don't refer sufficiently to and analyze methodically descriptions and financial indicators in the official

³⁴¹ Rigi & Prey, "Value, Rent," 392.

documents and reports published by social media companies. These documents and reports would help us explain empirically the sources of these companies generating revenues as well as (surplus) *value* from social media activities which are initialized through these platforms. Although preliminary work refers to some metrics such as *cost per thousand (CPT)* or *cost per mille (CPM)*, they don't analyze the revenue model of social media platforms particularly. As an example, Rigi&Prey compare differing prices for advertisers between conventional media and new media per one thousand viewers (that is *CPT*).³⁴² And rightly enough they ask the following question:

If audiences produce value, then why would one thousand readers of *The Stockton Record* produce 15.3 times more value than the same number of *USA Today* readers? Or why should the same number of visitors to newspaper sites on the Internet produce 12.48 times higher value than do “prosumers” on social networking sites?³⁴³

Here it is claimed that *CPT* doesn't represent the *value* generated through paid attention and time but the rent for advertising space and time. These two factors serve to rate rented space. This space feeds the hope of advertisers for future sales. So *surplus value* is created through a negotiated price for the rent that is “dependent on the projected profile of the readers/viewers attracted to this space/time. Class, gender, generation, race, national differences, and corresponding cultural habitus, among other factors, are all major aspects of audiences' profiles.”³⁴⁴ Rigi&Prey are right in their conclusion that *CPT/CPM* and audience *labour* are not determinant in *value* generation because *CPT/CPM* fluctuates significantly between different media channels independently from audience efforts such as viewing, reading, paying attention. But many investigations -including Rigi&Prey's work- still lack a simple explanation of the revenue-generating mechanism for social media platforms. As mentioned in earlier paragraphs it is “the like economy”³⁴⁵ and “the webs of affective

³⁴² Rigi & Prey, “Value, Rent,” 395-7.

³⁴³ Rigi & Prey, “Value, Rent,” 396.

³⁴⁴ Rigi & Prey, “Value, Rent,” 396.

³⁴⁵ Gerlitz & Helmond, “The Like Economy.”

attachments around informational objects”³⁴⁶ that most convincingly theorize the mechanism in broad strokes. Though we acknowledge the significance of these theoretical discussions which lead us to an understanding of the transformation from the former-conventional (mass media) regime of *value* generation to the informational regime, we can state that there is still a lack of inquiry to embed this theoretical consideration within the operating model of any social media platform. It will be useful to test this theory with a case/model in operation. To understand this model we will focus our analysis on Facebook’s annual reports and official statements so that we can explain their revenue, role/place of the advertiser and the user in *value* generation in this model and the ad-system in operation. We choose to study Facebook as a case for the same reasons as Pew Research Center explains why they study Facebook to analyze social media algorithms and personal data:

[T]he platform is used by a considerably bigger number of Americans than other popular social media platforms like Twitter and Instagram. Indeed, its global user base is bigger than the population of many countries. Facebook is the third most trafficked website in the world and fourth most in the United States. Along with Google, Facebook dominates the digital advertising market, and the firm itself elaborately documents how advertisers can micro-target audience segments. In addition, the Center’s studies have shown that Facebook holds a special and meaningful place in the social and civic universe of its users.³⁴⁷

As confirmed also by Statista, Pew Research Center states that (by July 2020) Facebook is listed at the top of the social media platforms worldwide with more than 2.7 billion users (see Figure 4.1). Additionally, Facebook, by taking over Instagram in 2012 and WhatsApp in 2014 enlarged its number of active users.³⁴⁸

³⁴⁶ Arvidsson & Colleoni, “Value in Information Capitalism,” 144.

³⁴⁷ Paul Hitlin & Lee Rainie, “Facebook Algorithms and Personal Data,” Pew Research Center, January 16, 2019, accessed November 11, 2020, <https://www.pewresearch.org/internet/2019/01/16/facebook-algorithms-and-personal-data/#why-we-study-facebook>.

³⁴⁸ Sam Shead, “Facebook owns the four most downloaded apps of the decade,” *BBC*, December 18, 2019, accessed November 12, 2020, <https://www.bbc.com/news/technology-50838013>.

Through these takeovers not only did it increase its user pool, but more importantly it rebuilt itself as a social media ecosystem with various spaces, compounding data synchronically into its system.

The volume of Facebook’s user database is not our only reason to choose it for our analysis, but it also helps us by providing transparency for its users. Facebook announced “Ad preferences” in June 2014.³⁴⁹ This is the panel that lets users see and control the data collected to show ads to them. So, all users can reach the information on how Facebook classifies them based on their interests, which advertisers include them in their audiences and how it determines which ads to show them. Through this released data we can understand how any user is indexed (and *abstracted*) into the ad system to be reduced as an asset in the generated audience of any advertiser.

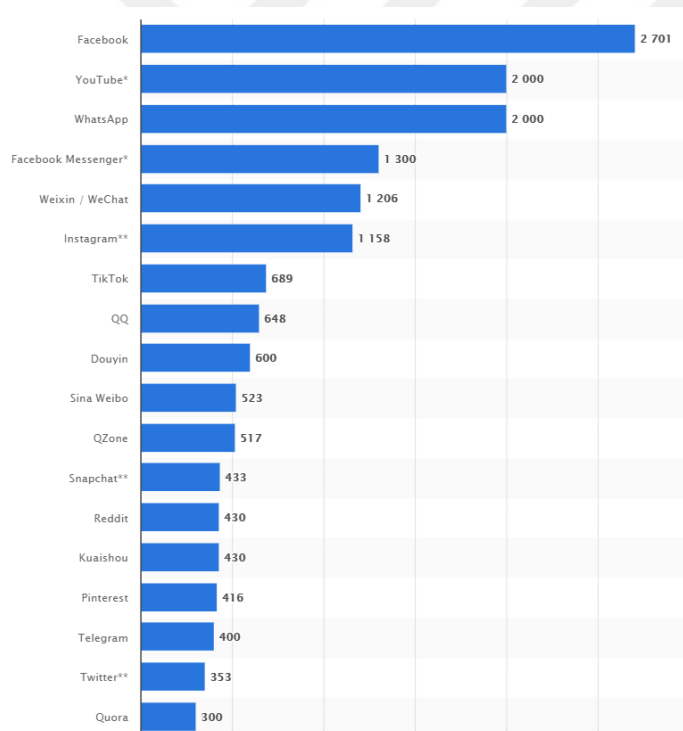


Figure 4.1. Number of Active Users of Social Media Platforms (millions)³⁵⁰

³⁴⁹ “Making Ads Better and Giving People More Control Over the Ads They See,” Facebook Newsroom, Facebook, June 12, 2014, accessed November 10, 2020, <https://about.fb.com/news/2014/06/making-ads-better-and-giving-people-more-control-over-the-ads-they-see>.

³⁵⁰ “Most popular social networks worldwide as of October 2020, ranked by number of active users,” Statista, accessed December 2, 2020, <https://www.statista.com/statistics/272014/global->

Facebook declared its intention to sell its shares on stock market and hold its initial public offering (IPO) in 2012. To be eligible for this process Facebook filed the necessary forms and documents to be submitted to The Securities and Exchange Commission (SEC). The most fundamental form in anticipation of IPO is called as S-1 which “requires companies to provide information on the planned use of capital proceeds, detail the current business model and competition and provide a brief prospectus of the planned security itself, offering price methodology and any dilution that will occur to other listed securities.”³⁵¹ After the necessary inspection of these documents by SEC, Facebook announced the pricing of its initial public offering and its shares started to be traded on the NASDAQ Global Select Market in May 2012.³⁵² Since IPO, Facebook also releases reports on an ongoing basis because the federal securities laws require the companies whose shares are traded on the stock market to disclose this information.³⁵³ One of these documents, called 10-K, is released annually and contains comprehensive information on the company’s business and financial condition. Unlike the annual report which is required to be sent by companies to their shareholders, 10-K includes more detailed information.³⁵⁴ 10-K has a standard structure of four parts and fifteen subsections. It discloses information on several topics under these subsections (which are called *item* in this form): description of the business, risk factors, financial statements, organizational structure, properties, management’s discussion etc. (See Appendix A for the cover page and table of contents of a sample of Form 10-K). In this study we will analyze the S-1 document and the 10-K annual reports released between 2013-2020 to understand the revenue model and find the key actors, processes and

social-networks-ranked-by-number-of-users/#:~:text=What%20is%20the%20most%20popular,1.1%20billion%20monthly%20active%20accounts.

³⁵¹ Will Kenton, “SEC Form S-1 Definition,” Investopedia, March 19, 2020, accessed November 10, 2020, <https://www.investopedia.com/terms/s/sec-form-s-1.asp>.

³⁵² “Facebook Announces Pricing of Initial Public Offering,” Facebook Investor Relations, Facebook, accessed December 3, 2020, <https://investor.fb.com/investor-news/press-release-details/2012/Facebook-Announces-Pricing-of-Initial-Public-Offering/default.aspx>.

³⁵³ “Form 10-K,” Glossary, U.S. Securities and Exchange Commission, accessed December 1, 2020, <https://www.investor.gov/introduction-investing/investing-basics/glossary/form-10-k>.

³⁵⁴ “How to Read a 10-K,” U.S. Securities and Exchange Commission, accessed December 1, 2020, <https://www.sec.gov/fast-answers/answersreada10khtm.html>.

metrics in (surplus) *value* generation. These documents include a wealth of information on various topics.

We will focus particularly on the parts which help us answer questions related to *value* generation, such as: From which operations does Facebook substantially generate revenue? Where is the user located in this revenue model? What are the key metrics defined by Facebook to explain surplus and profitability? And what is the portion of the users in surplus and profitability? To answer our questions we will analyze the content of Form S-1 and 10-K reports. But we will focus on particular sections of these forms: *Item 1. Business, Item 1A. Risk Factors and Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations*. These *items* include descriptions about the business, actors, procedures, explanations and descriptions of the key metrics and sources of the revenues and costs.

As highlighted by Faltesek, although these documents are “important resources for study” they are not included enough among the research interests of communication scholars.³⁵⁵ They provide us official and objective information that can be assessed for our inquiry into *value*. Due to their standardized structure we can reliably trace the change in definitions, explanations and related financial scores. Hence, any colleague can easily check and repeat our study and findings by accessing these public sources.

4.2.2. Sources of Revenues and (Surplus) Value

In the S-1 form and all 10-K files released between 2013-2020, we can find the explanation about revenues under the section “Components of Results of Operations” which includes statements on components of revenues, costs of revenues, and operating expenses. In all of these documents, it is consistently declared that Facebook generates “substantially” all of its revenue from advertising.³⁵⁶ Facebook also puts out a similar statement in the section “Risk Factors” as follows: “Substantially all of our revenue is currently generated from

³⁵⁵ Faltesek, *Selling Social Media*, 8.

³⁵⁶ In S-1 and 10-K documents published by Facebook between 2012-2020.

third parties advertising on Facebook and Instagram.”³⁵⁷ The second source of revenue is categorized under “Payments and other fees”³⁵⁸ which primarily includes fees received from developers using Facebook’s Payments infrastructure. Facebook mandates³⁵⁹ the use of this infrastructure for game applications work on its platform to reach users. Thus the revenue from payments and fees is generated almost exclusively from game applications.³⁶⁰ Additionally, there are other sources of fees in all periods that are not significant, such as: “delivery of virtual reality platform devices”,³⁶¹ “consumer hardware devices”,³⁶² and “ad serving and measurement products.”³⁶³ These statements partly support the claim by Rigi & Prey, who identify four methods through which social media generate income: “leasing advertisement space to generate advertisement rent”, “the sale of services to advertisers and others”³⁶⁴, “the sale of information” and “selling shares [in financial markets] and through speculation.”³⁶⁵ Advertisement rent and the sale of services are directly listed under “Consolidated Statements of Income Data” in the 10-K files. The third one, income generated through selling shares and speculation, is potentially actualized. As a publicly-traded company on NASDAQ, Facebook is supposed to generate money through operations on stock market. Additionally, we find that Facebook might generate income from interests which in the income statement are labelled “Interest and other income” (See Appendix B

³⁵⁷ Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 11, accessed November 20, 2020, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/45290cc0-656d-4a88-a2f3-147c8de86506.pdf>.

³⁵⁸ In the S-1 form and 10-K documents released between 2013-2019 this source is called as referred here. In the latest 2020 version of 10-K this section is named as only “Other revenue”. Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 54.

³⁵⁹ Facebook Inc., Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017), 39, accessed November 18, 2020, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/80a179c9-2dea-49a7-a710-2f3e0f45663a.pdf>.

³⁶⁰ Facebook Inc., Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017), 9.

³⁶¹ Facebook Inc., Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017), 39.

³⁶² Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 54.

³⁶³ Facebook Inc., Form 10-K for the Period Ending December 31, 2015 (filed January 28, 2016), 40, accessed November 18, 2020, <http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/0c796377-fba3-4e40-b18a-3503901af1a4.pdf>.

³⁶⁴ Rigi & Prey give examples of these services: “collecting, analyzing, storage, and delivery of data.” Rigi & Prey, “Value, Rent,” 399.

³⁶⁵ Rigi & Prey, “Value, Rent,” 399.

for the sample of Income Statement). Every publicly-traded company must account for their incomes/expenses resulting from interests. SEC defines this portion of income as: “Interest income is the money companies make from keeping their cash in interest-bearing savings accounts, money market funds and the like. On the other hand, interest expense is the money companies paid in interest for money they borrow.”³⁶⁶ Lastly, only one source/method, i.e. “the sale of information” is not stated in any part of the 10-K files. This method is also strictly denied by Facebook, which officially declares in the Frequently Asked Questions (FAQ) section in “About Facebook Ads” page, in answer to the question “Does Facebook sell my data?” that “Facebook does not sell data to advertisers. This includes personal information like your name or the content of your Facebook posts.”³⁶⁷ Thus, based on our findings from the analysis of annual reports and by reference to the public declaration of Facebook, we can conclude that only this source/method in the revenue generation model claimed by Rigi & Prey is not valid particularly for Facebook. Based on our investigation of Facebook’s official and accessible financial and operational documents, their model is only partly supported.

We tested the validity of Rigi & Prey’s “hypothetical identification” of four methods through which social media can generate income by inspecting the documents and releases of Facebook and we found that Facebook generates income basically in three ways.³⁶⁸ The most significant one is renting advertisement space. This will be central in our forthcoming analysis for two reasons: (1) It is the only one which might be related to user *labour* because it is claimed that users contribute to generating surplus *value* through their impressions and actions; (2) As acknowledged by Facebook, it is a substantial part of total revenue.

³⁶⁶ “Beginners' Guide to Financial Statement,” U.S. Securities and Exchange Commission, February 5, 2007, accessed November 10, 2020, <https://www.sec.gov/reportspubs/investor-publications/investorpubsbegfinstmtguidehtm.html>.

³⁶⁷ “About Facebook Ads,” Facebook, accessed December 7, 2020, <https://www.facebook.com/ads/about/>

³⁶⁸ Rigi & Prey, “Value, Rent,” 399.

For a better understanding of the significance of advertising operations in revenue making, we need to analyze the portions of the income generated through advertisements exposed to the users of Facebook. Based on the data gathered from the 10-K files we find that the share of advertising revenues in Facebook's total revenues increased significantly from 2012 to 2019 (Figure 4.2). This figure indicates that Facebook over the years has gradually established its income model on advertising rent. Moreover, in the most recent SEC filings, it is announced that in the 3rd quarter of 2020, the portion of advertising has reached %98.8 of Facebook's total income.³⁶⁹ So we understand that the *ad* system and user-contributed advertising operations are very "substantial" for Facebook.³⁷⁰ As Fuchs and Sevignani point out: "Targeted advertising is at the heart of the capital accumulation model of many corporate social media platforms."³⁷¹ Based on these results we can claim that Facebook could be regarded as principally a business model of digital advertising in the contemporary digital economy.

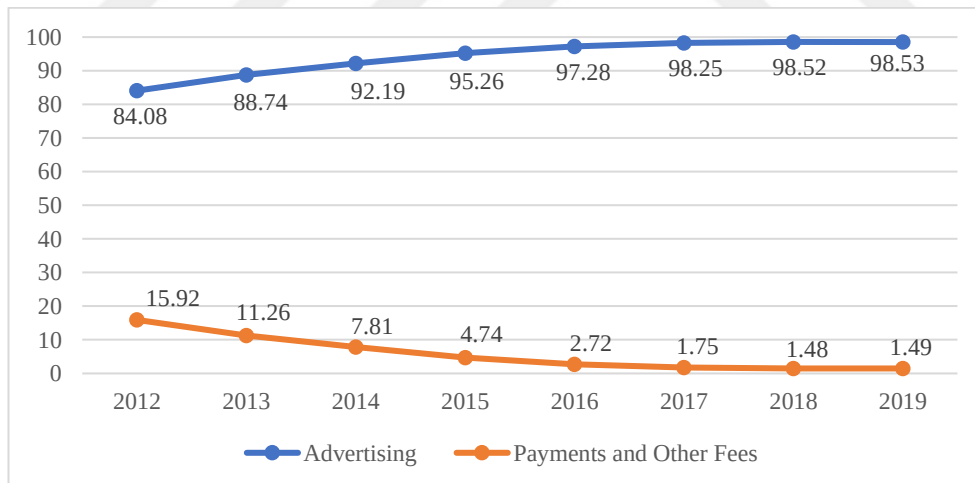


Figure 4.2. Proportions in Facebook's Revenues (%)³⁷²

³⁶⁹ Facebook Inc., Form 10-Q for the Quarterly Period Ending September 30, 2020 (filed October 30, 2020), 40, accessed November 18, 2020, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/518957aa-c936-455b-8ba0-9743ca4c3855.pdf>.

³⁷⁰ Facebook Inc., Form 10-K for the Period Ending December 31, 2018 (filed January 31, 2019), 9, accessed November 15, 2020, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/a109a501-ed16-4962-a3af-9cd16521806a.pdf>.

³⁷¹ Fuchs & Sevignani, "What Is Digital Labour?", 237.

³⁷² Consolidated (derived) data from the analysis of the financial statements in 10-K files released between 2013-2020. See Appendix C for the raw data.

While the share of advertising operations in total income increases it can be noticed that the share of payments and other fees diminishes. The sharpest decrease was recognized in 2015 and it is explained by Facebook as follows (Figure 4.3):

Payments and other fees revenue in 2015 decreased \$125 million , or 13%, compared to 2014 . The decrease in Payments and other fees revenue was a result of decreased Payments revenue from games played on personal computers, partially offset by an increase in other fees revenue related to acquisitions closed in the second half of 2014.

The portion of payments and other fees in revenue is not directly and proportionally related with user *labour* because there is no active contribution of any user in *value* generation through payments. Users act as consumers in this commercial relationship. This source of revenue can be considered as a commission for payments and transactions within Facebook Payments service. The decrease in the volume of payments and other fees and, more importantly, their diminishing share in total revenue shows us the transformation of Facebook into a business model that is based on income generated through user impressions and engagements on advertising. So, in the forthcoming analysis, we aim to focus on the statistics on advertising revenue and particularly the change in this source of revenue in relation to user activity and/or any related variable as explained in annual reports.

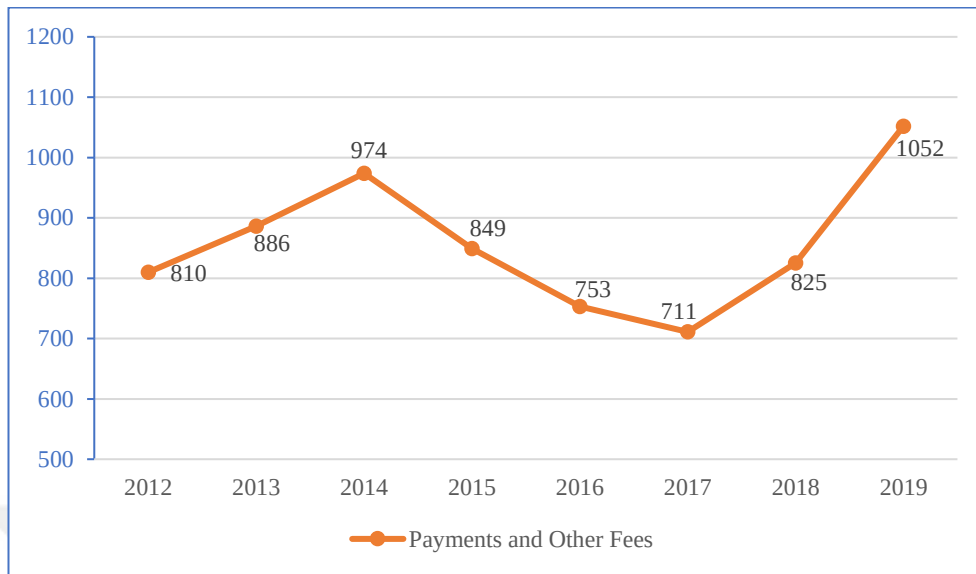


Figure 4.3. Revenues from Payments and Other Fees (in million \$)³⁷³

While the share of advertising in total revenues increases significantly, we also notice that the volume of the advertising revenue climbs drastically (Figure 4.4).³⁷⁴ We can analyze statements that might explain the underlying mechanism of this upslope so that we can elaborate on whether it is directly and proportionally related to increased user contribution or not.

³⁷³ Consolidated (derived) data from the analysis of financial statements in 10-K files released between 2013-2020.

³⁷⁴ It is remarkable that the overall digital advertising revenue in the world don't increase at that pace. For example, the biggest player in this sector, Google has been able to increase its advertising revenues at a rate around 15-20% in these years. See the report by J. Clement, "Digital advertising revenue of leading online companies 2012-2019," Statista, accessed Feb 7, 2020, <https://www.statista.com/statistics/205352/digital-advertising-revenue-of-leading-online-companies>.

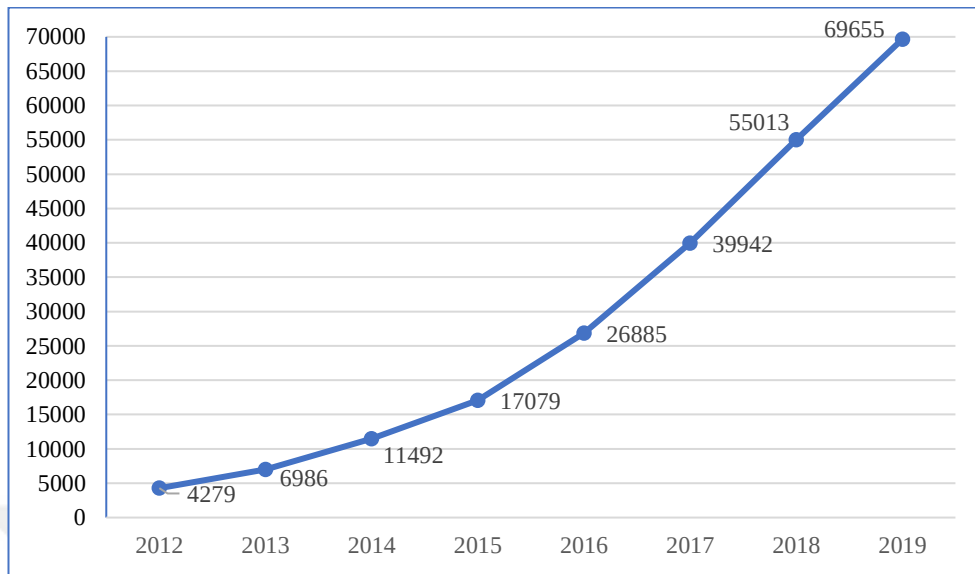


Figure 4.4. Advertising Revenues (in million \$)³⁷⁵

Firstly, we can investigate the definition of advertising revenues based on the statements in annual 10-K reports so that we can reach the components of the advertising mechanism that generates (surplus) *value* for Facebook. In the last 10-K file which was issued in January 2020, advertising revenue is defined as:

We generate substantially all of our revenue from advertising. Our advertising revenue is generated by displaying ad products on Facebook, Instagram, Messenger, and third-party affiliated websites or mobile applications. Marketers pay for ad products either directly or through their relationships with advertising agencies or resellers, based on the number of impressions delivered or the number of actions, such as clicks, taken by users. We recognize revenue from the display of impression-based ads in the contracted period in which the impressions are delivered. Impressions are considered delivered when an ad is displayed to a user. We recognize revenue from the delivery of action-based ads in the period in which a user takes the action the marketer contracted for. The number of ads we show is

³⁷⁵ Consolidated (derived) data from the analysis of financial statements in 10-K files released between 2013-2020.

subject to methodological changes as we continue to evolve our ads business and the structure of our ads products.³⁷⁶

This statement has been transformed over the years with launches of new features and the incorporation (acquisition) of new platforms such as Instagram. In 2012, there were only Facebook, affiliated websites and mobile applications as platforms on which ads were displayed.³⁷⁷ But in the annual report released in 2017,³⁷⁸ Instagram has been added to this definition and Messenger has been also included in the annual report released in 2018.³⁷⁹ But the delivery logic of the advertising system has not changed in principle within this period. At this point, we need to highlight that while there were only two methods of delivery mentioned in the report describing the operations of 2012 (that is the report released in 2013), those were “the number of impressions delivered or the number of clicks made by our users”³⁸⁰, in 2013 “the number of actions” has been added as the third delivery method feeding the revenue-generating mechanism.³⁸¹

The number of delivered advertisements is associated with two key user metrics: *Daily Active Users (DAU)* and *Monthly Active Users (MAU)*. In the last 10-K document they’re defined as:

Daily Active Users (DAUs). We define a daily active user as a registered and logged-in Facebook user who visited Facebook through our website or a mobile device, or used our Messenger application (and is also a

³⁷⁶ Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 54.

³⁷⁷ Facebook Inc., Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013), 44, accessed November 15, 2020, https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_2012_10K.pdf;

Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January, 29, 2020).

³⁷⁸ Facebook Inc., Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017), 39.

³⁷⁹ Facebook Inc., Form 10-K for the Period Ending December 31, 2017 (filed February 1, 2018), 41, accessed November 15, 2020, <http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/c826def3-c1dc-47b9-99d9-76c89d6f8e6d.pdf>.

³⁸⁰ Facebook Inc., Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013), 44.

³⁸¹ Facebook Inc., Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014), 44, accessed November 15, 2020, <http://d11ge852tjjqow.cloudfront.net/CIK-0001326801/a49d99fb-5c6f-47bb-ad5d-7b9a8eabd4f0.pdf>.

registered Facebook user), on a given day. We view DAUs, and DAUs as a percentage of MAUs, as measures of user engagement on Facebook. [...] **Monthly Active Users (MAUs)**. We define a monthly active user as a registered and logged-in Facebook user who visited Facebook through our website or a mobile device, or used our Messenger application (and is also a registered Facebook user), in the last 30 days as of the date of measurement. MAUs are a measure of the size of our global active user community on Facebook.³⁸²

Facebook regards numbers of daily and monthly active users as key assets because trends in these numbers affect Facebook's revenue and financial results by influencing the number of ads it is able to show, the value of the ads to marketers, the volume of Payments transactions, as well as its expenses and capital expenditures.³⁸³

In our investigation of daily and monthly active users, we need to consider the volume of delivered ads (as well as delivery methods) because they are the sources of ad revenue and they also represent the role of social media users in revenue generation, hence *value* generation in connection with it. We might assume that any rise in advertising revenue can be explained with a correlated increase in the number of delivered advertisements to the users. And the capacity of Facebook to show the maximum number of advertisements is connected to the daily and monthly active users and their engagement level.

As depicted in Figure 4.3, advertising revenue has been rising steadily for years. To understand the significant change in this trend we included also the related key user metrics in the diagram. We can thus find out whether there is a proportional/parallel pace between advertising revenue, *Daily Active Users*, and *Monthly Active Users*. Together with these metrics we also need to evaluate the change in delivered ads, but in the S-1 document and the 10-K files, Facebook doesn't release the exact numbers. However, in the explanations just after the

³⁸² Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 45-6.

³⁸³ Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 45.

consolidated statements of income data in each document, Facebook reveals if there is any increase or decrease in delivered ads in that year compared to the previous year. We can make inferences based on these explanations to be used in our overall analysis.

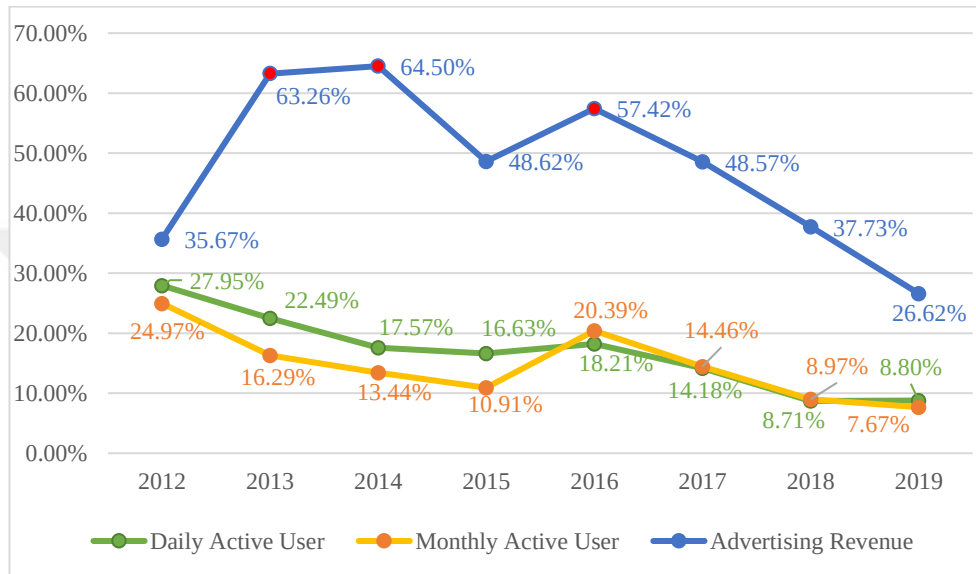


Figure 4.5. The Rate of Yearly Increase in Advertising Revenue Compared to DAU and MAU (%)³⁸⁴

Firstly, we can focus on the “pace” of the upward trend in advertising revenue. It is certainly noticeable that there are three significant periods (2013, 2014 and 2016) in which advertising revenue has “exponentially” increased (Figure 4.5). But, before we analyze these periods, we need to underline that the basis of Facebook’s advertising system was established particularly with the updates in the algorithm that designates volume, frequency, price and target of the displayed advertisements. That’s why 2012 is regarded as “a landmark year when it came to new ways of advertising on Facebook.”³⁸⁵ The updates influenced the content and frequency of the posts/stories in *News Feed* which is the principal

³⁸⁴ Consolidated (derived) data from the analysis of financial statements in 10-K files released between 2013-2020.

³⁸⁵ “Facebook Advertising & News Feed Algorithm History,” Power Digital Marketing, accessed November 10, 2020, <https://powerdigitalmarketing.com/blog/facebook-advertising-and-news-feed-algorithm-history>.

space for advertisements and referred to as the “core product” of Facebook.³⁸⁶ *News Feed* is defined by Facebook simply as: “News Feed is the constantly updating list of stories in the middle of your home page. News Feed includes status updates, photos, videos, links, app activity and likes from people, Pages and groups that you follow on Facebook.”³⁸⁷ In 2012 Facebook gradually started to show “sponsored stories” in the main *News Feed*.³⁸⁸ This means that companies can promote posts from their business *pages* to be published on the *News Feeds* of their followers (and their *friends*) on Facebook. This feature is announced as “a separate product that launched in May 2012.”³⁸⁹ In the 10-K document for the operation in 2012, Facebook declares this update: “In 2012, we introduced features that give marketers new ways to reach people who use Facebook. These include ads in News Feed on both desktop and mobile devices...”³⁹⁰ This update directly influenced the advertising revenue which increased by 35.67% in 2012. This growth is explained as due to the 32% increase in the number of delivered ads and 3% increase in the average price per ad (Figure 4.6).³⁹¹ We understand that the number of delivered ads increased in parallel to the 24.97% increase in *MAU*, and the 27.95% increase in *DAU*. But the gap between the change in advertising revenue and user engagement metrics could be explained with the significant increase (32%) in the number of delivered ads. This trend indicates that the number of users, particularly their engagement in Facebook and their *labour* of watching ads influenced revenues and the *value* of the advertisements in 2012. However, we need to add an important note on the delivery methods of

³⁸⁶ Facebook Inc. Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013), 8.

³⁸⁷ “How News Feed Works,” Facebook Help Center, Facebook, accessed December 1, 2020, <https://www.facebook.com/help/1155510281178725>.

³⁸⁸ Josh Costine, “Facebook Sponsored Story Ads To Appear In The Web News Feed In 2012,” TechCrunch, accessed December 1, 2020, <https://techcrunch.com/2011/12/20/sponsored-stories-news-feed>.

³⁸⁹ Abhishek Doshi, “Testing Promoted Posts for People in the U.S.,” Facebook Newsroom, accessed November 28, 2020, <https://about.fb.com/news/2012/10/testing-promoted-posts-for-people-in-the-u-s>.

³⁹⁰ Facebook Inc., Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013), 5.

³⁹¹ Facebook Inc., Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013), 47.

these advertisements, especially the impression based advertisements. Regarding the number of delivered ads, in the 10-K file for the operations of 2012, Facebook states that:

“The number of ads we show is subject to methodological changes as we continue to evolve our ads business and the structure of our ads products. Whether we count the initial display only or every display of an ad as an impression is dependent on where the ad is displayed. For example, an individual ad in News Feed that is purchased on an impression basis may be displayed to users more than once during a day; however, only the initial display of the ad is considered an impression, regardless of how many times the ad is actually displayed within the News Feed.”

This statement leads us to be skeptical about the “direct connection” between the user’s *labour time* and the generated *value*. Based on this explanation we understand that generated revenue from ads doesn’t change based on whether a user pays attention to an ad a few times or only once. Thus, the *value* doesn’t differ proportionally or linearly based on the attention time of the user, in other words, the *labour time* of the user. Also, when we consider the other two delivery methods (click-based and action-based advertisements) it seems that the allocated time and effort of a user regarding an advertisement might change without any direct relation to the delivery method of that advertisement. Recognition of income from these advertisements is not based on the time users spend on them. Hence, the statistical data on revenues and the comments regarding these revenues in annual reports don’t refer to the influence of different delivery methods in connection with the attention time of users and their impact on generated revenues. Rather, the number of active users, the number of delivered ads and fluctuations in prices are mentioned in the explanations of Facebook. So in the further analysis, we focus on these variables to investigate their correlated influence on revenues and we aim to reveal if there is a substantial effect of users (in cumulative) on the (surplus) *value* of Facebook.

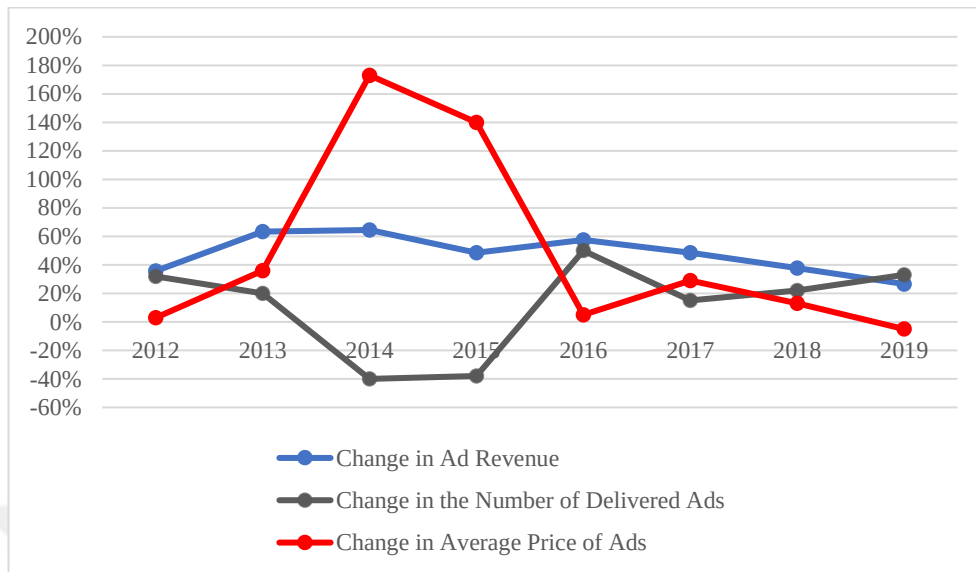


Figure 4.6. The Rate of Yearly Change in Ad Revenue Compared to Change in the Number of Delivered Ads and the Average Price of Ads³⁹²

In 2013 the advertising revenue increased to \$6.986 billion, which means a 63.26% change compared to 2012. In the same period, *DAU* increased by 22.49% and *MAU* increased by 16.29%. Facebook explains this change in the 10-K document for 2013 as:

The most important factor driving advertising revenue growth was an increase in revenue from ads in News Feed on both mobile devices and personal computers. News Feed ads are displayed more prominently, have significantly higher levels of engagement and a higher price per ad relative to our other ad placements.³⁹³

We claim that the ad system started to give the best results in 2013, as a consequence of the introduction of sponsored stories for businesses on Facebook in 2012. This update resulted in a significant increase in advertising revenue, i.e. more than 60%. In the last months of 2012 Facebook also announced that ordinary users could promote their personal posts.³⁹⁴ With the launch of sponsored stories

³⁹² Consolidated (derived) data from the analysis of financial statements in 10-K files released between 2013-2020.

³⁹³ Facebook Inc., Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014), 46.

³⁹⁴ Doshi, “Testing Promoted Posts for People in the U.S.”

for both ordinary users and businesses the number of delivered advertisements scaled up. Hence, we can estimate that the total *labour* time allocated by users of Facebook increased too.³⁹⁵ However we noticed that although user growth had an impact on the number of ads shown, this increase was also caused by Facebook's intervention to lower "the market reserve price" which is the minimum price to publish an advertisement on *News Feed*.³⁹⁶ So, the minimum price threshold accepted in the auction mechanism of the ad system was manipulated and cut down. Hence, it leveraged the demand for the advertisements and more people and businesses were able to buy and expose advertisements to users. As a result of this intervention, more advertisers entered the system and average prices in the auction-based advertising system rose to %36 compared to 2012. Here, we understand that the introduction of new spaces for advertisements and updates in the algorithm of the advertising system amplified the surplus to be generated through the growth of Facebook's user population. Facebook took advantage of user growth by supplying more potential space for advertisers on *News Feed* so that the number of delivered ads increased by 20%; and by decreasing the minimum reserve price it fueled the competition between advertisers so that it lead to a 36% increase in average price per ad. As a result, the rate of change in generated income advertising operations hit a record level, reaching 63.26%. Based on the analysis of the changes between 2012-2013 in these indicators (Figure 4.5 and Figure 4.6) we can conclude that the surplus *value* can't simply be explained by reference to the growth in the number of users and -interrelatedly- the number of ads users were exposed to. The updates in the algorithm that defines the laws of bidding manipulate the *value* of ads. And last but not least: we need to acknowledge that Facebook works to develop new services to attract advertisers. We can cite as an example, the "ad serving technology" which

³⁹⁵ We need to underline that we can learn from secondary sources that average time spent per day with Facebook does not increase as substantially as advertising revenues. The increases are at around 5-10%. See the chart: "Average Time Spent per Day with Facebook, Instagram and Snapchat by US Adult Users of Each Platform, 2014-2019," Emarketer, accessed November 28, 2020, <https://www.emarketer.com/chart/211521/average-time-spent-per-day-with-facebook-instagram-snapchat-by-us-adult-users-of-each-platform-2014-2019-minutes>.

³⁹⁶ Facebook Inc., Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014), 46.

“dynamically determines the best available ad to show each user based on the combination of the user's unique attributes and the real-time comparison of bids from eligible ads.”³⁹⁷ Or “*Custom Audiences*” that helps marketers target people more precisely by anchoring users who have previously expressed interest in that particular marketer.³⁹⁸ Thus, by enhancing targeting options and analytical services, it aims to increase the efficiency of ads, and that would lead to scale up the demand and the willingness of advertisers to pay more for each ad.

The impact of manipulation in the algorithm-based ad system can be detected most clearly by inspecting the fluctuation in advertising revenues compared to the number of displayed ads and average prices in 2014 and 2015. In 2014 delivered ads decreased by 40% compared to 2013. This means that Facebook users are exposed to significantly fewer ads. However, advertising revenue jumped to the highest level of increase in the years 2012-2019. While supplied ads diminished by 40%, ad revenue performed 64.5% better than ad revenue in 2013. To analyze these results firstly we can cite the explanation given by Facebook in the annual report for 2014:

The most important factor driving advertising revenue growth was an increase in revenue from ads in News Feed on both mobile devices and personal computers. News Feed ads are displayed more prominently, have significantly higher levels of engagement and a higher price per ad relative to our other ad placements. [...] Other factors that influenced our advertising revenue growth in 2014 included (i) an increase in the number of marketers actively advertising on Facebook, which we believe increased demand for our ad inventory, (ii) other product changes to increase the value and performance of our ads, and (iii) an increase in user growth and engagement.³⁹⁹

³⁹⁷ Facebook Inc., Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014), 6.

³⁹⁸ Facebook Inc., Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014), 6.

³⁹⁹ Facebook Inc., Form 10-K for the Period Ending December 31, 2014 (filed January 29, 2015), 43, accessed November 15, 2020, <http://d11ge852tjjqow.cloudfront.net/CIK-0001326801/b2038013-1251-4c25-bb3b-c6a60d41bc47.pdf>.

We can deduce from the annual reports of earlier years that the ads in *News Feed* became the pivot space for ads since the algorithm was updated in 2012. They are more efficient than those in other places (such as “right-hand side”⁴⁰⁰ of the pages) in terms of attained engagement and generated *value* (with a higher price per ad). Additionally, as explained in the earlier reports, user growth and increased performance of ads on mobile devices on both *News Feed* and other places influence revenues in a positive direction. Here, what is special for the year 2014 is that even though -for the first time- the number of delivered ads decreased dramatically, the ad revenue increased at a record level. One of the reasons for this remarkable interplay between these indicators might lie behind this statement in the abovementioned explanation: “(ii) other product changes to increase the value and performance of our ads.”⁴⁰¹ The product changes in 2014 had a huge impact on the average price per ad, which increased by 173% (Figure 4.6) Facebook justifies this change by stating that it “decreased the number of ads displayed but increased the prominence of each ad.”⁴⁰² Here, the word “prominence” refers to fewer ads but better targeting and increased conversion for the marketers so that the overall quality of the ads and user experience would be improved. But on the other side of the coin, as a result of the reduction in the supply of ad space, this change drove higher competition for the marketers who are eager to reach *audiences* assembled on Facebook. Consequently, it caused a substantial increase in the average price/cost per ad.

The trends in the numbers of delivered ads and the price per ad were quite similar to the trends of 2014. The explanation by Facebook was not too different from the statement in the annual report for 2014: “In 2015 compared to 2014, the average price per ad increased by 140% and the number of ads delivered decreased by 38%. The increase in average price per ad was driven by a product change related to certain non-News Feed ads during the third quarter of 2014,

⁴⁰⁰ Facebook Inc., Form 10-K for the Period Ending December 31, 2014 (filed January 29, 2015), 5.

⁴⁰¹ Facebook Inc., Form 10-K for the Period Ending December 31, 2014 (filed January 29, 2015), 43.

⁴⁰² Facebook Inc., Form 10-K for the Period Ending December 31, 2014 (filed January 29, 2015), 43.

which decreased the number of ads displayed but increased the prominence of each ad.”⁴⁰³ Here, both for 2014 and 2015, it is remarkable that *DAU* and *MAU* increased by 12-17%, hence, the number of users grew in those years but the number of displayed ads decreased. Thus, users were exposed to fewer ads on Facebook and cumulatively attention time given to the ads decreased. For those years we can claim that user *labour* did not act as a principal role in the amplification of revenues and the generation of the *surplus value*.

The logic of the advertising system has not changed significantly in the following years. For the years between 2015 and 2020 what is remarkable is that the efficiency of *value*-generating operations has become gradually more dependent on the increased use of mobile devices. Hence, the size of the space and the frequency of mobile advertisements have been rising in this period. Facebook points out that for 2017 one of the crucial drivers that influenced advertising revenue was “an increase in the number and frequency of ads displayed on mobile devices.”⁴⁰⁴ In 2017 the share of mobile advertising reached 88% of total advertising revenue and it continued to grow to the level of 92% in 2018.⁴⁰⁵ But this trend doesn’t indicate any significant difference in the way Facebook generates revenue from displaying ads.

The number of daily and monthly active users increase together with the number of displayed ads in the years between 2015 and 2020. But although there is a consistent increase in user population, the pace of this increase has diminished to 7.67% towards 2020.⁴⁰⁶ Facebook too admits and projects this trend and states it in 10-K reports. For example, in the annual report for 2016, it states: “[W]e anticipate increases in the number and frequency of ads displayed in News Feed

⁴⁰³ Facebook Inc., Form 10-K for the Period Ending December 31, 2015 (filed January 28, 2016), 41.

⁴⁰⁴ Facebook Inc., Form 10-K for the Period Ending December 31, 2017 (filed February 1, 2018), 43.

⁴⁰⁵ Facebook Inc., Form 10-K for the Period Ending December 31, 2018 (filed January 31, 2019), 44.

⁴⁰⁶ Facebook Inc., Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020), 56.

will be a less significant driver of our revenue growth in the future.”⁴⁰⁷ Similarly, for 2017 it repeats that: “We anticipate that advertising revenue growth will continue to be driven primarily by price rather than increases in the number and frequency of ads displayed.”⁴⁰⁸ By taking account of the saturation of increase in the user growth and by reference to the anticipation of Facebook as mentioned here, we can estimate that the role of the advertising algorithm has become more crucial in generating *value*. Facebook makes product changes continuously to enhance “quality, relevance, and performance” of the ads. It highlights this objective in 2019’s 10-K file: “In 2019, we continued to focus on our main revenue growth priorities: (i) helping marketers use our products to connect with consumers where they are and “(ii) making our ads more relevant and effective.” For this purpose, Facebook continuously makes updates that are supposed to increase the targeted reach and conversions for marketers. And these results will lead to more demand and higher prices. Consequently, we can claim that the more precise regulation of these variables will enable Facebook to become more successful in creating *surplus value*.

4.2.3. An Overview of Content Curation through Algorithms

Since the introduction of ads in *News Feed*, this space has become the locomotive of advertising operations. Facebook has been updating the structure and the logic of the feed continuously to keep user engagement high, as well as to meet the demand of advertisers. In August 2013, Facebook announced the special blog for the updates in *News Feed*:

We are continually working to improve News Feed and from time to time we make updates to the algorithm that determines which stories appear first. We’ve heard from our users and Page owners that we need to do a better job of communicating these updates. Starting today, we’re going to try and change that. News Feed FYI blog posts, beginning with this one,

⁴⁰⁷ Facebook Inc., Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017), 41.

⁴⁰⁸ Facebook Inc., Form 10-K for the Period Ending December 31, 2017 (filed February 1, 2018), 43.

will highlight major updates to News Feed and explain the thinking behind them.⁴⁰⁹

We've concluded from the analysis of the annual reports that Facebook, after the launch of ads on *News Feed*, started to direct and consolidate the ads into this field but at the same time decreased the supply of delivered ads in 2014 and 2015. By analyzing the released posts in this blog that addresses the change in the algorithm we aim to reach an overall explanation about how Facebook intervenes in the efficiency of its model to enhance the *value*-generating mechanism.

Since the introduction of the *News Feed FYI Blog*, Facebook always emphasizes the importance of “high quality content.” To investigate quality factors, Facebook conducted a survey with a random sample of twenty-one million users over a one-week period to evaluate the quality of the content. Some of the questions in this survey are as follows:

- Is this timely and relevant content?
- Is this content from a source you would trust?
- Would you share it with friends or recommend it to others?
- Is the content genuinely interesting to you or is it trying to game News Feed distribution? (e.g. asking for people to like the content)
- Would you call this a low quality post or meme?
- Would you complain about seeing this content in your News Feed?⁴¹⁰

In this survey, Facebook tested the *News Feed* ranking algorithm to define and increase the quality of organic content. And it announced that they built a new “machine learning” system to analyze and detect important content and curate the *feed* of each user based on this analysis.⁴¹¹ Here, we learn from the press release about this survey that the algorithm uses over a thousand different factors so that it detects content and assigns scores for each user, content and page: “The system

⁴⁰⁹ Lars Backstrom, “News Feed FYI: A Window Into News Feed,” Facebook for Business News, accessed November 17, 2020, <https://www.facebook.com/business/news/News-Feed-FYI-A-Window-Into-News-Feed>.

⁴¹⁰ Varun Kacholia, “Showing More High Quality Content,” Facebook Newsroom, accessed November 17, 2020, <https://about.fb.com/news/2013/08/news-feed-fyi-showing-more-high-quality-content>.

⁴¹¹ Kacholia, “Showing More High Quality Content.”

uses over a thousand different factors, such as how frequently content from a certain Page is reported as low quality (e.g. hiding a Page post), how complete the Page profile is, and whether the fan base for a particular Page overlaps with the fan base for other known high quality Pages.”⁴¹² What is significant for our analysis is that the new algorithm mentioned in this press release was only an add-on to the existing one, so that there might be additional factors the machine learning system analyzes. On the basis of the *news* announced by Facebook, we can only deduce some basic principles of the algorithm to assign relevancy and quality scores to the shared content:

The News Feed algorithm responds to signals from you, including, for example:

- How often you interact with the friend, Page, or public figure (like an actor or journalist) who posted.
- The number of likes, shares and comments a post receives from the world at large and from your friends in particular.
- How much you have interacted with this type of post in the past.
- Whether or not you and other people across Facebook are hiding or reporting a given post.⁴¹³

Here, the algorithm assigns values based on the user’s connection with other users, *pages*, and shared content. The connections are the basis for the *social graph* in which “[e]very person or entity is represented by a point within the graph, and the affiliations between people and their friends and interests form billions of connections between the points.”⁴¹⁴ These points are matched with each other to decide the ranking of any content in the *News Feed*. Facebook points out that (for 2013) when a user visits Facebook there are 1500 potential stories to be shown from *friends*, *pages* and people. This volume exceeds users attention capacity in an ordinary day. This would decrease the engagement of users.

⁴¹² Kacholia, “Showing More High Quality Content.”

⁴¹³ Backstrom, “News Feed FYI: A Window Into News Feed.”

⁴¹⁴ Facebook Inc., Form S-1 (filed February 01, 2012), 2, accessed November 10, 2020, <http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/f3fcb2a3-f76a-4aaa-9c7c-9fa100fdc962.pdf>.

Thereby Facebook ended the chronological order in *News Feed* and started to prioritize an average of 300 stories out of potential others.⁴¹⁵ Although *News Feed* seems to scroll down endlessly with thousands of shared posts, in order to keep people active and less-distracted, Facebook regulates both the organic and sponsored content.

4.2.4. Regulation of Ads and *Surplus Value*

The updates in the algorithm influence both organic content and sponsored content. In this session, we've especially reviewed releases in *News Feed FYI* blog and selected 3 news releases (of 26 posts) directly addressing the updates that had an impact on the way advertisers share the sponsored content (Appendix D).⁴¹⁶ The headlines for these news releases are:

1. More Relevant Ads in News Feed (September 27, 2013)⁴¹⁷
2. Listening to People's Feedback to Show Better Ads (September 11, 2014)⁴¹⁸
3. Reducing Overly Promotional Page Posts in News Feed (November 14, 2014)⁴¹⁹

These news releases include crucial information about the changes in the algorithm that altered the mechanism of the *News Feed* as an advertising space. As we noted in the analysis of the annual reports, the "prominence" of the ads was raised by Facebook by regulating the "quality" and the "relevancy" of the ads. *News Feed* is continually updated to show most related posts (either organic or sponsored) with which people most likely want to interact. In the release "More Relevant Ads in News Feed", Facebook points out that "We aim to show people the most relevant ads based on things such as their interests and the Pages they like. [...] We are currently working on some updates to the ads algorithm to

⁴¹⁵ Backstrom, "News Feed FYI: A Window Into News Feed."

⁴¹⁶ We've also scanned the 57 news released between 2013 – 2015. See Appendix D.

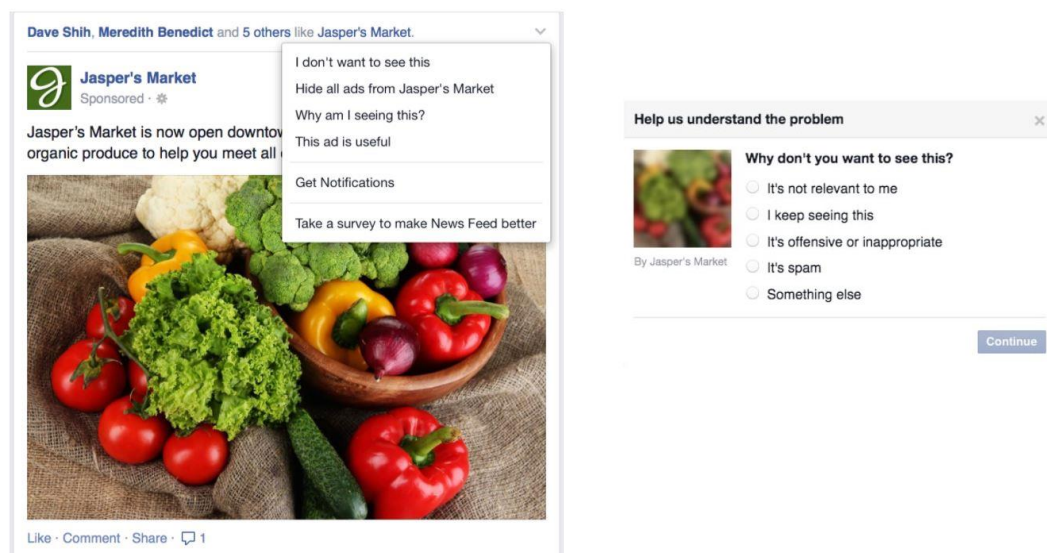
⁴¹⁷ Hong Ge, "More Relevant Ads in News Feed," Facebook Newsroom, accessed November 28, 2020, <https://about.fb.com/news/2013/09/news-feed-fyi-more-relevant-ads-in-news-feed/>

⁴¹⁸ Max Eulenstein, "Listening to People's Feedback to Show Better Ads," Facebook Newsroom, accessed November 28, 2020, <https://about.fb.com/news/2014/09/news-feed-fyi-listening-to-peoples-feedback-to-show-better-ads/>

⁴¹⁹ "Reducing Overly Promotional Page Posts in News Feed," Facebook Newsroom.

improve the relevance and quality of the ads people see.”⁴²⁰ To reach this purpose the machine learning system also needs feedback from users: “When a person interacts with an ad (clicks, likes, comments on, or shares), News Feed learns that these ads are relevant for them. When someone hides an ad, News Feed learns that that person wants to see less of those types of ads.”⁴²¹ This feedback mechanism has been strengthened with the update released in September 2014, titled “Listening to People’s Feedback to Show Better Ads.” Facebook declared this improvement by emphasizing the active contribution of users for enhanced quality and the relevance of the ads:

For years, we have given people the choice to hide an ad so they no longer see it in their News Feed. We’ve also looked at these hides and used them as a signal that other people on Facebook might not want to see that ad. Now, we are going a step further by taking into account the specific reason they didn’t want to see that ad, and use that as a signal to inform whether or not we show the ad to other people.⁴²²



4.7. Feedback Options to the Ads ⁴²³

⁴²⁰ Ge, “More Relevant Ads in News Feed.”

⁴²¹ Ge, “More Relevant Ads in News Feed.”

⁴²² Eulenstein, “Listening to People’s Feedback to Show Better Ads.”

⁴²³ Eulenstein, “Listening to People’s Feedback to Show Better Ads.”

With these updates in the algorithm, users can cooperate with Facebook and feed the data for the machine learning system for better ads. What is important for our analysis is that while the machine “retrains” itself with continuous calculations of the connections based on quality and relevancy criterion, users give feedback to better retrain it. As a result, overall *value* of the ads increases at the end of this process. In other words, the scores which are produced through the independent analysis of the machine based on hundreds of factors are combined with the “organic” feedback of “real” users. Subsequently, these scores are used in calculations to determine the number of ads delivered and the price for each ad. The potential fluctuations caused by these updates were pointed out for the advertisers in the news release entitled “More Relevant Ads in News Feed” (September 2013):

For marketers, this means we are showing ads to the people who might want to see them the most. For example, if someone always hides ads for electronics, we will reduce the number of those types of ads that we show to them. This means that some marketers may see some variation in the distribution of their ads in the coming weeks.⁴²⁴

Due to the outcomes of these algorithmic interventions, there were dramatic changes in the number of delivered ads and the prices in some periods, particularly between 2013-2015.

Lastly, the third news release, entitled “Reducing Overly Promotional Page Posts in News Feed”,⁴²⁵ (November 14, 2014) informs us about a crucial change in the algorithm that would require *business page* owners to share genuine organic content to reach their audience. *Business pages* were the principal interface for the companies to promote their content without needing to pay for ads. With this update Facebook warned them not to post overly promotional content that would harm the engagement level of users:

⁴²⁴ Ge, “More Relevant Ads in News Feed.”

⁴²⁵ “Reducing Overly Promotional Page Posts in News Feed,” Facebook Newsroom.

As part of an ongoing survey we asked hundreds of thousands of people how they feel about the content in their News Feeds. People told us they wanted to see more stories from friends and Pages they care about, and less promotional content.

We dug further into the data to better understand this feedback. What we discovered is that a lot of the content people see as too promotional is posts from Pages they like, rather than ads. [...]

According to people we surveyed, there are some consistent traits that make organic posts feel too promotional:

1. Posts that solely push people to buy a product or install an app
2. Posts that push people to enter promotions and sweepstakes with no real context
3. Posts that reuse the exact same content from ads⁴²⁶

This update was very important for advertisers because it meant that “the rules of the game” had started to change for them. On the one hand, it seems beneficial for users so that they would be shown more related content from the *friends* and *pages* they value; on the other hand, it decreased the capacity of *business pages* to reach their audience organically. Because of the importance of this update in the algorithm, just after the publication of the post on *News Feed FYI* blog, Facebook released a brief explanation, entitled “An Update to News Feed: What it Means for Businesses” (November 15, 2014) to clarify the change for advertisers:

Beginning in January 2015, people will see less of this type of content⁴²⁷ in their News Feeds. As we’ve said before, News Feed is already a competitive place — as more people and Pages are posting content, competition to appear in News Feed has increased. All of this means that Pages that post promotional creative should expect their organic distribution to fall significantly over time. Businesses should still refer to our Page publishing tips and best practices. And for targeting specific

⁴²⁶ “Reducing Overly Promotional Page Posts in News Feed,” Facebook Newsroom.

⁴²⁷ Facebook means that the content includes messages that are highly promotional and shared on *business pages* as an organic post.

audiences with predictable reach, Facebook advertising offers ways to achieve specific business objectives, like driving in-store sales or app downloads.

As a side effect of this update, the owners of *business pages* were channeled to publish advertisements to reach the desired volume of users. This manipulation in the algorithm directed the demand which was already accumulated throughout the years to the ad services and products. As stated in the explanation above, businesses are invited to pay if they are willing to display the promotional content. As we've analyzed the financial statements regarding the operations in 2014 and 2015, this change didn't cause an increase in the number of delivered ads. On the contrary, there were decreases of 40% and 38% in those years. Facebook in this release concerning the reduction of overly promotional *page* posts in *News Feed* clearly states that: "This change will not increase the number of ads people see in their News Feeds. The idea is to increase the relevance and quality of the overall stories – including Page posts – people see in their News Feeds."⁴²⁸

Thus, we can now infer that as a result of the interventions in the algorithm -as stated in these 3 news releases- that determined which posts to be displayed to users, businesses had less opportunity to show their posts organically on *News Feed*. So they tended to pay for promotion. As a result, the demand for ads increased dramatically particularly between 2014 and 2015. But concurrently there was no increase in the supplied space for ads because of Facebook's policy to show less promotional content, more organic engagement and allocate all promotional posts within the ad system. Thereby, while the cumulative attention time (user *labour*) and the number of exposed ads didn't increase, the *value* of all users' impressions, clicks or actions went up, especially in 2014 and 2015.

In conclusion, based on the combined analysis of the annual reports and the official releases, we acknowledge that the interaction of social media users is an essential "reference point" (prerequisite) for the ad machine to establish an *abstract*, algorithm-based system that assigns points to each connection of the users with objects and people. But the *surplus value* is less dependent on the

⁴²⁸ "Reducing Overly Promotional Page Posts in News Feed," Facebook Newsroom.

proportional increases in volume of users or their *labour*. The algorithm is the core actor that harvests and cultivates data from each interaction and continually refines it by learning (artificial intelligence) from surveillance and the analysis of all social engagements online as well as direct feedbacks from users. *Surplus value* is created through the operations of this *abstraction* machine. We've analyzed the impacts of the updates in the working mechanism of this machine on revenues, demand, the number of delivered ads and the average price per ad. We can conclude that the algorithm can function as a regulator and manipulate the *value* of each asset on the platform.

4.3. REFLECTIONS OF ABSTRACTION 3.0

Abstraction 3.0 works at many levels on social media through the algorithm. It assigns scores to each connection based on pre-defined factors. Users' interactions, their "likes, comments, shares"⁴²⁹ are surveilled and analyzed so that each interaction is calculated to reach abstract scores (numerical values). These factors are numerous and open to be varied (and amplified) through continuous improvement by machine learning. Cumulatively, all of these scores for each point of connection are used to evaluate how much a post, particularly an advertisement, is relevant to any user.

A similar approach to our study was taken by Michael A. DeVito. DeVito in his research titled as *From Editors To Algorithms: A Values-Based Approach To Understanding Story Selection In The Facebook News Feed*, used content analysis of Facebook's patents, press releases, and Securities and Exchange Commission forms to identify a core set of algorithmic values that define story selection on the Facebook *News Feed*.⁴³⁰ As he finds out that there are some principles that the machine learning system considers while ranking stories on the *News Feed*. These principles are called algorithmic values and categorized by DeVito:

⁴²⁹ Kacholia, "Showing More High Quality Content."

⁴³⁰ Michael A. DeVito, "From Editors to Algorithms: A Values-Based Approach to Understanding Story Selection in the Facebook News Feed," *Digital Journalism* 5, no. 6 (2017): 753.

The nine algorithmic values we have identified, in descending order of influence over the News Feed, are friend relationships, explicitly expressed user interests, prior user engagement, implicitly expressed user preferences, post age, platform priorities, page relationships, negatively expressed preferences, and content quality.⁴³¹

Within these values, the most effective is friend relationships regarded in the curation of the ranked posts on *News Feed*. However, we don't exactly know the exact, numerical weight of it within the calculations by the algorithm because of the trade secrets. It is not an open-source software. DeVito states this difficulty as follows:

The bigger challenge is the black-boxed nature of major algorithms, where the inner workings of a major system are purposely obscured from public view. This is a common practice to protect trade secrets and prevent malicious hacking and gaming of the system. As a result, it is rare for us to get any insight into key values-based processes like variable definition.⁴³²

Although we can't reach the decomposition of the algorithm we can find the textual-based or keyword-based results of it. These results indicate to us how the new version of *abstraction* (*abstraction 3.0*) can "literally" assign *abstract* categories to the users. Before mentioning these categories we find it necessary to analyze the explanations of Facebook about the sources for the machine to produce these categories.

Facebook informs users and answers the most significant questions concerning ads on the help page -titled *About Facebook Ads*. Here, one of the essential topics is about "Why you see a particular ad". Facebook explains this as follows: "Our ad system prioritizes what ad to show you based on what advertisers tell us their desired audience is, and we then match it to people who might be interested in that ad." Within this sentence, we deduce that the key term is "interest". Facebook analyzes our "activity across Facebook companies and

⁴³¹ DeVito, "From Editors to Algorithms," 767.

⁴³² DeVito, "From Editors to Algorithms," 759.

products”⁴³³, “activity with other businesses”⁴³⁴ that share data with Facebook, “activity on other websites and apps”⁴³⁵ that send data directly to Facebook via the business tools developed by Facebook (e.g. Facebook Pixel, APIs and SDKs) and the location data.⁴³⁶ These data are inferred by the machine learning system and converted into *categories* and *interests* for every single user. Facebook shares information about personal *interests* with each user. This information can be found under “Ad Preferences” panel in the Facebook accounts of every user (Figure 4.8).⁴³⁷

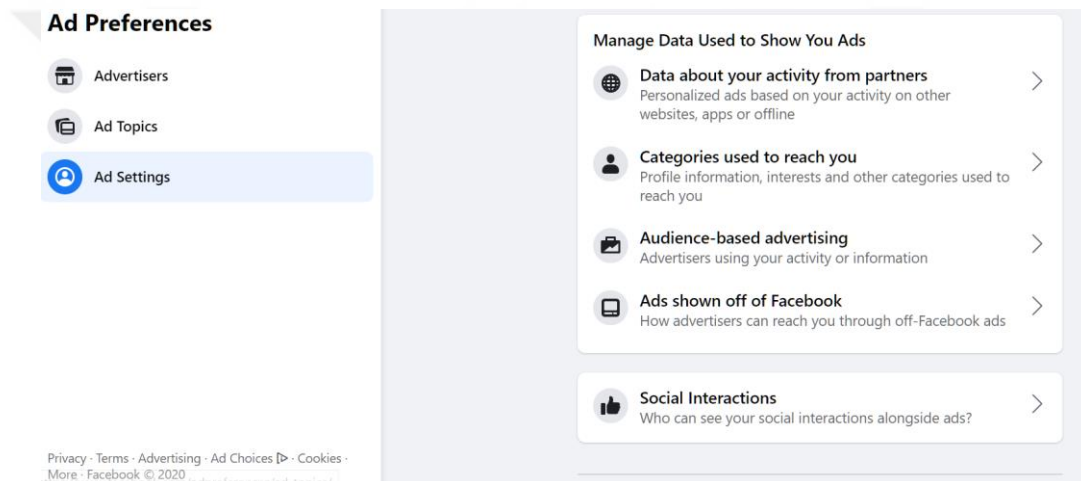


Figure 4.8. Personal “Ad Preferences” Panel of A User

⁴³³ “About Facebook Ads,” Facebook (About). In this page these activities are listed as: “Pages you and your friends like”, “Information from your Facebook and Instagram profile”, “Places you check in using Facebook”;

⁴³⁴ “About Facebook Ads,” Facebook (About). It is explained as: “When you share information like your phone number or email address with a business, they might add it to a customer list that can be matched to your Facebook profile. We can then try to match the ad to the most relevant audience. You may have shared your information with these businesses by: Signing up for an email newsletter [+] Making purchases at retail stores [+] Signing up for a coupon or discount. Customer list [:] A list of current or potential customers that an advertiser uploads to Facebook. The list may include phone numbers, email addresses or other information.”

⁴³⁵ “About Facebook Ads,” Facebook (About). Facebook explains business tools it serves as: “Websites you visit or apps you use can send Facebook data directly by using our business tools (such as a pixel) to help us show you ads based on products or services you’ve looked at, such as a shirt on a clothing retailer’s website. Examples of this include: Viewing one of their web pages [+] Downloading their mobile app [+] Adding a product to a shopping cart or making a purchase.”

⁴³⁶ “About Facebook Ads,” Facebook (About). The details of the location information: “We use location data to show you ads from advertisers trying to reach people in or near a specific place. We get this information from sources such as: Where you connect to the internet [+] Where you use your phone [+] Your location from your Facebook and Instagram profile.”

⁴³⁷ This page can only be viewed by signed-in Facebook accounts owners:
https://www.facebook.com/adpreferences/ad_settings.

In the “Ad Preferences” panel the tab “Categories used to reach you” shows us how the *abstraction* machine of Facebook tags a user with hundreds of keywords that are named by Facebook as *interests*. This part is explained in the panel as follows:

-Interests and Other Categories Used to Reach You-

Advertisers can reach you based on interest categories and other categories that we associate with you. We add you to these categories based on information you've provided on Facebook and your activity. You can decide to remove yourself from these specific categories.⁴³⁸

Users have the option to check and remove themselves from any *interest* or *category* that is tagged to define them. But it is remarkable that removing it doesn't affect the overall number of ads exposed to them.⁴³⁹ Here, we need to underline that this list is produced specially for each user. And such lists contain random and specific labels rather than generic meta-categories such as the standard tags on demographical information. Demographical categories and some of the behavioral categories are separately generated and listed.⁴⁴⁰ There could be hundreds of *interests* in your lists that form a “recipe” of you to be used in better targeting for advertisements. These *interest* tags could be about everything including products, brands, political figures, hobbies, destinations and so on. This list is dynamically generated and continually refined through the analysis of the data by the machine learning system.

We conceive the *interests* and *categories* -of Facebook- as significant examples of the new-age products which are created through the *labour* of *abstraction* machine. In the *abstraction 3.0* the algorithmic machine works,

⁴³⁸ This page can only be viewed by signed-in Facebook accounts owners: https://www.facebook.com/adpreferences/ad_settings.

⁴³⁹ Facebook states this under this panel as follows: “Removing yourself from an interest category prevents advertisers from reaching you by indicating that their ads should be shown to people in that specific interest category. It doesn't affect the number of ads you see overall. We may still show you ads related to these categories if we think these ads may be relevant to you.”

⁴⁴⁰ Caitlin Dewey, “98 Personal Data Points That Facebook Uses to Target Ads to You,” *The Washington Post*, accessed December 2, 2020, <https://www.washingtonpost.com/news/the-intersect/wp/2016/08/19/98-personal-data-points-that-facebook-uses-to-target-ads-to-you>.

through mining and intelligence, to produce categories that serve accumulation of *surplus value* for the operations of the capitalist organization. The variation in the profitability of each ad is controlled through sophisticated calculations that can't be defined or controlled by users or advertisers.

The *interests* and *categories* represent users in the universe of social media's software *abstraction*. However, most users don't know much about their "representative" on the platform. In 2019, Pew Research Center conducted a survey to investigate "How well do Americans understand these algorithm-driven classification systems, and how much do they think their lives line up with what gets reported about them?"⁴⁴¹ As a result of this study, it is reported that "the large majority of Facebook users (88%) found that the site had generated some material for them. A majority of users (59%) say these categories reflect their real-life interests, while 27% say they are not very or not at all accurate in describing them."⁴⁴² While more than one-fourth of the users declare that the *abstract* qualities assigned to them don't reflect the reality, these *categories* are used to define the *value* of the ads that are exposed to them. And in total, the advertising operations that are based on this *abstraction* generate more than 98% of total revenues for Facebook.⁴⁴³

⁴⁴¹ Hitlin & Rainie, "Facebook Algorithms and Personal Data."

⁴⁴² Hitlin & Rainie, "Facebook Algorithms and Personal Data."

⁴⁴³ Facebook Inc., Form 10-Q for the Quarterly Period Ending September 30, 2020 (filed October 30, 2020), 40.

CONCLUSION

We started our research with a question: Could users' activities and efforts on social media be thought of as a form of work or labour⁴⁴⁴ to maintain social media business? The answer to this question is both yes and no. Yes, because the activities and connections people built on social media generate data to be used for developing enhanced targeting algorithms that continually work for increasing the efficiency and the profitability of the company's advertising operations. Also, they rent advertising space to the marketers and sell our attention (time) to them. We can also answer this question: No, because users produce data and content organically immanent to their daily life. They voluntarily use social media. Their motivation may not be producing but most likely to maintain their social life. They are merely consumers whose data is harvested through technological apparatus, but this doesn't necessarily mean that they are "working" for the companies. In this thesis, we aimed to reach answers (or explanations) to this question beyond "yes" or "no". Although both of these binary positions have rational arguments, they still lack clarifying controversies regarding the extent of the contribution/participation of the user in the accumulation of the capital.

One of the obstacles in our analysis was the confusion about the terminology regarding work, and especially on labour. Basically, work can be defined as a productive activity. But today, when we use this word what it denotes for most of us is conscious efforts to create a product mostly as a part of paid employment. But it doesn't need to indicate this meaning. Labour has been defined and considered in different meanings. Conflicting conceptualizations of it, particularly the misreadings of Marx's texts have grown the confusion around the categorization of any activity under "work" or "labour" in the lexical meaning or *labour* of Marxist terminology. So we deconstructed these notions to differentiate various meanings and connotations so that we can eliminate the confusion in the terminology. This issue was not only an obstacle for our research it is also a

⁴⁴⁴ Here we don't write word labour in italic because in this question we don't mean Marx's *labour* only. So for a neutral connotation we use this word here in regular font.

common problem for each study to address work or labour (or *labour*) in any context. For example, recent debates on digital labour inherit this confusion that triggers many “rejoinders” between the scholars, regarding the “productive” side of the digital activities of the user. Kaplan identifies this problem as:

The burgeoning debate over digital labor has reached something of an impasse. Despite a growing range of efforts to define the category, to distinguish it from competing concepts (such as raw material or rent), and to specify its role in the political economy of social networking sites (SNS) and associated media platforms, no agreement has emerged among media theorists on even the most rudimentary questions, such as whether the activity of SNS should count as work (e.g., Andrejevic 2002; Jhally and Livant 1986), whether this work counts as labor (e.g., Fuchs and Sevignani 2013; Mosco 2011), or whether such labor is the ultimate source of industry profits (e.g., Andrejevic 2015; Scholz 2012).⁴⁴⁵

We conducted a comprehensive investigation that contains the etymological, lexical and conceptual considerations. Through this analysis, we decomposed their meanings to solve confusions on the varying definitions. This analysis reached a turning point when we inquired into the *labour* of Marx. It was identified that work was being fragmented with the transformation in the mode of production through the industrial revolution. This “modern break”⁴⁴⁶ gave birth to *labour* which is an abstract category itself -as discussed in the third chapter. Based on this conceptualization we established our theory of *abstraction*. With this proposition, we aimed to indicate the significance of a phenomenon (or mechanism) that derives abstract categories from everything (including living beings and objects) than re-apply or re-assign these categories onto the original and authentic thing/being. At the beginning (*abstraction 1.0*), it was operating in the factory, in the production field, on the workers. Through quantification and appropriation, it defined *values* of products and the activities/efforts (work) that

⁴⁴⁵ Michael Kaplan, “The Self-Consuming Commodity: Audiences, Users, and the Riddle of Digital Labor,” *Television & New Media* 21, no. 3 (March 2020): 240.

⁴⁴⁶ Arendt, *The Human Condition*, 17.

were done to create these products. In other words, it was in the form of commodification that resulted in *alienation*. At the second level (*abstraction 2.0*), this commodification went beyond the walls of the factory into the “culture” (Culture 2.0 of Sacco). The operating principle of this mode of *abstraction* was more qualitative and *fluid* than its previous mode. Relative assignments of *values* to people, products, actions, identities, all made it almost impossible to “rationally” evaluate the *use-value* of a product. In the last instance, we propose that with the help of digital technologies “the quantitative” strikes back but strengthened by inheriting the postmodern ambiguities and tautologies of its former version. It is *abstraction 3.0* that operates in a logic that makes the research implications that just addresses the aspects regarding *labour* useless or limited. That’s why we propose the statements as “beyond labour” or “beyond digital labour” in our investigation. Sure, this discussion should involve the *labour* side of this mechanism but if we insist on using *labour* to name it such as “digital labour”, we might fall into the debates caused by misunderstandings and misreadings on what is productive or not productive. This issue has started to be revived and in recent years it is increasingly criticized. One significant example of criticism is offered by Gandini in his very recent article, *Digital labour: an empty signifier?*: “Over the years, the expression ‘digital labour’ has come to be used indistinctly to identify almost *all* forms of direct or indirect labouring that takes place through the mediation of a digital medium [...] it has become a kind of empty signifier, becoming a sort of umbrella term that is increasingly delinked from its origins as a critical Marxist stance on labour and value [...], unable to serve a clearly distinguishable critical or analytical purpose.”⁴⁴⁷ We support Gandini’s approach and stress the necessity to direct the domain of the discussions to the inquiry into the underlying *abstracting* operations that generate *value*. Based on this perspective we propose our conceptualization of the new mode of *abstraction*. It is *abstraction 3.0* that works beyond labour and accumulates capital from derivative operations. Social media companies, particularly Facebook is a significant model that represents the operational logic of *abstraction 3.0*. This

⁴⁴⁷ Gandini, “Digital Labour: An Empty Signifier?” 1.

logic is identified by Arvidsson as follows: “The logic of the derivative is rooted in the now dominant financial level of the capitalist economy, and is mediated by social media and the algorithmic processing of large digital data sets.”⁴⁴⁸

We propose that Facebook’s model shows us that we are gradually encapsulated by this algorithmic mechanism that has the capacity or potential to build a derivative reality. It can self-referentially generate *value* through the abstract categories, such as *interests* and *categories* as listed in the “Ad Preferences” panel of Facebook, deduced from our activities, qualities, subjectivities, and connections. It functions as a “non-human agent”⁴⁴⁹ rather than a neutral, technological instrument; it has the power to curate the content; it regulates users and advertisers; it assigns *value* in the exchange of ads. Moreover, it continually refines itself through machine learning so that it enhances its capacity for increased or amplified accumulation of *value*.

Lastly, algorithms of social media platforms, particularly Facebook and Twitter, work in a concealed shell, protected by patent laws and this is a significant limitation for researchers to analyze its mechanism. This limitation also makes it a challenge for analysts to identify the violations and/or manipulations done through algorithms. We need to underline that algorithms might seem to operate as totally independent from human intervention but this may not be the truth. “Algorithms are often presented as an extension of natural sciences like physics or biology. While these algorithms also use data, math and computation, they are a fountain of bias and slants — of a new kind.”⁴⁵⁰ Net neutrality can be broken by adding the code that filters the unwanted content from the feed or through the -human- content editors of social media companies.⁴⁵¹ To

⁴⁴⁸ Adam Arvidsson, “Facebook and Finance: On the Social Logic of the Derivative,” *Theory, Culture & Society* 33, no. 6 (November 2016): 3.

⁴⁴⁹ B. Latour, *Reassembling the Social: An Introduction to Actor Network Theory* (Oxford, UK: Oxford University Press, 2005).

⁴⁵⁰ Zeynep Tufekci, “The Real Bias Built In at Facebook,” *The New York Times*, accessed December 2, 2020, <https://www.nytimes.com/2016/05/19/opinion/the-real-bias-built-in-at-facebook.html>.

⁴⁵¹ Zeynep Tufekci, “Algorithmic Harms Beyond Facebook and Google: Emergent Challenges of Computational Agency,” *Colorado Technology Law Journal* 13 (2015): 214. As an example to the algorithmic filtering: Tufekci’s analysis proves that Facebook algorithm largely “buried” news

overcome the difficulties caused by the sophisticated and mystified nature of the algorithms of these social media platforms, we need more collaboration between different actors including scholars, lawyers, software engineers and ethical hackers. We also need interdisciplinary approaches that bind various implications and provide grounded propositions based on the results of the studies that are conducted in multifaceted research designs.



REFERENCES

- Adorno, T., and M. Horkheimer. "The Culture Industry: Enlightenment as Mass Deception." In *Media and Cultural Studies: Keywords*, edited by Meenakshi Gigi Durham & Douglas Kellner, 71-101. Wiley-Blackwell, 2001.
- Althusser, L. "Ideology and Ideological State Apparatuses (Notes Towards an Investigation)." In *The Anthropology of the State: A Reader*, edited by Aradhana Sharma & Akhil Gupta, 86-98. Wiley-Blackwell, 2006.
- Anderson, Stephanie, Kathy Hamilton, and Andrea Tonner. "Social Labour: Exploring Work in Consumption." *Marketing Theory* 16, no. 3 (2016): 383-400. <https://doi.org/10.1177/1470593116640598>.
- Andrejevic, M. "The Work of Being Watched: Interactive Media and the Exploitation of Self-Disclosure." *Critical Studies in Media Communication* 19, no. 2 (2002): 230-248.
- Appadurai, A. "Disjuncture and Difference in the Global Cultural Economy." *Theory, Culture & Society* 7, no. 2 (1990): 295-310.
- Applebaum, Herbert A. *The Concept of Work*. Albany: State University of New York Press, 1992.
- Applebaum, Herbert. "The Concept of Work in Western Thought." In *Meanings of Work: Considerations for The Twenty-First Century*, edited by Frederick C. Gamst, 46-78. SUNY Press, 1995.
- Arendt, Hannah. *Between Past and Future*. Harmondsworth: Penguin Books, 1968.
- Arendt, Hannah. "Labor, Work, Action." In *Amor Mundi: Explorations in the Faith and Thought of Hannah Arendt*, edited by James W. Bernauer, 29-42. Boston: M. Nijhoff, 1987.
- Arendt, Hannah. *The Human Condition*. University of Chicago Press, 1998.
- Arnold, M. "From 'Culture and Its Enemies.'" In *The Broadview Anthology of Victorian Prose 1832-1901*, edited by Lisa A. Surridge & Mary Elizabeth Leighton, 238-249. Peterborough: Broadview Press, 2012.
- Arthur, C. J. *Dialectics of Labour*. Oxford: Basil Blackwell, 1986.

- Arvidsson, A. "The Ethical Economy: Towards a Post-Capitalist Theory of Value." *Capital & Class* 33, no.1 (2009): 13-29.
- Arvidsson, A., and E. Colleoni. "Value in Information Capitalism and on the Internet." *The Information Society* 28 (2012): 135–50.
- Arvidsson, Adam. "Facebook and Finance: On the Social Logic of the Derivative." *Theory, Culture & Society* 33, no. 6 (November 2016): 3-23.
- De Backer, K., I. Desnoyers-James, and L. Moussiégt. "“Manufacturing or Services - That is (not) the Question’: The Role of Manufacturing and Services in OECD Economies.” *OECD Science, Technology and Industry Policy Papers*, no. 19. Paris: OECD Publishing, 2015.
<http://dx.doi.org/10.1787/5js64ks09dmn-en>.
- Backstrom, Lars. "News Feed FYI: A Window Into News Feed." Facebook for Business News. Accessed November 17, 2020.
<https://www.facebook.com/business/news/News-Feed-FYI-A-Window-Into-News-Feed>.
- Baudrillard, Jean. *For a Critique of the Political Economy of the Sign*. Translated by Charles Levin. Telos Press, 1981.
- Baudrillard, J. *Selected Writings*. Cambridge: Polity, 1988.
- Baudrillard, J. *The Consumer Society: Myths and Structures*. Sage, 1998.
- Bauman, Z. *Legislators and Interpreters*. Cambridge: Polity, 1987.
- Bauman, Zygmunt. *Liquid Modernity*. Cambridge, UK: Polity, 2006.
- Beetz, Kirk H. "Rome - Employment and Labor." In *Encyclopedia of Society and Culture in the Ancient World*, edited by Peter Bogucki, 433-434. New York: Infobase Publishing, 2008.
- Biblehub. "Genesis 3 NIV - The Fall." Accessed April 5, 2019.
<https://biblehub.com/niv/genesis/3.htm>.
- Blackwell, Christopher. "Greece - Employment and Labor." In *Encyclopedia of Society and Culture in the Ancient World*, edited by Peter Bogucki, 431-432. New York: Infobase Publishing, 2008.

- Bogucki, Peter. "Employment and Labor – Introduction." In *Encyclopedia of Society and Culture in the Ancient World*, edited by Peter Bogucki, 425. New York: Infobase Publishing, 2008.
- Bolin, G. "Notes From Inside the Factory. The Production and Consumption of Signs and Sign Value in Media Industries." *Social Semiotics* 15, no. 3 (2005): 289-306.
- Bowder, Diana. *Who Was Who in The Roman World*. Oxford: Phaidon, 1980.
- Bruns, A. *Blogs, Wikipedia, Second Life, and Beyond: From Production to Produsage*. New York: Peter Lang, 2008.
- Budd, John W. *The Thought of Work*. Ithaca, N.Y: ILR Press, 2011.
- Castells, M. *The Rise of the Network Society. The Information Age: Economy, Society and Culture*, Vol. 1. Oxford: Blackwell, 1996.
- Castells, M. "Materials for an exploratory theory of the network society." *British Journal of Sociology* 51, no. 1 (2000): 5-24. <https://doi.org/10.1111/j.1468-4446.2000.00005.x>.
- Chertkovskaya, E., and B. Loacker. "Work and Consumption: Entangled." *Ephemera* 16, no. 3 (2016): 1-20.
- Cleaver, Harry. "Work is Still the Central Issue! New Words for New Worlds." In *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work*, edited by Ana Dinerstein and Michael Neary, 144-157. Vermont: Ashgate, 2002.
- Clement, J. "Digital advertising revenue of leading online companies 2012-2019." Statista. Accessed Feb 7, 2020. <https://www.statista.com/statistics/205352/digital-advertising-revenue-of-leading-online-companies>.
- Clemons, Peter. *Interactions of Thought and Language in Old English Poetry*. Cambridge: Cambridge University Press, 2006.
- Colletti, Lucio. *From Rousseau to Lenin. Studies in Ideology and Society*. New York etc.: Monthly Review Press. 1972.

- Costine, Josh. "Facebook Sponsored Story Ads To Appear In The Web News Feed In 2012." TechCrunch. Accessed December 1, 2020.
<https://techcrunch.com/2011/12/20/sponsored-stories-news-feed>.
- Deleuze, Gilles. "Postscript on the Societies of Control." *October* 59 (1992): 5. Accessed April 18, 2020. www.jstor.org/stable/778828.
- Deuze, M. "Living in Media and the Future of Advertising." *Journal of Advertising* 45, no. 3 (2016): 326-333.
- DeVito, Michael A. "From Editors to Algorithms: A Values-Based Approach to Understanding Story Selection in the Facebook News Feed." *Digital Journalism* 5, no. 6 (2017): 753-773.
- Dewey, Caitlin. "98 Personal Data Points That Facebook Uses to Target Ads to You." *The Washington Post*. Accessed December 2, 2020.
<https://www.washingtonpost.com/news/the-intersect/wp/2016/08/19/98-personal-data-points-that-facebook-uses-to-target-ads-to-you>.
- Doshi, Abhishek. "Testing Promoted Posts for People in the U.S." Facebook Newsroom. Accessed November 28, 2020.
<https://about.fb.com/news/2012/10/testing-promoted-posts-for-people-in-the-u-s>.
- Duby, Georges. *Three Orders, Feudal Society Imagined*. Chicago: University of Chicago Press, 1980.
- Eckert, Andreas. "Why all the fuss about Global Labour History?" In *Global Histories of Work*, edited by Andreas Eckert, 3-22. Boston: De Gruyter, 2016.
- Ehmer, Josef, and Catharina Lis. *The Idea of Work in Europe from Antiquity to Modern Times*. New York: Routledge, 2016.
- Emarketer. "Average Time Spent per Day with Facebook, Instagram and Snapchat by US Adult Users of Each Platform, 2014-2019." Accessed November 28, 2020. <https://www.emarketer.com/chart/211521/average-time-spent-per-day-with-facebook-instagram-snapchat-by-us-adult-users-of-each-platform-2014-2019-minutes>.

Encyclopedia Britannica. s.v. "Beowulf." Accessed January 28, 2019.

<https://www.britannica.com/topic/Beowulf>.

Etymonline. "Werg-." Accessed January 28, 2019.

https://www.etymonline.com/word/*werg-?ref=etymonline_crossreference.

Eulenstein, Max. "Listening to People's Feedback to Show Better Ads." Facebook Newsroom. Accessed November 28, 2020.

<https://about.fb.com/news/2014/09/news-feed-fyi-listening-to-peoples-feedback-to-show-better-ads>.

Facebook. "About Facebook Ads." Accessed December 7, 2020.

<https://www.facebook.com/ads/about>.

Facebook. "Facebook Announces Pricing of Initial Public Offering." Facebook Investor Relations. Accessed December 3, 2020.

<https://investor.fb.com/investor-news/press-release-details/2012/Facebook-Announces-Pricing-of-Initial-Public-Offering/default.aspx>.

Facebook. "How News Feed Works." Facebook Help Center. Accessed December 1, 2020. <https://www.facebook.com/help/1155510281178725>.

Facebook. "Making Ads Better and Giving People More Control Over the Ads They See." Facebook Newsroom, June 12, 2014. Accessed November 10, 2020. <https://about.fb.com/news/2014/06/making-ads-better-and-giving-people-more-control-over-the-ads-they-see>.

Facebook. "Reducing Overly Promotional Page Posts in News Feed," Facebook Newsroom, Facebook, accessed November 28, 2020,

<https://about.fb.com/news/2014/11/news-feed-fyi-reducing-overly-promotional-page-posts-in-news-feed/>

Facebook, Inc. Form S-1 (filed February 01, 2012). Accessed November 10, 2020. <http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/f3fcb2a3-f76a-4aaa-9c7c-9fa100fdc962.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2012 (filed February 01, 2013). Accessed November 15, 2020. https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_2012_10K.pdf.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2013 (filed January 31, 2014). Accessed November 15, 2020.
<http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/a49d99fb-5c6f-47bb-ad5d-7b9a8eabd4f0.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2014 (filed January 29, 2015). Accessed November 15, 2020.
<http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/b2038013-1251-4c25-bb3b-c6a60d41bc47.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2015 (filed January 28, 2016). Accessed November 18, 2020.
<http://d1lge852tjjqow.cloudfront.net/CIK-0001326801/0c796377-fba3-4e40-b18a-3503901af1a4.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2016 (filed February 3, 2017). Accessed November 18, 2020.
<http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/80a179c9-2dea-49a7-a710-2f3e0f45663a.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2017 (filed February 1, 2018). Accessed November 15, 2020.
<http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/c826def3-c1dc-47b9-99d9-76c89d6f8e6d.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2018 (filed January 31, 2019). Accessed November 15, 2020.
<http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/a109a501-ed16-4962-a3af-9cd16521806a.pdf>.

Facebook, Inc. Form 10-K for the Period Ending December 31, 2019 (filed January 29, 2020). Accessed November 20, 2020.
<http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/45290cc0-656d-4a88-a2f3-147c8de86506.pdf>.

Facebook, Inc. Form 10-Q for the Quarterly Period Ending September 30, 2020 (filed October 30, 2020). Accessed November 18, 2020.

<http://d18rn0p25nwr6d.cloudfront.net/CIK-0001326801/518957aa-c936-455b-8ba0-9743ca4c3855.pdf>.

Faltesek, Daniel. *Selling Social Media*. New York: Bloomsbury, 2018.

Fisher, E. "The Political Economy of Social Media." In *Encyclopedia of Social Media and Politics*, edited by K. Harvey, 984-988. Thousand Oaks: Sage, 2014.

Fiske, J. *Understanding Popular Culture*. London: Unwin Hyman, 1989.

Fiske, J. "The Commodities of Culture." In *The Consumer Society Reader*, edited by M. Lee, 282-287. Oxford: Blackwell, 2000.

Forrester, W. R. *Christian Vocation*. New York: Scribner, 1953.

Frayssé, Olivier. "Work and Labour as Metonymy and Metaphor." *TripleC: Communication, Capitalism & Critique. Open Access Journal For A Global Sustainable Information Society* 12, no. 2 (2014): 468-485.

<https://doi.org/10.31269/triplec.v12i2.546>.

Fuchs, Christian. "Labor in Information Capitalism and on the Internet." *The Information Society* 26 (2010): 179-196.

Fuchs, Christian. "With or Without Marx? With or Without Capitalism?: A Rejoinder to Adam Arvidsson and Eleanor Colleoni." *TripleC* 10, no. 2 (2012): 633-45.

Fuchs, Christian, and Sebastian Seignani. "What is Digital Labour? What is Digital Work? What's their Difference? And Why do these Questions Matter For Understanding Social Media?" *TripleC: Communication, Capitalism & Critique. Open Access Journal For A Global Sustainable Information Society* 11, no. 2 (2013): 237-293.

<https://doi.org/10.31269/triplec.v11i2.461>.

Fuchs, Christian, and D. Trottier. "The Internet as Surveilled Workplace and Factory," in *European Data Protection: Coming of Age*, eds. S. Gutwirth, R. Leenes, P. de Hert & Y. Poulet, 33-57. Dordrecht: Springer Netherlands, 2013.

Fuchs, Christian, and Marisol Sandoval. "Digital Workers of the World Unite! A Framework for Critically Theorising and Analysing Digital Labour."

- TripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society* 12, no. 2 (January 2014): 486-563. <https://doi.org/10.31269/triplec.v12i2.549>.
- Gabriel, Y., and T. Lang. *The Unmanageable Consumer*. Sage, 2015.
- Gamst, Frederick C. "Considerations of Work." In *Meanings of Work: Considerations for the Twenty-First Century*, edited by Frederick C. Gamst, 1-45. SUNY Press, 1995.
- Gandini, Alessandro. "Digital Labour: An Empty Signifier?" *Media, Culture & Society* (August 2020): 1-12. <https://doi.org/10.1177/0163443720948018>.
- Ge, Hong. "More Relevant Ads in News Feed." Facebook Newsroom. Accessed November 28, 2020. <https://about.fb.com/news/2013/09/news-feed-fyi-more-relevant-ads-in-news-feed>.
- Gerlitz, Carolin, and Anne Helmond. "The Like Economy: Social Buttons and the Data Intensive Web." *New Media & Society* 15 (8): 1348–65. <https://doi.org/10.1177/1461444812472322>.
- Gill, R., and A. Pratt. "In the Social Factory?: Immaterial Labour, Precariousness and Cultural Work." *Theory, Culture & Society* 25, no.7-8 (2008): 1-30. <https://doi.org/10.1177/0263276408097794>.
- Godelier, Maurice. "Aide-Memoire for a Survey of Work and Its Representations." *Current Anthropology* 21, no. 6 (1980): 832-835. <https://doi.org/10.1086/202590>.
- Godelier, Maurice. "Work and Its Representations: A Research Proposal." *History Workshop Journal* 10, no. 1 (1980): 166. <https://doi.org/10.1093/hwj/10.1.164>.
- Gorz, André. *Critique of Economic Reason*. London: Verso, 1989.
- Grint, Keith. *The Sociology of Work*. Cambridge: Polity Press, 2013.
- Hammer, Margaret L. *Giving Birth*. Louisville, Ky.: Westminster/John Knox Press, 1994.
- Hardt, Michael, and Antonio Negri. *Empire*. Cambridge, Massachusetts/London: Harvard University Press, 2000.

- Hardt, Michael, and Antonio Negri. *Multitude: War and Democracy in the Age of Empire*. London: Hamish Hamilton, 2005.
- Herman, Edward S., and Noam Chomsky. *Manufacturing Consent: The Political Economy of the Mass Media*. London: The Bodley Head, 2008.
- Hill, Roger B. "Historical Context of the Work Ethic." Accessed January 30, 2019. <http://workethic.coe.uga.edu/historypdf.pdf>.
- Hitlin, Paul, and Lee Rainie. "Facebook Algorithms and Personal Data." Pew Research Center, January 16, 2019. Accessed November 11, 2020. <https://www.pewresearch.org/internet/2019/01/16/facebook-algorithms-and-personal-data/#why-we-study-facebook>.
- Jhally, S. "Advertising as Religion: The Dialectic of Technology and Magic." In *Cultural Politics in Contemporary America*, edited by I. Angus & S. Jhally, 217-229. New York: Routledge, 1989.
- Jhally, S., and B. Livant. "Watching as Working: The Valorization of Audience Consciousness." *Journal of Communication* 36, no. 3 (1986): 124-143.
- Kacholia, Varun. "Showing More High Quality Content." Facebook Newsroom. Accessed November 17, 2020. <https://about.fb.com/news/2013/08/news-feed-fyi-showing-more-high-quality-content>.
- Kandiyali, Jan. "Freedom and Necessity in Marx's Account of Communism." *British Journal for the History of Philosophy* 22, no. 1 (2014): 104-123.
- Kaplan, Michael. "The Self-Consuming Commodity: Audiences, Users, and the Riddle of Digital Labor." *Television & New Media* 21, no. 3 (March 2020): 240-259.
- Katz, E., and J. G. Blumler. *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Sage, 1974.
- Kemp, Simon. "Digital 2020: Global Digital Overview." Datareportal, January 30, 2020. Last modified January 30, 2020. <https://datareportal.com/reports/digital-2020-global-digital-overview>.
- Kenton, Will. "SEC Form S-1 Definition." Investopedia, March 19, 2020. Accessed November 10, 2020. <https://www.investopedia.com/terms/s/sec-form-s-1.asp>.

- King, L. "Information, Society and the Panopticon." *The Western Journal of Graduate Research* 10, no.1 (2001): 40-50.
- Kocka, Jürgen. "Work as a Problem in European History." In *Work in a Modern Society: The German Historical Experience in Comparative Perspective*, edited by Jürgen Kocka (Berghahn Books, 2010), 1-15.
- Latour, B. *Reassembling the Social: An Introduction to Actor Network Theory*. Oxford, UK: Oxford University Press, 2005.
- Lazzarato, Maurizio. "Immaterial Labor." In *Radical Thought in Italy: A Potential Politics*, edited by P. Virno and M. Hardt, 133-148. Minneapolis, Minnesota: University of Minnesota Press, 1996.
- Lee, M. J. *Consumer Culture Reborn: The Cultural Politics of Consumption*. London: Taylor & Francis, 2003.
- Levidow, Les, and Bob Young. "Introduction." In *Science, Technology and the Labour Process*, Vol. 1, edited by Les Levidow and Bob Young. London: CSE Books, 1981.
- Lexico, s.v. "work." Accessed January 22, 2019.
<https://www.lexico.com/en/definition/work>.
- Lievrouw, L., and S. Livingstone. *Handbook of New Media*. London, UK: Sage, 2004.
- Lipset, Seymour Martin. "The Work Ethic, Then and Now." *Public Interest* (1990): 61-69.
- Lis, Catharina, and Hugo Soly. *Worthy Efforts. Attitudes to Work and Workers in Pre-Industrial Europe*. Leiden: Brill, 2012.
- Locke, John. "Some Considerations on the Consequences of the Lowering of Interest, and Raising the Value of the Money." The Online Library of Liberty. Accessed March 1, 2020. <https://oll.libertyfund.org/titles/locke-the-works-of-john-locke-vol-4-economic-writings-and-two-treatises-of-government>.
- Lund, Arwid. "Playing, Gaming, Working and Labouring: Framing the Concepts and Relations." *TripleC: Communication, Capitalism & Critique*. Open

- Access Journal for a Global Sustainable Information Society* 12, no. 2 (January 2014): 735-801. <https://doi.org/10.31269/triplec.v12i2.536>.
- Mainz, Valerie, and Griselda Pollock. "Introduction." In *Work and the Image: v. 1: Work, Craft and Labour-Visual Representations in Changing Histories*, edited by Valerie Mainz and Griselda Pollock, 1-12. Routledge, 2019.
- Mandel, Ernest. Introduction to *Capital*, by Karl Marx, 11-86. Penguin, 1976.
- Manovich, L. *The Language of New Media*. Cambridge, MA: MIT Press, 2001.
- Marazzi, C. *Capital and Language: From the New Economy to the War Economy*. Los Angeles, CA: Semiotext(e), 2008.
- Marx, Karl. *Economic & Philosophic Manuscripts of 1844*. Moscow: Progress Publishers, 1959.
- Marx, Karl. *The Poverty of Philosophy*. New York: International Publishers, 1969.
- Marx, Karl. *Grundrisse: Foundations of the Critique of Political Economy*. Penguin, 1973. Accessed March 3, 2020. <https://www.marxists.org/archive/marx/works/download/pdf/grundrisse.pdf>.
- Marx, Karl. *Capital: A Critique of Political Economy - Volume I*. London: Penguin, 1976.
- Marx, Karl, and Friedrich Engels. *The German Ideology*. London: Lawrence and Wishart, 1982.
- Marx, Karl. *Marx: Selected Writings*, edited by Lawrence H. Simon. Hackett Publishing, 1994.
- Marx, Karl. "The Commodity." In *A Contribution to the Critique of Political Economy*. Marxists.org, 1999. Accessed March 5, 2020. <https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/ch01.htm>.
- Merton, Robert K. *The Sociology of Science: Theoretical and Empirical Investigations*. Chicago, IL: The University of Chicago Press, 1973.
- Miller, V. *Understanding Digital Culture*. London: Sage, 2011.
- Mohun, Simon. "Abstract Labour." In *A Dictionary of Marxist Thought*, edited by Tom Bottomore. Cambridge, MA: Harvard University Press, 1991.

- Negri, A. "Capitalist Domination and Working-Class Sabotage." In *Working Class Autonomy and the Crisis*, edited by Red Notes, 92-137. London: Red Notes/CSE Books, 1979.
- Negri, A. *The Politics of Subversion: A Manifesto for the Twenty-first Century*. Cambridge: Polity Press, 1989.
- Negri, Antonio. *Marx Beyond Marx*. New York: Autonomedia, 1991.
- Nickell, Stephen, Stephen Redding, and Joanna Swaffield, "Patterns of Growth," *Centrepiece* 7, no. 3 (2002): 2-9.
- Niles, John D. "Locating Beowulf In Literary History." *Exemplaria* 5, no. 1 (1993): 79-109. <https://doi.org/10.1179/exm.1993.5.1.79>.
- Pilat, Dirk, Agnès Cimper, Karsten Olsen, and Colin Webb. *The Changing Nature of Manufacturing in OECD Economies*. OECD, STI Working Paper, 2006/9).
- Poster, Mark. *The Second Media Age*. London: Polity, 1995.
- Postone, Moishe. *Time, Labor, and Social Domination: A Reinterpretation of Marx's Critical Theory*. Cambridge: Cambridge University Press, 1993.
- Power Digital Marketing. "Facebook Advertising & News Feed Algorithm History." Accessed November 10, 2020. <https://powerdigitalmarketing.com/blog/facebook-advertising-and-news-feed-algorithm-history>.
- Rigi, Jakob, and Robert Prey. "Value, Rent, and the Political Economy of Social Media." *The Information Society* 31, no.5 (2015): 392-406.
- Ritzer, G. Introduction to *The Consumer Society: Myths and Structures*, by J. Baudrillard, 1-24. Sage, 1998.
- Ritzer, G. "Automating Prosumption: The Decline of the Prosumer and the Rise of the Prosuming Machines." *Journal of Consumer Culture* 15, no. 3 (2015): 407-424.

- Ritzer, G., and P. J. Rey. "From 'Solid' Producers and Consumers to 'Liquid' Prosumers." In *Liquid Sociology: Metaphor in Zygmunt Bauman's Analysis of Modernity*, edited by M. Davis, 157-176. Farnham: Ashgate, 2013.
- Robins, Kevin, and Frank Webster. "Cybernetic Capitalism: Information, Technology, Everyday Life," In *The Political Economy of Information*, edited by Vincent Mosco & Janet Wasko, 44-75. Madison: University of Wisconsin Press, 1988.
- Rose, Michael. *Reworking the Work Ethic: Economic Value and Socio-Cultural Politics*. London: Schocken, 1985.
- Rubin, I. I. "Essays on Marx's Theory of Value - Chapter Fourteen Abstract Labor." Marxists.org. Accessed March 5, 2020.
<https://www.marxists.org/archive/rubin/value/ch14.htm>.
- Ryken, Leland. *Redeeming the Time: A Christian Approach to Work and Leisure*. Grand Rapids, Mich.: Baker Books, 1995.
- Sacco, Pier Luigi. "Culture 3.0: A New Perspective for the EU 2014-2020 Structural Funds Programming." *OMC Working Group on Cultural and Creative Industries* (2011): 1-22.
- Saint Benedict. *The Rule of St. Benedict*. London: S.P.C.K., 1931.
- Sayers, A. "The Concept of Labor: Marx and His Critics." *Science & Society* 71, no. 4 (2000): 431-454.
- Schultz, Duane, and Sydney Ellen Schultz. *A History of Modern Psychology*. Fort Worth, Texas: Harcourt, 2000.
- Seneca. "Of a Happy Life." In *The Wisdom of the Stoics: Selections from Seneca, Epictetus, and Marcus Aurelius*, edited and translated by Henry Hazlitt and Frances Hazlitt. Accessed February 2, 2019.
<https://mises.org/library/wisdom-stoics-selections-seneca-epictetus-and-marcus-aurelius/html/p/1660>.
- Shead, Sam. "Facebook owns the four most downloaded apps of the decade." *BBC*, December 18, 2019. Accessed November 12, 2020.
<https://www.bbc.com/news/technology-50838013>.
- Smith, Adam. *The Wealth of Nations, Books I-III*. London, Penguin, 1999.

- Smythe, Dallas W. *Counterclockwise*. Boulder, CO: Westview Press, 1994.
- Smythe, Dallas W. "Communications: Blindspot of Western Marxism." *Canadian Journal of Political and Social Theory* 1, no. 3 (1977): 1-27.
- Statista. "Most popular social networks worldwide as of October 2020, ranked by number of active users." Accessed December 2, 2020.
<https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/#:~:text=What%20is%20the%20most%20popular,1.1%20billion%20monthly%20active%20accounts>.
- Steiner, G. *Extraterritorial: Papers on Literature and the Language Revolution*. London: Atheneum, 1976.
- Straubhaar, J., R. LaRose, and L. Davenport. *Media Now: Understanding Media, Culture and Technology*. Boston: Wadsworth, 2012.
- Strümpell, Christian. "The Anthropology of Work and Labour: Editorial Note." *Ethnoscripts* 19, no. 2 (2017): 5-14.
- Taylor, Frederick Winslow. *Scientific Management*. Routledge, 2013.
- Tilgher, Adriano. *Homo Faber: Work through the Ages*. New York: Harcourt Brace, 1930.
- Tilgher, Adriano. *Work: What It Has Meant to Men Through the Ages*. New York: Arno Press, 1977.
- Toffler, A. *The Third Wave*. New York: Bantam Books, 1980.
- Toffler, A. *Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century?* New York: Bantam, 1990.
- Tronti, Mario. "Social Capital." *Telos* 17 (1973): 98–121.
- Tufekci, Zeynep. "Algorithmic Harms Beyond Facebook and Google: Emergent Challenges of Computational Agency." *Colorado Technology Law Journal* 13 (2015): 203-218.
- Tufekci, Zeynep. "The Real Bias Built In at Facebook." *The New York Times*. Accessed December 2, 2020.
<https://www.nytimes.com/2016/05/19/opinion/the-real-bias-built-in-at-facebook.html>.

- U.S. Securities and Exchange Commission. "Form 10-K." Glossary. Accessed December 1, 2020. <https://www.investor.gov/introduction-investing/investing-basics/glossary/form-10-k>.
- U.S. Securities and Exchange Commission. "How to Read a 10-K." Fast Answers. Accessed December 1, 2020. <https://www.sec.gov/fast-answers/answersreada10khtm.html>.
- U.S. Securities and Exchange Commission. "Beginners' Guide to Financial Statement." Investor Publications. Accessed November 10, 2020. <https://www.sec.gov/reportspubs/investor-publications/investorpubsbegfinstmtguidehtm.html>.
- Vernant, Jean-Pierre. *Myth and Thought Among Greeks*. New York: Zone Books, 2006.
- Warde, Alan. "Production, Consumption and 'Cultural Economy,'" In *Cultural Economy*, edited by Paul du Gay & Michael Pryke, 185-200. London: Sage, 2002.
- Weingart, Brigitte. "Arbeit - Ein Wort Mit Langer Geschichte." Accessed January 29, 2019. http://www.steffen-maerker.de/Arbeit/body_arbeit.html.
- Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. New York: Oxford University Press, 1983.
- Witheford, N. "Autonomist Marxism and the Information Society." *Capital and Class* 52 (1994): 85-125. <https://doi.org/10.1177/030981689405200105>.
- Xenophon. *Oeconomicus*. Translated by H. G. Dakyns. Macmillan and Co., 2014. Accessed February 10, 2019. <https://ebooks.adelaide.edu.au/x/xenophon/x5oe/complete.html#chapter15>.
- Yankelovich, Daniel. *New Rules: Searching for Self-Fulfillment in a World Turned Upside Down*. New York: Random House, 1981.
- Zander, P-O. "Baudrillard's Theory of Value - A Baby in the Marxist Bath Water?" *Rethinking Marxism* 26, no. 3 (2014): 382-397.
- Zimmermann, Bénédicte. "Work, Labor: History of the Concept." In *International Encyclopedia of the Social & Behavioral Sciences*, edited by James D.

Wright, 675-679. Elsevier, 2015. <http://dx.doi.org/10.1016/B978-0-08-097086-8.03124-X>.



APPENDICES

APPENDIX A

Sample Cover Page and Table of Contents - Form 10-K of Facebook for the Period Ending December 31, 2018

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark One)
☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2018
or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____
Commission File Number: 001-36551

FACEBOOK, INC.
(Exact name of registrant as specified in its charter)

Delaware **20-1665019**
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification Number)

1601 Willow Road, Menlo Park, California 94025
(Address of principal executive offices and Zip Code)
(650) 543-4800
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Class A Common Stock, \$0.000006 par value (Title of each class)	The Nasdaq Stock Market LLC (Name of each exchange on which registered)
---	--

Securities registered pursuant to Section 12(g) of the Act:

None
(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 (Exchange Act) during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒
The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant as of June 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, was \$486 billion based upon the closing price reported for such date on the Nasdaq Global Select Market.
On January 28, 2019, the registrant had 2,385,533,940 shares of Class A common stock and 468,455,860 shares of Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2019 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2018.

FACEBOOK, INC.
FORM 10-K
TABLE OF CONTENTS

<u>Note About Forward-Looking Statements</u>	<u>3</u>
<u>Limitations of Key Metrics and Other Data</u>	<u>4</u>
<u>PART I</u>	
<u>Item 1. Business</u>	<u>5</u>
<u>Item 1A. Risk Factors</u>	<u>8</u>
<u>Item 1B. Unresolved Staff Comments</u>	<u>30</u>
<u>Item 2. Properties</u>	<u>30</u>
<u>Item 3. Legal Proceedings</u>	<u>30</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>30</u>
<u>PART II</u>	
<u>Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	<u>31</u>
<u>Item 6. Selected Financial Data</u>	<u>33</u>
<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	<u>35</u>
<u>Item 7A. Quantitative and Qualitative Disclosures About Market Risk</u>	<u>54</u>
<u>Item 8. Financial Statements and Supplementary Data</u>	<u>55</u>
<u>Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	<u>84</u>
<u>Item 9A. Controls and Procedures</u>	<u>84</u>
<u>Item 9B. Other Information</u>	<u>84</u>
<u>PART III</u>	
<u>Item 10. Directors, Executive Officers and Corporate Governance</u>	<u>85</u>
<u>Item 11. Executive Compensation</u>	<u>85</u>
<u>Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	<u>85</u>
<u>Item 13. Certain Relationships and Related Transactions, and Director Independence</u>	<u>85</u>
<u>Item 14. Principal Accounting Fees and Services</u>	<u>85</u>
<u>PART IV</u>	
<u>Item 15. Exhibits, Financial Statement Schedules</u>	<u>86</u>
<u>Signatures</u>	

APPENDIX B

Sample Income Statement of Facebook for the Period Ending December 31, 2016

	Year Ended December 31,					
	2016	2015	2014			
	(in millions)					
Consolidated Statements of Income Data:						
Revenue	\$	27,638	\$	17,928	\$	12,466
Costs and expenses:						
Cost of revenue		3,789		2,867		2,153
Research and development		5,919		4,816		2,666
Marketing and sales		3,772		2,725		1,680
General and administrative		1,731		1,295		973
Total costs and expenses		15,211		11,703		7,472
Income from operations		12,427		6,225		4,994
Interest and other income/(expense), net		91		(31)		(84)
Income before provision for income taxes		12,518		6,194		4,910
Provision for income taxes		2,301		2,506		1,970
Net income	\$	10,217	\$	3,688	\$	2,940

Share-based compensation expense included in costs and expenses:

	Year Ended December 31,		
	2016	2015	2014
	(in millions)		
Cost of revenue	\$ 113	\$ 81	\$ 62
Research and development	2,494	2,350	1,328
Marketing and sales	368	320	249
General and administrative	243	218	198
Total share-based compensation expense	\$ 3,218	\$ 2,969	\$ 1,837

APPENDIX C

Consolidated Table of Facebook's Active Users, Revenues, Average Revenues Per User, Change in Number of Advertisements Displayed and Average Advertisement Prices

	2012	2013	2014	2015	2016	2017	2018	2019
Daily Active Users (DAU, million users)	618	757	890	1038	1227	1401	1523	1657
Monthly Active Users (MAU, million users)	1056	1228	1393	1545	1860	2129	2320	2498
Change in DAU (%)	27.95	22.49	17.57	16.63	18.21	14.18	8.71	8.80
Change in MAU (%)	24.97	16.29	13.44	10.91	20.39	14.46	8.97	7.67
Advertisement Revenues (\$, in millions)	4279	6986	11492	17079	26885	39942	55013	69655
Total Revenues (\$, in millions)	5089	7872	12466	17928	27638	40653	55838	70697
Change in Advertisement Revenues (%)	35.67	63.26	64.50	48.62	57.42	48.57	37.73	26.62
Average Revenue Per User (ARPU) (\$)	4.82	6.41	8.95	11.60	14.86	19.09	24.07	28.30
Average Advertising Revenue Per User (AARPU) (\$)	4.05	5.69	8.25	11.05	14.45	18.76	23.71	27.88
Change in AARPU (%)	8.56	40.40	45.02	34.00	30.76	29.79	26.39	17.59

Change in Number of Advertisements Displayed (%)	32	20	-40	-38	50	15	22	33
Change in Average Advertisement Price (%)	3	36	173	140	5	29	13	-5



APPENDIX D

Table of Facebook Newsroom Posts

#	Publication Date	Title	Link
1	December 9, 2015	Continuing to Build News Feed for All Types of Connections	https://about.fb.com/news/2015/12/news-feed-fyi-continuing-to-build-news-feed-for-all-types-of-connections/
2	December 4, 2015	Using Surveys to Better Understand Viral Stories	https://about.fb.com/news/2015/12/news-feed-fyi-using-surveys-to-better-understand-viral-stories/
3	October 8, 2015	How the Reactions Test Will Impact Ranking	https://about.fb.com/news/2015/10/news-feed-fyi-how-the-reactions-test-will-impact-ranking/
4	October 6, 2015	Building for All Connectivity	https://about.fb.com/news/2015/10/news-feed-fyi-building-for-all-connectivity/
5	July 31, 2015	A Better Understanding of “Hide”	https://about.fb.com/news/2015/07/news-feed-fyi-a-better-understanding-of-hide/
6	July 9, 2015	Updated Controls for News Feed	https://about.fb.com/news/2015/07/updated-controls-for-news-feed/
7	June 29, 2015	Taking into Account More Actions on Videos	https://about.fb.com/news/2015/06/news-feed-fyi-taking-into-account-more-actions-on-videos/
8	June 12, 2015	Taking Into Account Time Spent on Stories	https://about.fb.com/news/2015/06/news-feed-fyi-taking-into-account-time-spent-on-stories/
9	May 7, 2015	Exposure to Diverse Information on Facebook	https://about.fb.com/news/2015/05/news-feed-fyi-exposure-to-diverse-information-on-facebook/
10	April 21, 2015	Balancing Content from Friends and Pages	https://about.fb.com/news/2015/04/news-feed-fyi-balancing-content-from-friends-and-pages/
11	April 3, 2015	Live from F8	https://about.fb.com/news/2015/04/news-feed-fyi-live-from-f8/
12	January 20, 2015	Showing Fewer Hoaxes	https://about.fb.com/news/2015/01/news-feed-fyi-showing-fewer-hoaxes/

13	November 14, 2014	Reducing Overly Promotional Page Posts in News Feed	https://about.fb.com/news/2014/11/news-feed-fyi-reducing-overly-promotional-page-posts-in-news-feed/
14	November 7, 2014	More Ways to Control What You See in News Feed	https://about.fb.com/news/2014/11/news-feed-fyi-more-ways-to-control-what-you-see-in-news-feed/
15	September 18, 2014	Showing More Timely Stories from Friends and Pages	https://about.fb.com/news/2014/09/news-feed-fyi-showing-more-timely-stories-from-friends-and-pages/
16	September 11, 2014	Listening to People's Feedback to Show Better Ads	https://about.fb.com/news/2014/09/news-feed-fyi-listening-to-peoples-feedback-to-show-better-ads/
17	August 25, 2014	Click-baiting	https://about.fb.com/news/2014/08/news-feed-fyi-click-baiting/
18	June 23, 2014	Showing Better Videos	https://about.fb.com/news/2014/06/news-feed-fyi-showing-better-videos/
19	May 27, 2014	Giving People More Control Over When They Share from Apps	https://about.fb.com/news/2014/05/news-feed-fyi-giving-people-more-control-over-when-they-share-from-apps/
20	April 10, 2014	Cleaning Up News Feed Spam	https://about.fb.com/news/2014/04/news-feed-fyi-cleaning-up-news-feed-spam/
21	February 24, 2014	Showing Stories About Topics You Like	https://about.fb.com/news/2014/02/news-feed-fyi-showing-stories-about-topics-you-like/
22	January 21, 2014	What Happens When You See More Updates from Friends	https://about.fb.com/news/2014/01/news-feed-fyi-what-happens-when-you-see-more-updates-from-friends/
23	December 2, 2013	Helping You Find More News to Talk About	https://about.fb.com/news/2013/12/news-feed-fyi-helping-you-find-more-news-to-talk-about/
24	September 27, 2013	More Relevant Ads in News Feed	https://about.fb.com/news/2013/09/news-feed-fyi-more-relevant-ads-in-news-feed/
25	August 23, 2013	Showing More High Quality Content	https://about.fb.com/news/2013/08/news-feed-fyi-showing-more-high-quality-content/

26	August 6, 2013	Announcing News Feed FYI: A Series of Blogs on News Feed Ranking	https://about.fb.com/news/2013/08/announcing-news-feed-fyi-a-series-of-blogs-on-news-feed-ranking/
----	----------------	--	---

