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Power and dignity: the ends of online behavioral advertising in the European Union

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CHAPTER 1. INTRODUCTION: POWER & DIGNITY

1.1. Setting the Stage¹

The rise of digital platform providers as powerful market actors has been one of the defining characteristics of the twenty-first century.² These platforms include search engines,³ social networks,⁴ marketplaces,⁵ app stores,⁶ messengers,⁷ on-demand,⁸ and video-sharing services.⁹ The companies providing these services, such as Alphabet,¹⁰ Amazon, and Meta,¹¹ were nearly bankrupt or non-existent in the early 2000s.¹² In 2022, these three companies exceeded \$4 trillion in market capitalization and joined Apple and Microsoft on the list of the world's most profitable companies, commonly known as Big Tech.¹³ The rise of these companies

¹ Parts of this section were published as the co-authored paper: *See generally*, Lex Zard & Alan M. Sears, *Targeted Advertising and Consumer Protection Law in the European Union*, 56 VAND. J. TRANSNAT'L L. 799 (2023).

² A digital platform (or platform) is defined in this thesis as a digital service that “facilitates interactions between two or more distinct but independent sets of users (whether firms or individuals) who interact through the service via the Internet.” *See* ORG. FOR ECON. COOP. & DEV., AN INTRODUCTION TO ONLINE PLATFORMS AND THEIR ROLE IN THE DIGITAL TRANSFORMATION, 20 (2019), <http://doi.org/10.1787/53e5f593-en>. The Digital Services Act that regulates digital services in the EU distinguishes between “online platforms” and “online search engines”. *See* Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act), 2022 O.J. (L 277), art. 3 (i)-(j) [hereinafter Digital Services Act]. Platform in this thesis has a broader meaning and covers both “online platforms” and “online search engines”.

³ For example, Google Search, Microsoft Bing.

⁴ For example, Facebook, Instagram, Twitter.

⁵ For example, Amazon Store, Google Shopping.

⁶ For example, Google Play, Apple AppStore.

⁷ For example, WhatsApp, Signal.

⁸ For example, Netflix, Amazon Prime.

⁹ For example, YouTube, TikTok.

¹⁰ Alphabet, Inc. [hereinafter Alphabet] is a technology conglomerate that was previously listed on stock market as Google, Inc. Google LLC is now one of the wholly owned subsidiaries of Alphabet and it operates, among other things, Google Search, Google Shopping, Google Play, YouTube, Google Chrome, Android, and Google Maps. *See G is for Google*, ALPHABET, <https://abc.xyz/> (last visited Oct 10, 2022).

¹¹ Meta Inc. [hereinafter Meta] was formerly listed on the stock market as Facebook, Inc., which was incorporated in 2004. It operates Facebook, Instagram and WhatsApp. *See Introducing Meta: A Social Technology Company*, META (Oct. 28, 2021), <https://about.fb.com/news/2021/10/facebook-company-is-now-meta/> (last visited Jun 8, 2023).

¹² Luigi Zingales & Filippo Maria Lancieri, *Stigler Committee Digital Platforms: Policy Brief*, 2–6 (2019).

¹³ “Big Tech” refers to five companies: Alphabet, Amazon, Apple, Microsoft, and Meta. In 2021, these companies alongside Saudi Aramco were the largest companies by market capitalization. *See* Jenna Ross, *The Biggest Companies in the World in 2021*, VISUAL CAPITALIST (Jun. 10, 2021), <https://ourworldindata.org/explorers/population-and-demography> (last visited Oct 10, 2022). Since then Meta has dropped on 9th and then 13th place. *See Largest Companies by Market Cap*, COMPANIESMARKETCAP, <https://companiesmarketcap.com/> (last visited Nov 16, 2023). The main source

is unsurprising: their platforms act as the “gateways”¹⁴ to the Internet, where humans spend a large portion of their daily time.¹⁵

In principle, their gatekeeping position allows platform providers to sort consumers into categories and give business users access to these categories.¹⁶ Therefore, platform providers monetize their position as intermediaries by charging business users for consumer attention instead of directly charging consumers a monetary fee.¹⁷ Marketplaces and app stores are *commission-based* platforms: they charge a commission to retailers (or developers) who sell their products (services, content) to the platform consumers.¹⁸

Search engines, social networks, and video-sharing services are primarily *advertising-based* platforms: they charge advertisers for showing their advertisements to platform consumers.¹⁹ The providers of advertising-based platforms have been particularly impactful in shaping the human experience online.²⁰ These companies, notably Alphabet and Meta,²¹ have molded their shared

of revenue for Alphabet, Amazon, and Meta is derived from the monetization of their platforms. While Apple and Microsoft also monetize platforms (e.g., Apple App Store, Microsoft Bing), the majority of their profits come from the sale of computer devices and associated software.

¹⁴ See generally, Jonathan Zittrain, *A History of Online Gatekeeping*, 19 HARV. J. L. & TECH. 253 (2006). In the EU, the Digital Markets Act introduced the rules for designating “gatekeepers”. See Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) O.J. 2022 (L 265)1 [hereinafter Digital Markets Act].

¹⁵ Julie E. Cohen, *Law for the Platform Economy*, 51 U. C. DAVIS L. REV. 133, 143 (2017). (“Platforms represent infrastructure-based strategies for introducing friction into networks. In theory, the twenty-first century communications infrastructure still known as the Internet is “open,” and for some purposes, that characterization is accurate. For most practical purposes, however, the “network of networks” is becoming a network of platforms; Internet access and use are intermediated from beginning to end.”)

¹⁶ See *Id.* at 145–148.

¹⁷ See generally, TIM WU, *THE ATTENTION MERCHANTS: THE EPIC SCRAMBLE TO GET INSIDE OUR HEADS* (2016). This thesis refers to individual recipients of platform service as consumers. See also Jake Goldenfein & Lee McGuigan, *Managed Sovereigns: How Inconsistent Accounts of the Human Rationalize Platform Advertising*, 3 J. L. & POL. ECON. 425 (2023).

¹⁸ See How to Sell on Amazon, AMAZON, <https://sell.amazon.com/sell> (last visited Nov 15, 2022). See Apple Media Services Terms and Conditions, APPLE LEGAL, <https://www.apple.com/legal/internet-services/itunes/us/terms.html> (last visited Nov 15, 2022).

¹⁹ See How We Make Money with Advertising, GOOGLE, <https://howwemakemoney.withgoogle.com> (last visited Nov 15, 2022). See Terms of Service, FACEBOOK, <https://www.facebook.com/terms.php> (last visited Nov 15, 2022).

²⁰ See SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* 63–97 (2019).

²¹ Amazon, Microsoft, and Apple are increasingly involved in monetizing their position for advertising purposes. Amazon, in particular, has become the third gatekeeper with a significant share in online advertising markets. See e.g., Share of ad-selling companies in digital advertising revenue in the United States from 2020 to 2025, STATISTA (2023), <https://www.statista.com/statistics/242549/digital-ad-market-share-of-major-ad-selling-companies-in-the-us-by-revenue/> (last visited Jun 9, 2023). Unlike Alphabet and Meta, online advertising is only a complementary source of revenue for other Big Tech platform providers.

monetization model into the infrastructure that facilitates the “free Internet,” where consumers access most websites and apps without monetary payment.²²

This infrastructure works the following way: platforms provide advertising dashboards, such as Google Ads or Meta Ads Manager, where advertisers choose categories of consumers they want to target with advertising campaigns.²³ These dashboards typically enable targeting consumers categorized based on their search keywords, demographics, and interests, the latter being particularly popular amongst advertisers.²⁴ This feature, also known as online behavioral advertising (OBA), enables advertisers to target consumer segments categorized based on the interests that platforms inferred by analyzing consumer behavioral data.²⁵ For example, the platform’s algorithm may categorize a consumer as a surf enthusiast because they have watched surfing videos. Instead of directly surveying consumers, platforms assume they can accurately predict their genuine interests through algorithmic processes.²⁶

This thesis refers to providers of all digital services, including platforms, that publish advertising on their websites and apps as “publishers” (GLOSSARY).²⁷ OBA requires publishers to maximize consumer behavioral data for optimizing their algorithms’ performance and, thus, revenue.²⁸ Platform providers lead the OBA industry with access to the most consumer behavioral data and the best computation capabilities among publishers. With this imperative, platform providers (e.g., Alphabet and Meta) contract other publishers (e.g., newspapers and gaming) that provide websites and apps over the Internet to join their advertising networks, such as Google Display Network and Meta Audience Network.²⁹ In exchange, platform providers track consumers across the publishers’ websites and apps, optimize their OBA algorithms, and offer advertisers to serve campaigns across the ad network.³⁰

Publishers can also rent their advertising space outside large platforms’ ad networks either privately (providing their own dashboards, e.g., the New York

²² See Julie E. Cohen, *Infrastructuring the Digital Public Sphere*, 25 YALE J. L. & TECH. 1 (2023).

²³ See *Id.*, at 14-28.

²⁴ See e.g., *Explore Advanced Advertising Strategies*, GOOGLE ADS, https://ads.google.com/intl/en_ie/home/resources/advanced/ (last visited Jun 9, 2023).

²⁵ See FREDERIK J. ZUIDERVEEN BORGESIU, *IMPROVING PRIVACY PROTECTION IN THE AREA OF BEHAVIORAL TARGETING* 14 (2015). See *About Audience Targeting*, GOOGLE ADS HELP, <https://support.google.com/google-ads/answer/2497941?hl=en> (last visited Jan 3, 2023).

²⁶ See ZUIDERVEEN BORGESIU, *supra* note 25, at 1-2.

²⁷ See *Glossary of Terminology*, IAB, <https://www.iab.com/insights/glossary-of-terminology/> (last visited Jan 3, 2023).

²⁸ See ZUBOFF, *supra* note 20, at 93-98. See JULIE E. COHEN, *BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM* 3 (2019).

²⁹ See e.g., *Meta Audience Network*, META, <https://www.facebook.com/audiencenetwork/> (last visited Jun 9, 2023).

³⁰ See ZUBOFF, *supra* note 20, at 93-98.

Times) or in the open advertising exchange, sometimes called “AdTech”. Nevertheless, within AdTech, Alphabet provides the largest advertising exchange, Google AdX, that enables all publishers, including platforms and their ad networks, to compete in a fully automated auction process, determining what advertisement is placed on what website or app over the Internet.³¹ In essence, Alphabet provides the largest advertising intermediary in all functions of AdTech. Therefore, through ad networks and ad exchanges, the largest platform providers, such as Alphabet and Meta, provide OBA infrastructure that enables consumers to access most of the Internet without paying a monetary fee.³²

While publishers could execute other forms of (e.g. contextual) advertising, executing OBA privately is challenging as they cannot access necessary data without joining advertising networks or open exchanges. As a response, A myriad of digital service providers have emerged to facilitate the OBA infrastructure. Nevertheless, the largest platform providers that channel most of the consumer attention online have access to unmatched amounts of behavioral data and continue to dominate the advertising markets emerging from the OBA infrastructures.³³ These platform providers collect revenue far exceeding estimated fair returns to their shareholders.³⁴ Studies report that while the OBA infrastructures benefit the large platforms with data advantage (“data power”),³⁵ notably Alphabet and Meta, they do not similarly benefit advertisers, publishers, and consumers dependent on their platforms.³⁶

³¹ See Michael Veale & Frederik Zuiderveen Borgesius, *AdTech and Real-Time Bidding under European Data Protection Law*, 23 GERMAN L. J. 226–227 (2022).

³² See also Cohen, *supra* note 22 at 14–28. See also Shoshana Zuboff, *Big Other: Surveillance Capitalism and the Prospects of an Information Civilization*, J. INFO. TECH. (2015), <https://journals-sagepub-com.ezproxy.leidenuniv.nl/doi/10.1057/jit.2015.5> (last visited Oct 28, 2023).

³³ In 2019, in the UK, £14 billion was spent on online advertising, 80% of which were spent on platforms operated by Alphabet and Meta. See COMPETITION & MKTS. AUTH., ONLINE PLATFORMS AND DIGITAL ADVERTISING: MARKET STUDY FINAL REPORT 9 (2020) [hereinafter CMA (UK) Study on Online Platforms and Digital Advertising].

³⁴ See *Id.*, at 33. See COMISIÓN NACIONAL DEL LOS MERCADO Y LA COMPETENCIA, STUDY ON THE COMPETITION CONDITIONS IN THE ONLINE ADVERTISING SECTOR IN SPAIN E/CNMC/002/2019 143–145 (2021) [hereinafter CNMC (Spain) Study on Competition in Online Advertising].

³⁵ See Antonio Davola & Gianclaudio Malgieri, *Data, Power and Competition Law: The (Im)Possible Mission of the DMA?*, in THE ECONOMICS AND REGULATION OF DIGITAL MARKETS (RESEARCH IN LAW AND ECONOMICS, 31) (2023), <https://papers.ssrn.com/abstract=4242574> (last visited Sep 23, 2023).

³⁶ See CMA (UK) Study on Online Platforms and Digital Advertising, *supra* note 33. See CNMC (Spain) Study on Competition in Online Advertising, *supra* note 34. See EUROPEAN PARLIAMENT, POL’Y DEP’T FOR ECON., SCI. & QUALITY OF LIFE POLICIES, ONLINE ADVERTISING: THE IMPACT OF TARGETED ADVERTISING ON ADVERTISERS, MARKET ACCESS AND CONSUMER CHOICE (2021) [hereinafter European Parliament Study Online Advertising & Consumer Choice]. See EUROPEAN PARLIAMENT, POL’Y DEP’T FOR CITIZENS’ RIGHTS & CONST. AFF., REGULATING TARGETED AND BEHAVIOURAL ADVERTISING IN DIGITAL SERVICES: HOW TO ENSURE USERS’ INFORMED CONSENT (2021) [hereinafter European Parliament (EU) Report on Consent in Targeted & Behavioral Advertising]. See EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR COMMUNICATIONS NETWORKS, CONTENT AND TECHNOLOGY,

The central concern is that OBA infrastructure instrumentalizes the consumers by treating them as “mere means” to maximize profits for large platforms at the center of the infrastructure.³⁷ In particular, it is claimed that the relative profitability of OBA infrastructure in comparison to other forms of advertising stems from disregarding consumer autonomy and manipulating consumers by exploiting their vulnerability in decision-making, leading to a variety of adverse effects, such as loss of time, economic and emotional harm, discrimination, oppression, and psychological and physical detriment.³⁸ In extreme cases, consumer manipulation via OBA may lead to fatal outcomes³⁹ and undermine democracy.⁴⁰

The legal framework of the European Union (EU) heavily regulates OBA. Firstly, as OBA is a business-to-consumer commercial practice, consumer protection law requires businesses engaging in OBA to respect consumer autonomy.⁴¹ The Unfair Commercial Practices Directive (UCPD), more specifically, establishes boundaries for consumer exploitation, including through manipulation.⁴² Secondly, to safeguard consumer privacy, the Directive on Privacy and Electronic

STUDY ON THE IMPACT OF RECENT DEVELOPMENTS IN DIGITAL ADVERTISING ON PRIVACY, PUBLISHERS, AND ADVERTISERS (2023) [hereinafter European Commission Study Recent Digital Advertising Developments].

³⁷ See ZUBOFF, *supra* note 20, at 376–382. See COHEN, *supra* note 28, at 95–96.

³⁸ See Ryan Calo, *Digital Market Manipulation*, 82 GEO. WASH. L. REV. 995, 1025-26, 1029-30 (2014). See Tal Z. Zarsky, *Privacy and Manipulation in the Digital Age*, 20 THEORETICAL INQUIRIES L. 157, 162, 166 (2019). See Daniel Susser, Beate Roessler & Helen F. Nissenbaum, *Online Manipulation: Hidden Influences in a Digital World*, 4 GEO. L. & TECH. REV. 1, 38 (2019).

³⁹ Algorithms that rely on behavioral personalization (“profiling”) have been blamed for leading to physical and mental health harm for vulnerable consumers, such as minors. One infamous example is of Molly Russell, whose coroner argued that the social network content personalization algorithm (“recommender system”) led the minor to commit suicide. See Angus Crawford & Bethan Bell, *Molly Russell Inquest: Father Makes Social Media Plea*, BBC NEWS, Sep. 30, 2022, <https://www.bbc.com/news/uk-england-london-63073489> (last visited Mar 28, 2023). See Angus Crawford & Tony Smith, *In Her Own Words - Molly Russell’s Secret Twitter Account*, BBC NEWS, Sep. 21, 2022, <https://www.bbc.com/news/uk-62892636> (last visited Mar 28, 2023). See Matija Franklin et al., *The EU’s AI Act Needs to Address Critical Manipulation Methods*, OECD.AI (Mar. 21, 2023), <https://oecd.ai/en/work/ai-act-manipulation-methods> (last visited Mar 28, 2023). Recommender systems are often employed to operationalize OBA, and, thus, are covered by these thesis.

⁴⁰ See Shoshana Zuboff, *Surveillance Capitalism or Democracy? The Death Match of Institutional Orders and the Politics of Knowledge in Our Information Civilization*, 3 ORGAN. THEORY 3 (2022).

⁴¹ See Natali Helberger, Frederik Zuiderveen Borgesius & Agustin Reyna, *The Perfect Match? A Closer Look at the Relationship between EU Consumer Law and Data Protection Law*, 54 COMMON MKT. L. REV. 1427, 1436 (2017). See JAN TRZASKOWSKI, YOUR PRIVACY IS IMPORTANT TO US! - RESTORING HUMAN DIGNITY IN DATA-DRIVEN MARKETING 181–187 (2021). See FEDERICO GALLI, ALGORITHMIC MARKETING AND EU LAW ON UNFAIR COMMERCIAL PRACTICES 264–265 (2022).

⁴² Directive (EC) 2005/29 of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (Unfair Commercial Practices Directive) 2005 O.J. (L 149) 22 [hereinafter Unfair Commercial Practices Directive]. See TRZASKOWSKI, *supra* note 41, at 29–31.

Communications (ePrivacy Directive) regulates the tracking of consumers across the Internet,⁴³ and the landmark General Data Protection Regulation (GDPR) establishes safeguards against the harms of OBA to consumers when these systems process personal data.⁴⁴ The protection of personal data that OBA requires is a fundamental right in the EU legal framework, intending to safeguard human dignity.⁴⁵ Thirdly, consumer autonomy is also an essential objective of the EU competition policy.⁴⁶ The European Commission is actively enforcing competition law in digital markets, and in 2021, it opened formal antitrust investigations of Alphabet and Meta regarding their advertising practices.⁴⁷

The legal framework of the EU also recognizes new forms of societal and macroeconomic threats stemming from the OBA infrastructures that incentivize and enable consumer manipulation. In particular, arguably, OBA infrastructures threaten democracy by facilitating misinformation and polarization, and they favor large platform providers with data power, further inhibiting innovation.⁴⁸ In 2022, the EU introduced the Digital Services Act (DSA) and the Digital Markets Act (DMA), which regulate platform providers, including their advertising practices.⁴⁹

⁴³ Directive (EC) 2002/58 of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications) 2002 O.J. (L 201) 31 [hereinafter ePrivacy Directive]. See also *Proposal for a Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC (Regulation on Privacy and Electronic Communications)*, COM (2017) 10 (Jan. 10, 2017) [hereinafter Proposal for ePrivacy Regulation].

⁴⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) 2016 O.J. (L 119)1 [hereinafter General Data Protection Regulation]. Personal data protection law reform that resulted in the General Data Protection Regulation was largely triggered by the need to respond to emerging OBA business model. See European Commission Press Release IP/10/63, The Commission, Europeans' Privacy will be big challenge in next decade, says EU Commissioner (Jan. 28, 2010), https://ec.europa.eu/commission/presscorner/detail/en/IP_10_63 (last visited Nov 16, 2023).

⁴⁵ Consolidated Version of the Charter of Fundamental Rights of the European Union, art. 8, 2012 O.J. (C 326) 391 [hereinafter CFREU].

⁴⁶ See Inge Graef, *Consumer Sovereignty and Competition Law: From Personalization to Diversity*, 58 COMMON MKT. L. REV. 471, 475-476 (2021).

⁴⁷ See European Commission Press Release IP/22/1703, The Commission, Antitrust: Commission opens investigation into possible anticompetitive conduct by Google and Meta, in online display advertising (Mar. 11, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1703 (last visited Nov 16, 2022). See European Commission Press Release IP/23/3207, European Commission Press Release IP/23/3207, The Commission, Commission sends Statement of Objections to Google (Jun. 14, 2023), https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3207 (last visited Jun 14, 2023).

⁴⁸ See *Ledger of Harms*, CENTER FOR HUMANE TECHNOLOGY, <https://ledger.humanetech.com/> (last visited Nov 18, 2023).

⁴⁹ Digital Services Act, *supra* note 2. Digital Markets Act, *supra* note 12.

The DSA explicitly prohibits some forms of OBA intending to safeguard against societal consumer manipulation harms.⁵⁰ In contrast, the DMA plans to disperse the data power of designated “gatekeepers” or the most prominent platform providers to ensure contestability in digital markets, including in the OBA infrastructure, promote innovation, and safeguard the authentic choice of consumers.⁵¹ Lastly, by 2024, the EU may finalize drafting the Artificial Intelligence Act (AIA) that sets further boundaries for human manipulation via artificial intelligence (AI), also when used for OBA.⁵²

While the legal framework of the EU heavily regulates OBA, the online environment continues to be plagued by manipulative practices designed for operationalizing OBA infrastructure.⁵³ Some commentators explain this by pointing to the substantive insufficiency of the EU legal framework.⁵⁴ Others blame this on the ineffective enforcement of this framework.⁵⁵ Academic literature typically analyzes OBA through the lens of consumer protection, data protection, and competition law in silos.⁵⁶

Lastly, while there is a growing trend in the EU legal academia to break down the silos of these legal domains,⁵⁷ no academic work has yet evaluated the effectiveness of the EU legal framework as a whole from a unified perspective in protecting against consumer manipulation harms of OBA, which remains a central concern.⁵⁸

⁵⁰ Digital Services Act, *supra* note 2, rec. 69.

⁵¹ Digital Markets Act, *supra* note 12, recs. 1-2. The Digital Markets Act mentions consumer “choice” 23 times.

⁵² See *Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts*, COM (2021) 206 final (Apr. 21, 2021) [hereinafter AI Act Proposal].

⁵³ See EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, BEHAVIOURAL STUDY ON UNFAIR COMMERCIAL PRACTICES IN THE DIGITAL ENVIRONMENT: DARK PATTERNS AND MANIPULATIVE PERSONALISATION: FINAL REPORT (2022) [hereinafter European Commission Study Dark Patterns & Manipulative Personalization]. See *Manipulative Online Practices*, EUROPEAN COMMISSION, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_418 (last visited Mar 2, 2023).

⁵⁴ See e.g., Philipp Hacker, *Manipulation by Algorithms. Exploring the Triangle of Unfair Commercial Practice, Data Protection, and Privacy Law*, EUR. L. J. 1-34 (2021).

⁵⁵ See e.g., Johnny Ryan, *Don't Be Fooled By Meta's Fine For Data Breaches, Says Johnny Ryan*, THE ECONOMIST, May 24, 2023, <https://www.economist.com/by-invitation/2023/05/24/dont-be-fooled-by-metas-fine-for-data-breaches-says-johnny-ryan> (last visited May 30, 2023).

⁵⁶ See e.g., for consumer protection: Zard and Sears, *supra* note 1; See e.g., for data protection: ZUIDERVEEN BORGESIU, *supra* note 23; See e.g., for competition law: Graef, *supra* note 41.

⁵⁷ See e.g., Christof Koolen, *Consumer Protection in the Age of Artificial Intelligence: Breaking Down the Silo Mentality Between Consumer, Competition, and Data*, 31 EUR. REV. PRIV. L. 427-468 (2023).

⁵⁸ See Zuboff, *supra* note 40, at 7-10.

1.2. Research Questions

The central research question (RQ) of this thesis is:

RQ: to what extent can the European Union (EU) legal framework safeguard against consumer manipulation harms of online behavioral advertising (OBA)?

This RQ is broken down into five sub-questions (SQs) answered in five chapters, Chapter 2 through Chapter 6. The first sub-question (SQ1) focuses on defining and describing OBA, a central practice studied in this thesis:

SQ1: what is online behavioral advertising (OBA)?

By answering SQ1, Chapter 2 defines what OBA is, delineates related terminology, and describes how OBA works, including its actors. The second sub-question (SQ2) focuses on defining manipulation, which in later chapters is analyzed as the likely result of OBA:

SQ2: what is manipulation?

By answering SQ2, Chapter 3 defines manipulation and delineates it from other forms of influence, such as persuasion and coercion. The third sub-question (SQ3) shifts toward the central phenomenon of this thesis and explores the extent to which OBA results in consumer manipulation:

SQ3: what is consumer manipulation via OBA?

By answering SQ3, Chapter 4 analyzes the manipulative practices of OBA. The fourth sub-question (SQ4) addresses the harms of consumer manipulation via OBA, which is the central issue in this thesis:

SQ4: what are the consumer manipulation harms of OBA?

By answering SQ4, Chapter 5 defines the consumer manipulation harms of OBA as the central problem. The fifth and the last sub-question (SQ5) shifts to evaluating the EU legal framework:

SQ5: what are the legal boundaries of consumer manipulation via OBA in the EU?

By answering SQ5, Chapter 6 elaborates on the EU legal framework's boundaries on consumer manipulation via OBA. Chapter 7 combines answers of all five SQs and formulates the answer to the RQ of this thesis.

1.3. Methodology

This thesis aims to evaluate the effectiveness of the EU legal framework in safeguarding against the consumer manipulation harms of OBA. With this aim in mind, this thesis relied on *desk research*, including analysis of (i) legal texts and (ii) case law, (iii) academic literature, and (iii) online sources.

This thesis analyzes EU primary and secondary law with the scope defined in section 1.4. The EU primary law includes the Treaty of the Functioning of the European Union (TFEU),⁵⁹ the Treaty on the European Union (TEU)⁶⁰, and the Charter of the Fundamental Rights of the European Union (CFREU).⁶¹ These treaties are analyzed in two ways. Firstly, this thesis relies on them to identify interests, such as dignity and the free market, that the legal framework intends to protect. Through such analysis, Chapter 5 constructs the theory of harms that later acts as a lens through which the entire legal framework is evaluated. Secondly, primary law is also a subject of such an evaluation. For example, Chapter 5 evaluates the consistency and completeness of theories of harm in the EU Treaties.⁶²

Apart from the treaties, Chapter 6 evaluates the EU secondary law, including consumer protection, privacy and data protection, competition, and digital single market law. This thesis evaluates legislative acts, such as regulations, directives, decisions, recommendations, and opinions, and non-legislative acts, such as delegated acts and implementing acts, in light of the theory of harm developed in Chapter 5. In order to operationalize this evaluation, this thesis first describes and explains the boundaries of this framework for consumer manipulation via OBA (in section 6.1). This thesis relies on various types of interpretation of legal sources, including legal-historical, grammatical, and teleological.⁶³ In essence, Chapter 6 provides a *discourse analysis* of the EU legal framework by evaluating the content of the legislative documents and examining the underlying assumptions and ideologies.

⁵⁹ Consolidated Version of the Treaty on the Functioning of the European Union, June 7, 2016, 2016 O.J. (C 202) 47 [hereinafter TFEU].

⁶⁰ Consolidated Version of the Treaty of the European Union, October 26, 2012 O.J. (C 326) 15 [hereinafter TEU].

⁶¹ CFREU, *supra* note 46, art.8.

⁶² In addition, evaluating effectiveness of the EU legal framework in Chapter 6 also includes an analysis of the primary law.

⁶³ For example, by placing the GDPR in the historical context, the thesis identifies OBA as one of the issues that triggered the reform (legal-historical interpretation); by analyzing recitals, the thesis identifies the goal of the legislator to ensure consumer autonomy in the context of OBA (teleological interpretation), and by limiting interpretation to the wording of GDPR's norms, the thesis identifies how the industry has interpreted them in a way that misaligns with the legislator's goals (grammatical interpretation).

This thesis relies on the case law of the Court of Justice of the European Union (CJEU) and the European Court of Human Rights (hereafter ECtHR).⁶⁴ This thesis relies on ECtHR cases primarily for building a theory of harm in Chapter 5. The CJEU cases are considered in establishing the boundaries of the EU legal framework. The case law of the Member States is also used, as it often precedes cases addressed by the CJEU and, at times, influences EU policy. The case law was primarily identified through academic literature.

The legal sources and case law were, in all cases, accessed via the Internet. In most cases, the research relied on Google Search to find the latest version of the documents in the official databases.⁶⁵ The research accessed primary and secondary law on the official EU law (EUR-lex)⁶⁶ website and the case law on the CJEU (CURIA)⁶⁷ and the ECtHR (HUDOC)⁶⁸ websites. Lastly, the research relied on the professional networks on X (previously Twitter) and LinkedIn to follow the latest developments concerning legislative proposals, such as in the case of the DSA, the DMA, and the AIA, as well as court judgments or other binding decisions, such as decisions of the European Data Protection Board (EDPB).⁶⁹ The final date until the legal sources and case law were considered was 30 October 2023.

This research also relies on a rigorous literature desk review. Fulfilling the primary objective to evaluate how the EU legal framework safeguards against consumer manipulation harms of OBA required this thesis to define and describe OBA (SQ1, Chapter 2), to define manipulation (SQ2, Chapter 3), to explain how OBA can lead to manipulation (SQ3, Chapter 4) and what harms such manipulation result in (SQ4, Chapter 5).⁷⁰ For each of these chapters, most literature was accessed online and was searched on Leiden University Catalogue and, to some extent, Google Search. The literature was selected based on its source, range, and focus. Regarding sources, the thesis prioritizes the official documents of the EU institutions, such as guidelines, studies, opinions, and other reports. Regarding breadth of range, this thesis selected the literature that covered the most research

⁶⁴ See Council of Europe, European Convention for the Protection of Human Rights and Fundamental Freedoms, as amended by Protocols Nos. 11 and 14, 4 November 1950, ETS 5 [hereinafter ECHR].

⁶⁵ For legislation, keywords used for search typically included “final text” and the name of the legal document, e.g., “Digital Services Act”. Case law keywords included case numbers, e.g., “C-646/22-1”.

⁶⁶ See *EUR-Lex*, EUROPEAN UNION, <https://eur-lex.europa.eu/homepage.html> (last visited Nov 29, 2022).

⁶⁷ See *CURIA*, EUROPEAN COURT OF JUSTICE, <https://curia.europa.eu/> (last visited Nov 29, 2022).

⁶⁸ See *HUDOC*, EUROPEAN COURT OF HUMAN RIGHTS, <https://hudoc.echr.coe.int> (last visited Nov 29, 2022).

⁶⁹ Particularly useful has been a X account of journalist Luca Bertuzzi: @BertuzLuca, and a LinkedIn account of data protection expert Luis Alberto Montezuma: @luisalbertomontezuma.

⁷⁰ The literature review also supplemented the analysis of the legal sources and the case law in Chapter 6.

questions.⁷¹ Priority was given to literature that addressed topics within the scope of several SQs of this thesis.

Chapter 2 describes and explains how OBA works. Firstly, the Catalogue was searched with the keyword “online behavioral advertising”, and literature was selected based on the most recent publications with the title containing the keyword, prioritizing sources in the following order: papers including literature review, reports of the EU institutions, scholarly books, academic papers, news. These works provided an understanding of OBA across disciplines. Secondly, the Catalogue was searched with the following OBA-related keywords: “online advertising”, “targeted advertising”, “behavioral targeting”, “profiling”, “real-time bidding,” and “cookies”. Literature was selected in the same order as was done for “OBA”.

This thesis adopted an integrative framework for evaluating OBA that included analyzing findings in the literature from the fields of marketing, psychology, sociology, statistics, policy, and law, depending on the aspects of OBA that the section addressed. For example, section 2.3 describes OBA markets and, therefore, primarily relies on statistics and market studies conducted by competition authorities. Generally, priority was given to the most recent publications. Publications before 2000 are considered only when the section addresses historical context. For instance, section 2.1 explains OBA in a historical context and considers the literature published in the 1900s that explains the evolution of advertising. Google Search was used to capture news sources related to OBA.

Chapter 3 and 4 build a theory of consumer manipulation via OBA. Such a theory is built by evaluating philosophical literature, in particular ethics. Firstly, the Catalogue was searched with the keywords “manipulation”, “autonomy”, and “vulnerability”. Edited books combining various perspectives about manipulation and vulnerability were selected to understand a broad range of meanings and functions of these concepts. In a sense, the purpose of Chapter 3 is to inform legal discussions regarding the uses of these terms. Therefore, policymakers and law enforcers must make the theory-building exercise legible and usable. With this in mind, Chapter 3 selects conceptions of manipulation and vulnerability that can be useful for understanding consumer manipulation via OBA and its harms. Therefore, the Catalogue was further searched with keywords such as “online manipulation” and “digital market manipulation”. The literature was analyzed critically: while some arguments are endorsed, some are criticized and abandoned, and a newer theory of consumer manipulation has been developed.

Further, drafts of these chapters were shared with several philosophers whose work this theory of manipulation builds upon. Their feedback was received via

⁷¹ For example, Calo not only addresses manipulation, but also manipulation in digital markets, and harms of such digital market manipulation, providing discourse relevant to SQ2, SQ3, SQ4. *See* Calo, *supra* note 38.

informal interviews and has shaped the theory. Additionally, active participation in conferences and workshops has shaped the final version of the thesis.

This thesis also relied on the professional networks of X and LinkedIn⁷² to stay updated about new publications and pre-prints about related topics. These networks were used to stay up to date about technology trends. These professional networks were the primary way to find journalistic and other non-scientific sources. For journalistic texts, priority has been given to global, market-oriented, or technology-focused journalism, for example, published in the Economist or Wired, but also to news agencies that follow developments in the EU policy, e.g., EurActiv.⁷³

1.4. Scope

This section clarifies the focus of this thesis and explains the scope. The negative impact of OBA historically is formulated in terms of “privacy” harms. This thesis aims to broaden the analysis. OBA threatens privacy by often accessing information about people and sharing it with others without their knowledge. The OBA industry engages in such intrusions of privacy ultimately to maximize profit, the effect of which is claimed to be consumer manipulation as some OBA practices exploit consumers' vulnerabilities. Consumer manipulation and its harms have been particularly challenging to define.⁷⁴ With this in mind, this thesis focuses on developing a comprehensive theory of manipulation via OBA that can contribute towards understanding and safeguarding against its harms.

Typically, literature refers to Internet “users” or “data subjects” whose data the OBA industry processes. Nevertheless, in most cases, people accessing the Internet, including when using search engines or social networks, are in a commercial relationship with these digital service providers and act as “consumers”.⁷⁵ Overlooking this aspect has previously led to hesitation to apply consumer protection rules to the practices. Therefore, this thesis analyzes OBA in a commercial context and refers to the individual recipients of OBA as a “consumer”.

OBA can also be used in a political context. The Cambridge Analytica scandal revealing the manipulative capabilities of OBA took place in the political context.⁷⁶ Such political OBA is associated with its share of potentially adverse effects on elections, political processes, and democratic institutions. Considering these harms, the European Commission has proposed a Regulation on Transparency and

⁷² LinkedIn page of Luis Alberto Montezuma was particularly important source for finding most up to date material.

⁷³ Reporter Luca Bertuzzi was an important news source for this thesis.

⁷⁴ See generally *MANIPULATION: THEORY AND PRACTICE* (Christian Coons & Michael Weber eds., 2014). See Susser, Roessler, and Nissenbaum, *supra* note 38. See generally *THE PHILOSOPHY OF ONLINE MANIPULATION* (Fleur Jongepier & Michael Klenk eds., 2022).

⁷⁵ See Goldenfein and McGuigan, *supra* note 17.

⁷⁶ Cambridge Analytica, a political consulting firm, had used Facebook's advertising platform to influence 2016 elections. See Susser, Roessler, and Nissenbaum, *supra* note 38, at 9–12.

Targeting of Political Advertising.⁷⁷ However, the harms of political OBA largely stem from the affordances of the OBA infrastructure in a commercial context.⁷⁸ Therefore, this thesis analyzes *consumer* manipulation, not *citizen* manipulation. Nevertheless, the severity of political OBA harms needs further research.⁷⁹

This thesis does not analyse areas of law that primarily regulate advertising content, such as intellectual property, including copyright and trademarks, that typically safeguard business interests instead of consumer autonomy. This thesis also does not comprehensively analyse the law on non-discrimination and the environment.⁸⁰ Such a scope is justified due to the focus of this thesis on consumer manipulation and consumer autonomy. Nevertheless, analyses of legislation excluded from the scope of this thesis can complement analysis in this thesis, as non-discrimination, environmental, and media pluralism laws are best placed to safeguard against affinity and environmental harms, as well as threats to democracy rising by challenging media pluralism.

1.5. Structure

This thesis is structured as follows:

Chapter 1 sets the stage for this thesis by elaborating on how OBA acts as the infrastructure that enables the monetization of digital services and content online. It focuses on the potential of OBA to manipulate consumers and explains how the EU legal framework limits this practice. This chapter further introduces the research questions, elaborates on the research methods, scopes the research, and illustrates the structure of the thesis.

Chapter 2 answers SQ1 of this thesis and describes what OBA is. Initially, this chapter provides a working definition of OBA and its components. Next, Chapter 2 analyzes OBA from four perspectives. Firstly, it describes OBA as an advertising paradigm that targets consumers based on their observed behavior instead of voluntary disclosure of preferences. Secondly, it describes OBA as one of several

⁷⁷ See *Proposal for a Regulation of the European Parliament and of the Council on the Transparency and Targeting of Political Advertising*, COM (2021) 731 final (Nov.25, 2021). [hereinafter *Proposal for Political Advertising Regulation*].

⁷⁸ See ZUBOFF, *supra* note 35, at 27-63.

⁷⁹ See EUROPEAN DATA PROTECTION SUPERVISOR, *Opinion 2/2022 On the Proposal for Regulating on the Transparency and Targeting of Political Advertising* (2022).

⁸⁰ See for non-discrimination law: Sandra Wachter, *Affinity Profiling and Discrimination by Association in Online Behavioural Advertising*, 35 BERKELEY TECH. L. J. 367 (2020). See also Amit Datta et al., *Discrimination in Online Advertising: A Multidisciplinary Inquiry*, in PROCEEDINGS OF THE 1ST CONFERENCE ON FAIRNESS, ACCOUNTABILITY AND TRANSPARENCY 20 (2018), <https://proceedings.mlr.press/v81/datta18a.html> (last visited Jan 24, 2023). See EUROPEAN DIGITAL RIGHTS (EDRI), *How Online Ads Discriminate: Unequal Harms of Online Advertising in Europe*, <https://edri.org/our-work/how-online-ads-discriminate/>. See Ana Maria Corrêa, *Regulating Targeted Advertising: Addressing Discrimination with Transparency, Fairness, and Auditing Tests Remedies*, 46 COMPUT. L. & SEC. REV. 1, 1-2 (2022). See Alan M. Sears, *The Limits of Online Price Discrimination in Europe*, 21 SCI. TECHNOL. LAW REV. 1, 38-40 (2021).

configurations of online advertising that algorithmically infers consumer interests and traits based on their behavioral data. Thirdly, Chapter 2 describes markets that emerge for facilitating OBA across the Internet. Fourthly, chapter 2 explains the technical infrastructures that support OBA markets, such as tracking technologies and the programmatic auction processes. Lastly, Chapter 2 formulates the answer to SQ1 by highlighting the essence of this practice at the intersections of different perspectives.

Chapter 3 answers SQ2 of this thesis and builds a theory of manipulation. Firstly, Chapter 3 positions manipulation as a form of influence, distinguishes it from other forms such as persuasion and coercion and defines manipulation as a hidden, successful, and intentional influence. Chapter 3 clarifies that manipulation as a hidden influence involves the exploitation of decision-making vulnerabilities. Secondly, Chapter 3 defines decision-making vulnerabilities, such as cognitive biases, desires, emotions, and beliefs. Thirdly, Chapter 3 uses the layered concept of vulnerability to define different levels of manipulateness. Chapter 3 then explains the difference between labeled and layered conceptions of vulnerability, adopts layered conceptions, and illustrates the variety of vulnerability layers that may come from different sources. Finally, chapter 3 formulates an answer to SQ2 by defining manipulation and manipulative practices and proposing a method for evaluating the manipulateness of commercial practices.

Chapter 4 answers SQ3 of this thesis and builds a theory of consumer manipulation via OBA. Chapter 4 starts by placing manipulation in the context of business-to-consumer relationships (“consumer manipulation”). Chapter 4 identifies two sets of manipulative practices in the context of OBA. Firstly, it lists and describes manipulative practices of OBA used to extract consumers’ attention, time, and data. Secondly, it describes manipulative practices of OBA used in the delivery of advertisements. In conclusion, Chapter 4 formulates an answer to SQ3 and provides Table 4-9 with identified manipulative practices in OBA.

Chapter 5 answers SQ4 of this thesis. It builds the theory of consumer manipulation harms of OBA. It synthesizes market-based (welfarist) perspectives and rights-based (dignitarian) perspectives into a coherent theory by resolving inconsistencies using the normative theory of capabilities approach. Chapter 5 uses such a theoretical framework to analyze consumer manipulation harms of OBA. It concludes by answering SQ4 and identifying seven types of harms, including economic, environmental, affinity, privacy, authenticity, integrity, and dignity harms.

Chapter 6 answers SQ5 of this thesis. Firstly, it elaborates on the EU legal framework for consumer manipulation via OBA, including consumer protection law, data protection and privacy law, competition law, and digital single market law. Secondly, it identifies prohibitions of such a framework that set boundaries for OBA. Thirdly, it elaborates on advertising transparency rules that ensure safeguarding against consumer manipulation harms by making OBA practices transparent. Fourth, it analyzes the conditions under which OBA can be regarded as

legitimate. Lastly, the chapter concludes by answering SQ5 and sketching the legal boundaries of OBA in the EU.

Chapter 7 answers the RQ of this thesis. Firstly, it answers the RQ and substantiates the answer. Secondly, it offers two recommendations: bolder enforcement and clearer guidance. Thirdly, it anticipates central challenges for policymakers and academia.