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

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CHAPTER 5. CONSUMER MANIPULATION HARMS OF OBA

This thesis evaluates the ability of the European Union (EU) legal framework to safeguard against consumer manipulation harms of online behavioral advertising (OBA). Such an evaluation requires a coherent theory. With this in mind, this chapter answers the fourth sub-question of this thesis:

SQ4: what are the *harms* of consumer manipulation via online behavioral advertising?

In order to answer it, this chapter is divided into three parts: section 5.1. deliberates on traditional (market-based and rights-based) and new (capabilities-based) politically liberal theoretical approaches to conceptualizing consumer manipulation harms of OBA. Section 5.2. provides a typology of harm. Section 5.3 concludes the chapter by formulating the answer to the SQ4.

5.1. Theories of Harm

5.1.1. Consumer Manipulation Harms

This thesis understands consumer manipulation via OBA to be morally neutral and describes it as a successful attempt to hiddenly influence consumers by means of OBA.⁶²⁰ Manipulating a consumer can be considered “morally wrong” for various reasons (and degrees) depending on the normative lens through which it is evaluated.⁶²¹ For example, *deontologists* may regard consumer manipulation as wrong because it violates a categorical rule that humans should be treated “not merely as a means but also always as an end” (object formula).⁶²² In contrast, *consequentialists* may require an evaluation of consequences, such as economic, psychological, or physical implications, to determine the extent to which the phenomenon is wrongful.⁶²³

As a business-to-consumer commercial phenomenon, consumer manipulation via OBA has effects beyond moral considerations and is also legally relevant.⁶²⁴ Accordingly, this thesis refers to legally relevant adverse effects as *harms*.⁶²⁵ The Trans-Atlantic legal frameworks currently governing commercial relationships are typically based on the theories of harms conceptualized in response to the Industrial Revolution.⁶²⁶ There is an increasing consensus in academia that the theories underlying these legal frameworks cannot adequately capture the harms of the

⁶²⁰ See about “moralized” and “non-moralized” concepts of manipulation Wood, *supra* note 272 at 19–21.

⁶²¹ See “Autonomy, Dignity and Welfare” in SUNSTEIN, *supra* note 271 at 84–87.

⁶²² “Object formula,” also known as “humanity formula,” is one of four formulations of the categorical imperative. See IMMANUEL KANT, *GROUNDWORK FOR THE METAPHYSICS OF MORALS* 42 (2019). (“Act in such a way that you treat humanity whether in your own person or anyone else’s, never merely as a means, but also always as an end.”)

⁶²³ See Noggle, *supra* note 265 at 3.1. For example, consequentialists may morally justify manipulation for helping a person quit smoking, tolerate it for playfully seducing a lover, and condemn it for selling running shoes.

⁶²⁴ Some morally wrong practices are not relevant to the law. For example, while lying to one’s parents violates a tenet of Christian morality, it is not legally relevant in most cases. Moreover, legally relevant does not mean “illegal.” Some legally relevant adverse effects can be justified (self-defense) or excused (necessity). Lastly, an action may have legally relevant adverse effects but be morally justified. For example, a person seeking revenge may morally justify their actions based on the “eye for an eye” principle but cause legally relevant adverse effects.

⁶²⁵ In US context, *harms*, especially “legally cognizable harms” are referred to as the adverse effects that can be recognized by courts, and are closely linked with the “injury-in-fact” and “standing” (*locus standi*) doctrines. See Ido Kilovaty, *Legally Cognizable Manipulation*, 34 *BERKELEY TECH. L. J.* 449 (2019). See also Daniel Keats Citron & Daniel J. Solove, *Privacy Harms*, 102 *BOSTON UNIV. L. REV.* 798 (2022). Reference to “harm” is inconsistent in the EU policy, also, because there is no overarching European private law legislation.

⁶²⁶ “Trans-Atlantic” here refers to the geographic area of the European and North American continents. See COHEN, *supra* note 28 at 143–151. See also Elettra Bietti, *A Genealogy of Digital Platform Regulation*, 7 *GEO. L. TECH. REV.* 39 (2021).

Information Age.⁶²⁷ Moreover, without an adequate theory of harm, policymakers struggle to evaluate the stakes at play when considering governing OBA, which has generated unprecedented wealth for providers of platforms.⁶²⁸ Similarly, without such a theory of harm, regulatory enforcement bodies may struggle to allocate their resources efficiently, and judges may fail to recognize the true interests at stake.⁶²⁹

Some skeptics dismiss the harmfulness of consumer manipulation via OBA because they do not see anything new compared to traditional persuasive advertising or that broad conceptualization of harm may disproportionately limit entrepreneurial freedom.⁶³⁰ Legal academia has responded to general skepticism by developing in-depth analyses of the Information Age's adverse effects, focusing on privacy and data breach harms.⁶³¹ However, such a vantage point cannot wholly capture the heart of the matter regarding consumer manipulation.⁶³² This thesis broadens the analysis by focusing on consumer manipulation harms of OBA or legally relevant adverse effects of consumer manipulation via OBA.

Evaluating the harmfulness of consumer manipulation via OBA requires adopting a normative stance. Accordingly, this thesis scopes the discussion within theories of political liberalism that provide a theoretical basis for the legal

⁶²⁷ See COHEN, *supra* note 28 at 143–151. See also Citron and Solove, *supra* note 625. See also Ryan Calo, *The Boundaries of Privacy Harm*, 86 IND. L. J. 1131, 2011 (2011).

⁶²⁸ Primary beneficiaries of OBA are providers of digital platforms such as Alphabet and Meta (section 2.3.3). It has become increasingly doubtful that advertisers and publishers engaged in OBA also benefit from this practice. Moreover, consumers find the services of online platforms valuable, and they can access the internet for free. See European Commission Study Recent Digital Advertising Developments, *supra* note 36. See also Citron and Solove, *supra* note 625 at 826–829.

⁶²⁹ For example, a lot of focus of regulatory enforcers has been given to the cookie banner dark patterns, but not to the core practice of OBA directly (section 4.2.3) See about this effect in ambiguity about harms in Citron and Solove, *supra* note 625 at 813. Note that Citron's and Solove's argument is more relevant in US adjudication. Domestic courts and CJEU increasingly adopt a broader view on harms in the Information Age. (section 6.1.3).

⁶³⁰ See Calo, *supra* note 38 at 1018–1034. Note that the “there is nothing new” argument suggests that OBA, similar to most traditional advertising, does not cross the threshold between persuasion and manipulation. In essence, Chapter 4 illustrated how this argument is wrong.

⁶³¹ See COHEN, *supra* note 28 at 143–151. See Ido Kirovsky, *Psychological Data Breach Harms*, 23 N. C. J. L. & TECH. 1 (2021). See also Citron and Solove, *supra* note 625. See also Calo, *supra* note 627. See also Daniel J. Solove & Danielle Keats Citron, *Risk and Anxiety: A Theory of Data Breach Harms*, (2016), <https://papers.ssrn.com/abstract=2885638> (last visited Mar 15, 2023). See also Daniel J. Solove, *Data Is What Data Does: Regulating Use, Harm, and Risk Instead of Sensitive Data*, 118 NORTHWESTERN UNIV. L. REV. 1 (2024).

⁶³² Sax takes a similar stance in the context of health-apps. See M. Sax, *Between Empowerment and Manipulation: The Ethics and Regulation of For-Profit Health Apps* 22 (2021). (“I want to focus on the potential of digital choice architectures to – often subtly – manipulate our behavior. If we frame this problematic in terms of privacy, we would fail to get to the heart of the problem. To be sure, the problem of privacy in the digital society is important in this context, but it is only a secondary problem.”)

frameworks in the EU.⁶³³ While there have been attempts in US academia to create a “theory of justice” that could act as the overarching theory for politically liberal countries in the Trans-Atlantic region, global post-World War II theories are typically polarized by two different sets of goals: advancing the free market (classical liberalism) and promoting human flourishing through human rights and democratic rule (liberal constitutionalism).⁶³⁴ Similarly, Information Age harms are typically evaluated from two perspectives roughly labeled as *market-based* and *rights-based* approaches.⁶³⁵ Both of these converge in that the central issue of consumer manipulation via OBA and the source of harm stem from undermining *personal autonomy* – people’s capability to make their own decisions.⁶³⁶ This thesis understands personal autonomy not as the capability of rational or ideal choosers but as that of ordinary human beings with cognitive biases, beliefs, desires, and

⁶³³ See “four branches of liberalism” in Bietti, *supra* note 626 at 8–10. Moreover, there are theoretical stances such as *communitarianism* that criticize liberal political philosophy to be overly concerned about the individual. See Daniel Bell, *Communitarianism*, in THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta & Uri Nodelman eds., Fall 2022 ed. 2022), <https://plato.stanford.edu/archives/fall2022/entries/communitarianism/> (last visited Mar 24, 2023). Nevertheless, these views hold only peripheral importance in public and private law. With this in mind, this thesis focuses primarily on *liberal* theories.

⁶³⁴ Most notable is Rawls’s *Theory of Justice*. See JOHN RAWLS, A THEORY OF JUSTICE: ORIGINAL EDITION (1971). See Bietti, *supra* note 626 at 8.

⁶³⁵ This thesis labels the approaches “market-based” and “rights-based” to disambiguate perspectives that are at times labeled in misleading ways. For example, US legal academics sometimes distinguish between “harm-based” and “rights-based” approaches. See Citron and Solove, *supra* note 625 at 809. This may wrongfully suggest that adverse effects on human rights are not harms. Sometimes, the market-based approach is framed as a “welfare” perspective. See Zarsky, *supra* note 38 at 172. See also SUNSTEIN, *supra* note 271 at 84. Reference here is to “welfare economics” and broader (*pure*) *welfarist* moral theory that is a specific form of *utilitarianism*. While utilitarianism measures the quality of life in any given society at total (or average) “utility”, satisfaction of preferences, welfarism acknowledges that preferences may be deformed, setting a goal of satisfying “authentic” preferences. See MARTHA C. NUSSBAUM, CREATING CAPABILITIES: THE HUMAN DEVELOPMENT APPROACH 81 (2011). The reference to welfare in online manipulation literature reflects the practice of measuring welfare (satisfaction of authentic preferences) in economic terms. In Europe, “welfare” is also widely used in slightly different contexts of welfare state, social welfare, and welfare benefits. Therefore, this thesis refers to market-based harms. As for rights-based harms, scholars have previously differentiated “autonomy-based” and “dignity-based” approaches, where autonomy refers to personal autonomy as defined in this thesis, and dignity to human entitlement not to be experimented upon or not to be treated as objects. See SUNSTEIN, *supra* note 271 at 96. See also Zarsky, *supra* note 38 at 20. In the European context, such formulation is unnecessary. In European legal doctrine, “dignity” has a more nuanced meaning than the mere prohibition of experimentation and covers autonomy interests.

⁶³⁶ See Susser, Roessler, and Nissenbaum, *supra* note 38 at 35. Personal autonomy is not the same as “freedom.” See BEATE ROESSLER, THE VALUE OF PRIVACY 49 (2005). (“One must be free to be able to be autonomous, but not every free action is an autonomous one, and we expect people to choose, act, behave and live not only ‘freely’ but also autonomously.”) Further, freedom, can be understood as *non-interference* and *non-domination*. For freedom as non-interference see *Id.* at 44–49. For freedom as non-domination see PHILIP PETTIT, REPUBLICANISM: A THEORY OF FREEDOM AND GOVERNMENT (2002). Moreover, personal autonomy is not the same as moral autonomy, which refers to autonomy as a moral principle, for example, prescribed by the Kantian formulation of the categorical imperative. See KANT, *supra* note 622 at 65.

emotions vulnerable to influence.⁶³⁷ Berlin's quote captures the essence of personal autonomy in an aspirational frame:

I wish my life and decisions to depend on myself, not on external forces. I wish to be the instrument of my own, not other men's acts of will. I wish to be a subject, not an object [...] I wish to be somebody, not nobody [...] deciding, not being decided for [...] as if I were a thing [...] incapable of conceiving goals and policies of my own and realizing them.⁶³⁸

Understood this way, personal autonomy has conditions of *authenticity* and *capability*.⁶³⁹ Making autonomous decisions means making decisions one considers their own (authenticity).⁶⁴⁰ Making autonomous decisions requires the ability to discern such authentic reasons (capability).⁶⁴¹ Consumer manipulation undermines personal autonomy by making consumers incapable of deliberating on hidden influences that exploit their vulnerabilities, leading to decisions they cannot authentically regard as their own.⁶⁴²

Market-based and rights-based approaches take contrasting views on *why* undermining personal autonomy is harmful and to *what extent*. Both perspectives have limitations in conceptualizing Information Age harms. Sub-sections 5.1.2 and 5.1.3. evaluate consumer manipulation harms of OBA with market-based and rights-based approaches, respectively, and analyze their limitations. Sub-section 5.1.4 proposes a new method for examining consumer manipulation harms of OBA that combines market-based and rights-based approaches and works around their limitations.

5.1.2. Welfare: Free Market Approach

A free-market economy provides one approach to evaluate consumer manipulation harms. This approach reflects the utilitarian, classical liberalist

⁶³⁷ See Susser, Roessler, and Nissenbaum, *supra* note 38 at 36.

⁶³⁸ Isaiah Berlin, *Four Essays On Liberty*, in TWO CONCEPTS OF LIBERTY 118 (1969).

⁶³⁹ See Susser, Roessler, and Nissenbaum, *supra* note 38 at 36. Susser, Roessler, and Nissenbaum distinguish between "authenticity" and "competence." This thesis ascribes to the substance of these conditions. However, it terms "competence" conditions as "capability" similar to Berlin's definition of autonomy. See Berlin, *supra* note 638. The reader may notice closeness of such framing to Capability Approach later introduced in the thesis (section 5.1.4). Such framing is appealing for coherence of this thesis, but also for accuracy. *Capability* is ability to do something, and *competence* ability to do something well.

⁶⁴⁰ See Susser, Roessler, and Nissenbaum, *supra* note 38 at 36. ("And autonomous persons can (at least in principle) critically reflect on their values, desires, and goals, and act for their *own* reasons—i.e., endorse them *authentically* as their own.")

⁶⁴¹ See *Id.* ("Autonomous persons have the cognitive, psychological, social, and emotional *competencies* to deliberate, to form intentions, and to act on the basis of that process.")

⁶⁴² See on how online manipulation undermines two conditions of autonomy in *Id.* at 38.

perspective that sets the *utility* or satisfaction of people's preferences as the ultimate societal goal and prescribes a free economic exchange – the *market* – to create a social order that efficiently maximizes it.⁶⁴³ Welfare economics considers the free market as a mechanism to maximize social well-being or *welfare* by supplying products and services that satisfy people's authentic preferences. Nevertheless, the welfarist point of view is premised on the perception that people's authentic preferences can only be known to them, and therefore, their authentic or autonomous choice in the market is what ensures maximizing welfare.⁶⁴⁴ Free market economists suggest that in the absence of government intervention, the market can achieve "Pareto efficiency," a situation in which no individual can benefit more without harming another.⁶⁴⁵ This equilibrium of a free and perfectly competitive market is premised on maximizing utility, or well-being, which economists refer to as *welfare*.⁶⁴⁶

The free market theorists see the role of the government as intervening in the market only to prevent harm from occurring between private parties ("harm principle").⁶⁴⁷ In business-to-consumer relationships, such harm is typically theorized as a reduction in consumer welfare, which refers to the utility or well-

⁶⁴³ The foundations of the classical liberalist view on the market economy are typically located in Adam Smith's *Wealth of Nations*. Smith believed that individuals pursuing their "enlightened" self-interest would compete in the marketplace and be led by the "invisible hand" of the market to maximize societal well-being. See SMITH, *supra* note 317. See also JOHN STUART MILL, ON LIBERTY 142 (2nd ed. ed. 1859). See also about market-based harms of online manipulation in Zarsky, *supra* note 38 at 172. See market-based approach to manipulation harms in SUNSTEIN, *supra* note 271 at 85.

⁶⁴⁴ Such a view on satisfaction of preferences can, particularly, be attributed to Mill and Hayek. See MILL, *supra* note 643 at 16. ("People decide according to their preferences.") See also FRIEDRICH A. HAYEK, THE MARKET AND OTHER ORDERS 384 (Bruce Caldwell ed., 2013). ("[T]he awareness of our irremediable ignorance of most of what is known to somebody [who is a planner] is the chief basis of the argument for liberty".) See also NUSSBAUM, *supra* note 635 at 93.

⁶⁴⁵ Pareto efficiency is named after Italian economist Vilfred Pareto who first developed the theory. Moreover, there can be three different types of efficiency. *Allocative efficiency* refers to a situation when market price equals marginal cost, and everyone willing and able to buy a product will do so. *Productive efficiency* refers to a competitive market with the lowest possible production costs, lowering prices. Lastly, *dynamic efficiency* concerns how the market delivers innovation and technological progress. See ALISON JONES & BRENDA SUFRIN, EU COMPETITION LAW: TEXT, CASES, AND MATERIALS 8–11 (Fourth ed. 2011).

⁶⁴⁶ "Welfare" is the term that *economists* refer to denote overall physical, mental, emotional, and financial well-being, but is mostly measured in economic value. "Welfare economics" is a branch of economics that studies economic activities with their benefit in society. See *Id.* at 4.

⁶⁴⁷ "Harm principle" is famously articulated by MILL, *supra* note 643 at 18. ("That the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others.") See about harms in private law Duncan Kennedy, *A Transnational Genealogy of Proportionality in Private Law*, in THE FOUNDATIONS OF EUROPEAN PRIVATE LAW (Roger Brownsword et al. eds., 2011). See also Benedicte Fauvarque-Cosson, *The Need for Codified Guiding Principles and Model Rules in European Contract Law*, in THE FOUNDATIONS OF EUROPEAN PRIVATE LAW (Roger Brownsword et al. eds., 2011).

being consumers derive from consuming goods and services.⁶⁴⁸ Consumer welfare can be reduced either through “personal detriment” to the consumer or through “structural detriment” on the market that negatively affects the consumer’s interests.⁶⁴⁹ While personal detriment affects a consumer in a specific transaction (e.g., buying a damaged product that causes physical harm), structural detriment arises due to inefficiencies in the market (e.g., products are overpriced due to lack of competition).⁶⁵⁰ Perspectives of personal and structural detriment lead to different conclusions, not only as to whether it is directed at an individual consumer or market as a whole but also what counts as a harmful outcome.⁶⁵¹ Similarly, consumer manipulation harms of OBA can be categorized in two forms.

First, particular business practices, such as a single dark pattern or a manipulative advertisement, can be personally detrimental to the consumer from the market perspective if they lead to direct financial loss, loss of time, and psychological or physical injury.⁶⁵² Such a market perspective is consequentialist – undermining personal autonomy becomes detrimental when consumer manipulation affects other interests (e.g., physical health and economic interests).⁶⁵³ Moreover, such adverse effects reduce consumer welfare and, therefore, are considered harmful if they outweigh the benefits to the consumer.⁶⁵⁴ Even though the market approach includes non-financial detriments, cost-benefit analyses are typically monetary and, therefore, require translation of non-tangible detriment into an economic quantity that acts as a proxy for well-being.⁶⁵⁵

Second, businesses can also harm consumers by causing structural detriment or causing the market to fail, leading to inefficient market outcomes (“market failure”).⁶⁵⁶ Market failure harms are primarily ascribed to the erosion of competition when private parties transform their economic freedom into enough

⁶⁴⁸ See JONES AND SUFRIN, *supra* note 645 at 8–11. Consumer welfare is often identified with the economic concept of “consumer surplus” that is difference between the price they are willing to pay for a good or service and actual price they pay. However, in this thesis consumer welfare refers to the broader concept of physical, mental and financial well-being.

⁶⁴⁹ See EUROPEAN COMMISSION, DIRECTORATE-GENERAL FOR JUSTICE AND CONSUMERS, *Study on Measuring Consumer Detriment in the European Union: Final Report, Part I: Main Report*, 24 (2017).

⁶⁵⁰ *Id.* at 26–27.

⁶⁵¹ *Id.* at 2.

⁶⁵² *Id.* at 38–40.

⁶⁵³ *Id.* at 38–40.

⁶⁵⁴ See Zarsky, *supra* note 38 at 172. See SUNSTEIN, *supra* note 271 at 85.

⁶⁵⁵ See Zarsky, *supra* note 38 at 172. See SUNSTEIN, *supra* note 271 at 85. See also NUSSBAUM, *supra* note 635 at 81.

⁶⁵⁶ See ROBERT BALDWIN & MARTIJN CAVE, *UNDERSTANDING REGULATION: THEORY STRATEGY, AND PRACTICE* 15–22 (2nd ed. 2012).

power to distort competition and cause inefficiencies in the market.⁶⁵⁷ Market failures can also occur due to other factors, such as negative externalities.⁶⁵⁸ For example, a business may maintain competitive prices by polluting, causing indirect harm to the consumer.⁶⁵⁹ Such market failures can decrease consumer welfare and cause harm by reducing consumers' trust in the market, reducing innovation, reducing quality, and increasing prices for goods and services.

Regarding structural detriment, there is an alternative way to measure harm – the *total welfare* standard considers not only the benefits that accrue to consumers but also the costs and benefits of other affected parties, including businesses.⁶⁶⁰ As the market capitalization of platforms that rely on OBA has reached \$4 trillion, the choice between total welfare and consumer welfare standards may be relevant to evaluating OBA's consumer manipulation harms.⁶⁶¹ The European Commission has continuously affirmed consumer welfare as the objective of the EU competition policy and a standard to evaluate harms within the EU markets.⁶⁶²

Around the globe, but particularly within the EU, industrial policies have expanded the notion of welfare to include a variety of social goals.⁶⁶³ According to the Lisbon Treaty, one of the goals of the EU is to establish a “highly competitive social market economy.”⁶⁶⁴ The reference to the “social market” is typically interpreted as capturing non-economic social interests of the community, such as sustainability or diversity, as societal values.⁶⁶⁵ The EU's approach to a free market economy with emphasis on social and political values is sometimes “Rhine capitalism,” getting its name from the river Rhine that runs through Germany, France, and Benelux countries associated with formulating such social value-driven

⁶⁵⁷ See JONES AND SUFRIN, *supra* note 645 at 4. See about role of law to protect market in SMITH, *supra* note 317 at 20–21.

⁶⁵⁸ There are other sources of market failures. For the overview see BALDWIN AND CAVE, *supra* note 656 at 15–22.

⁶⁵⁹ *Id.*

⁶⁶⁰ Svend Albæk, *Consumer Welfare in EU Competition Policy*, in AIMS AND VALUES IN COMPETITION LAW, 72 (Caroline Heide-Jørgensen et al. eds., 2013).

⁶⁶¹ Zingales and Lancieri, *supra* note 12 at 6. See also Largest Companies by Market Cap, *supra* note 13.

⁶⁶² MARIO MONTI, *The Future for Competition Policy in the European Union* (2001), https://ec.europa.eu/commission/presscorner/api/files/document/print/en/speech_01_340/SPEECH_01_340_EN.pdf. (“[T]he goal of competition policy, in all aspects, is to protect consumer welfare by maintaining a high degree of competition in the common market. Competition should lead to lower prices, wider choice of goods, and technological innovation.”) See about objectives of the EU consumer policy JONES AND SUFRIN, *supra* note 645 at 44–46.

⁶⁶³ See JONES AND SUFRIN, *supra* note 645 at 51.

⁶⁶⁴ Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, Dec. 13, 2007, 2007 O.J. (C 306), art. 3.

⁶⁶⁵ See JONES AND SUFRIN, *supra* note 645 at 41. See about “interests” and “values” On Interests and Values, MAASTRICHT UNIVERSITY LAW BLOG (Sep. 6, 2019), <https://www.maastrichtuniversity.nl/blog/2019/09/interests-and-values> (last visited Jul 3, 2023).

economic policies.⁶⁶⁶ Rhine capitalism is often contrasted with the Anglo-Saxon approach to the market economy, referred to as “neo-liberalism”, which sees meeting non-economic social interests merely as a consequence of economic freedom and an unhindered market.⁶⁶⁷

Typically, integrating social values within the goals of the market is criticized as a tool for safeguarding these values and evaluating societal harms for at least two reasons. On the one hand, economists criticize using competition policies for objectives other than achieving efficiency.⁶⁶⁸ On the other hand, legal theorists criticize such an approach because it requires a cost-benefit analysis and applying monetary value as a proxy for societal values, such as personal autonomy, that they regard as not quantifiable.⁶⁶⁹ An approach based on human rights is typically proposed as an alternative solution to capturing the harms to societal values.⁶⁷⁰ Section 5.1.3 elaborates on such a human rights approach in the context of the harms of consumer manipulation via OBA.

5.1.3. Dignity: Human Rights Approach

The rights-based, *liberal constitutionalist* approach to harm evaluates the effects of consumer manipulation on the interests protected by the framework of human rights.⁶⁷¹ The United Nations (UN) has defined the list of such values that states are expected to respect, protect, and promote across the globe.⁶⁷² In general, theories of human rights have transformed from protecting the interests of individual human beings from state power (“non-interference”) to guiding the policy with the

⁶⁶⁶ See JONES AND SUFRIN, *supra* note 645 at 41. “Ordoliberalism” is also social market economy model from Freiburg School (Germany) in contrast to “neoliberalism” of the Chicago School (US). While the EU policy was largely inspired by ordoliberal and rhine model capitalism, eventually neo-liberal models have had significant impact on the EU policy. See generally Kati J., Csere, *EU Competition Law and Democracy in the Shadow of Rule of Law Backsliding*, in THE EVOLVING GOVERNANCE OF EU COMPETITION LAW IN A TIME OF DISRUPTIONS: A CONSTITUTIONAL PERSPECTIVE (C. Colombo & M. Eliantonio, K. Wright, eds.).

⁶⁶⁷ See Bietti, *supra* note 626 at 36–38.

⁶⁶⁸ See JONES AND SUFRIN, *supra* note 645 at 51.

⁶⁶⁹ See generally Tony Prosser, *Regulation and Social Solidarity*, 33 J. L. & Soc. 364 (2006).

⁶⁷⁰ See BALDWIN AND CAVE, *supra* note 656 at 15–22, 22–23.

⁶⁷¹ See for theoretical overview of rights-based perspective in relation to permissible harm Susanne Burri, *A Rights-Based Perspective on Permissible Harm*, Feb. 14, 2015, <http://etheses.lse.ac.uk/1060/> (last visited Apr 4, 2023).

⁶⁷² The foundational body of UN international human rights law is often referred to as International Bill of Human Rights (IBHR), that is formed by G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948). [hereinafter UDHR] as well as the *Twin Covenants*: G.A. Res. 2200(XXI) A, International Covenant on Civil and Political Rights (Dec. 16, 1966). [hereinafter ICCPR] and G.A. Res. 2200(XXI) A, International Covenant on Economic, Social and Cultural Rights (Dec. 16, 1966). [hereinafter ICESCR]. IBHR reflects normative framework of “respect” (negative vertical), “protect” (negative horizontal), and “fulfil” (positive). See Polly Vizard, Sakiko Fukuda-Parr & Diane Elson, *Introduction: The Capability Approach and Human Rights*, 12 J. HUM. DEV. CAPAB. 1, 4 (2011).

objective of human flourishing.⁶⁷³ This transformation is most vivid in the constitutionalism of the EU, which places human rights at the forefront of EU policy (parallel to economic power, as described in the section).⁶⁷⁴ The EU human rights framework is formed by the Charter for the Fundamental Rights of the European Union (CFREU) and the European Convention on Human Rights (ECHR).⁶⁷⁵ This framework is grounded in the concept of *human dignity*, which is often affirmed as the “essence” of the human rights framework in the EU or the *value* at the core of the interests this framework protects.⁶⁷⁶

In EU constitutionalism, human dignity can be best understood as a restatement of the deontological *humanity formula* that a human being must never be treated “merely as a means but also always as an end”.⁶⁷⁷ The European Commission has often explained this concept to be a form of the basic norm (or *Grundnorm*) from which all other norms derive their validity:

Human dignity is the basis of all fundamental rights. It guarantees the protection of a person from being treated as a mere object by the State or by its fellow citizens.⁶⁷⁸

⁶⁷³ See Vizard, Fukuda-Parr, and Elson, *supra* note 672 at 6.

⁶⁷⁴ See for the EU rights-based constitutionalism CATHERINE DUPR, *THE AGE OF DIGNITY: HUMAN RIGHTS AND CONSTITUTIONALISM IN EUROPE* (1st ed. ed. 2015). See for such transformation in the context of the digital age DE GREGORIO, *supra* note 154.

⁶⁷⁵ CFREU, *supra* note 43. ECHR, *supra* note 44. CFREU and ECHR are complementary – CFREU explicitly connects itself with the ECHR.

⁶⁷⁶ For example, *Vinter v. UK*, European Court of Human Rights (ECtHR) was considering whether a life sentence without the possibility (hope) of release was inhuman or degrading treatment. *Vinter and Others v. the United Kingdom* [GC], nos. 66069/09, 130/10 and 3896/10, ECHR 2013. (“Similar considerations must apply under the Convention system the *very essence* of which, as the Court has often stated, is respect for human dignity”) [emphasis added] See generally DUPR, *supra* note 674. Note that, *Vinter v. UK* also reflects the influence of West German constitutionalism on the ECtHR, as explicitly refers to their interpretation of human dignity in the judgment. Human dignity is also the first foundational value referred to in Lisbon Treaty. See Treaty of Lisbon, *supra* note 664 art. 2. (“The Union is founded on the values of respect for human dignity, freedom, democracy, equality, rule of law, and respect for human rights, including the rights of persons belonging to minorities.”) Moreover, human dignity is a centerpiece of the CFREU. Article 1 (“Human Dignity”) of TITLE 1 (“DIGNITY”) reads: “Human dignity is inviolable. It must be respected and protected.” Moreover, the preamble explains: “Conscious of its spiritual and moral heritage, the Union is founded on the indivisible, universal values of human dignity, freedom, equality and solidarity”. See CFREU, *supra* note 43.

⁶⁷⁷ EUROPEAN COMMISSION, *2010 Annual Report from the Commission on the Application of the EU Charter of Fundamental Rights*, (2010). Human dignity is notoriously difficult concept to understand, and define, and is often an object of skepticism and criticism. Some critics refer to it as “useless” or “empty”. However, these scholars miss an important aspect of human dignity – it’s exact meaning is not supposed to be known. Rather it provides a heuristic tool for the governance of change, where current societal values can be defended by reference to it. See DUPR, *supra* note 674 at 16.

⁶⁷⁸ EUROPEAN COMMISSION, *supra* note 677. For “Grundnorm” See Stephen Riley, *The Function of Dignity*, 5 AMST. L. FORUM, 103 (2013).

Ascribing to this concept, the highest possible normative value, above the sanctity of human life,⁶⁷⁹ reveals the EU constitutionalism and human rights to be a form of *humanism* – while it acknowledges that human beings can be citizens, workers, patients, or consumers, it commits of always also viewing them as humans.⁶⁸⁰ Grounding rights in human dignity is a reminder of the total annihilation of humanity during World War II and a commitment to “never again” permitting such inhumanity that is always possible.⁶⁸¹ Therefore, human dignity functions as a problem-solving tool.⁶⁸² It places the source of a comprehensive set of human rights in people’s humanity, ensuring the protection of the interests of the most vulnerable.⁶⁸³ It also establishes boundaries that are never permissible to cross.⁶⁸⁴

Title 1 of the CFREU formulates these boundaries as the right not to be arbitrarily killed (Article 2 CFREU),⁶⁸⁵ not to have physical and mental integrity breached (Article 3 CFREU),⁶⁸⁶ not to be tortured or subjected to inhuman and degrading treatment (Article 4 CFREU),⁶⁸⁷ and not to be subjected to slavery or trafficking (Article 5 CFREU).⁶⁸⁸ These rights, referred to together as “dignity rights”, reveal the very minimum of people’s quality of life necessary for life in dignity.⁶⁸⁹ Moreover, these rights must be respected so that other rights, such as

⁶⁷⁹ This suggests that human beings cannot be reduced to mere biological existence or “bare life”. See DUPR, *supra* note 674 at 174.

⁶⁸⁰ *Id.* at 172–182.

⁶⁸¹ *Id.* at 28–29. Furthermore, it inverts the relationship between the state and the individual – affirming the latter’s humanity and personal autonomy as the source and the boundaries of political power. *Id.* at 36.

⁶⁸² DUPR, *supra* note 674 at 16–23, 58–61.

⁶⁸³ See generally Mary Neal, *Not Gods but Animals: Human Dignity and Vulnerable Subjecthood*, 23 LIVERP. L. REV. 177 (2012). See also DUPR, *supra* note 674 at 175.

⁶⁸⁴ DUPR, *supra* note 674 at 174.

⁶⁸⁵ Article 2: 1. “Everyone has the right to life.” 2. “No one shall be condemned to the death penalty, nor executed.” CFREU, *supra* note 43, art. 2.

⁶⁸⁶ Article 3: 1. “Everyone has the right to respect for his or her physical and mental integrity.” 2. “In the fields of medicine and biology, the following must be respected in particular: (a) the free and informed consent of the person concerned, according to the procedures laid down by law; (b) the prohibition of eugenic practices, in particular those aiming at the selection of persons;” (c) the prohibition on making the human body and its parts as such a source of financial gain; (d) the prohibition of the reproductive cloning of human beings.” CFREU, *supra* note 43, Article 3.

⁶⁸⁷ Article 4: “No one shall be subjected to torture or to inhuman or degrading treatment or punishment.” CFREU, *supra* note 43, art. 3.

⁶⁸⁸ Article 5: 1. “No one shall be held in slavery or servitude.” 2. “No one shall be required to perform forced or compulsory labour.” 3. “Trafficking in human beings is prohibited.” CFREU, *supra* note 43, art. 5.

⁶⁸⁹ See also Lexo Zardiashvili & Eduard Fosch-Villaronga, “*Oh, Dignity Too?*” *Said the Robot: Human Dignity as the Basis for the Governance of Robotics*, 30 MINDS & MACH. 121 (2020). See DUPR, *supra* note 674 at 77.

privacy or freedom of expression, can be actualized.⁶⁹⁰ However, regarding dignity as the “essence” of other rights means that each right has a minimum core that cannot be crossed to ensure a quality of life worthy of dignity.⁶⁹¹ By establishing dignity as its minimum core, the fundamental human rights in the EU provide a theoretical framework for analyzing consumer manipulation harms of OBA. Whether or not consumer manipulation via OBA puts under pressure the core quality of life protected by “dignity rights” is evaluated in *section 5.2.7*.

OBA, which typically relies on personal data, comes in particularly strong tension with the EU theoretical framework of rights that, unlike other frameworks, includes the right to protection of personal data as a fundamental right.⁶⁹² In 1890, US legal scholars already articulated the impacts of technology on “the right to privacy” as the “right to be let alone.”⁶⁹³ The EU human rights framework recognizes such interest and captures it in the “right to private life and correspondence,” but it also goes beyond to safeguard people’s interest to be in control of personal information about them and formulates a separate “right to personal data protection.”⁶⁹⁴ This is primarily because privacy violations have led to unparalleled atrocities on the European continent. For example, the Nazi regime used data about religion processed by the Dutch government to wipe out the Jewish population in the Netherlands.⁶⁹⁵ The EU’s right to protect personal data is often called the right to “informational self-determination,”⁶⁹⁶ as it intends to uphold

⁶⁹⁰ See EUROPEAN COMMISSION, *supra* note 677. (“The rights and freedoms under the title Dignity, such as the right to life, and prohibition of torture and slavery, must be respected so we can exercise other rights and freedoms in the Charter, for example, freedom of expression and freedom of association.”)

⁶⁹¹ See DUPR, *supra* note 674 at 77. (“The phrase ‘life in dignity and independence’ is not defined, but arguably includes a core quality of life as protected by the Title I human dignity rights.”)

⁶⁹² See generally ZUIDERVEEN BORGESIU, *supra* note 25.

⁶⁹³ In the Harvard Law Review article, sometimes called “the most famous law review article” Warren and Brandeis formulated privacy as “right to be let alone” or solitude. See generally Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARV. L. REV. 193 (1890).

⁶⁹⁴ Such privacy as control of personal information was formulated by ALAN WESTIN, *PRIVACY AND FREEDOM* (1967). (“The right of the individual to decide what information about himself should be communicated to others and under what circumstances”)

⁶⁹⁵ Due to availability of such data the Jewish population of the Netherlands had the lowest survival percentage (23%) among all European countries. See Marnix Croes, *The Holocaust in the Netherlands and the Rate of Jewish Survival*, 20 HOLOCAUST GENOCIDE STUD. 474 (2006).

⁶⁹⁶ “Informational self-determination” was formulated by the West German federal constitutional court in 1983 in the case relating to census. Bundesverfassungsgericht [BVerfG][Federal Constitutional Court] Dec. 15, 1983, (self-determination) 1 BvR 209/83, ECLI:DE:BVerfG:1983:rs19831215.1bvr020983 (Ger.) translation at: https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/1983/12/rs19831215_1bvr020983en.html. (“Restrictions of this right to ‘informational self-determination’ are only permissible if they serve an overriding public interest”)

personal autonomy, for example, by requiring an individual's consent.⁶⁹⁷ Although it is ultimately grounded in human dignity, processing must be *fair* regardless of how the data is acquired.⁶⁹⁸

Tensions between OBA and the EU right to personal data protection have received much academic attention because this right emerged to specifically respond to the advance of information technologies and their appetite for personal data processing, and OBA can be seen as the culmination of using such technologies.⁶⁹⁹ However, the resulting myopic view on this tension fails to capture that personal data protection is one of many interests safeguarded by the EU rights framework under threat by consumer manipulation via OBA.⁷⁰⁰ Beyond rights of privacy and personal data protection, CFREU lists other *freedoms* in Title II, such as the right to liberty and security,⁷⁰¹ freedom of thought,⁷⁰² freedom of expression and information,⁷⁰³ freedom to conduct business,⁷⁰⁴ and right to property⁷⁰⁵ that can all come under pressure by consumer manipulation that in essence undermines personal autonomy.⁷⁰⁶

As consumer manipulation exploits human vulnerabilities that at times stem from unique differences of individuals, it may have adverse effects on the set of

⁶⁹⁷ Article 8: 1. "Everyone has the right to the protection of personal data concerning him or her." 2. "Such data must be processed *fairly* for specified purposes and on the basis of the *consent* of the person concerned or some other legitimate basis laid down by law. Everyone has the right of access to data which has been collected concerning him or her, and the right to have it rectified." CFREU, *supra* note 43, art. 8.

⁶⁹⁸ CFREU, *supra* note 43, art. 8. *See* about grounding in human dignity BVerfG, 1 BvR 209/83, *supra* note 696. ("The value and dignity of the person, acting in free self-determination as a member of a free society, are at the centre of the Basic Law. In addition to the constitutional guarantees laid down in specific freedoms, the general right of personality, guaranteed in Art. 2(1) in conjunction with Art. 1(1) of the Basic Law, serves to protect these interests; this protection may gain even more significance in light of modern developments that pose new risks to one's personality")

⁶⁹⁹ First modern personal data protection law was introduced in 1970 in Hesse, Germany to respond to the advancements of computer technologies. In 1973, Sweden introduced first national data protection legislation called Data Act. In 1978 Germany introduced German Federal Data Protection Act. Data Privacy Act: A Brief History of Modern Data Privacy Laws, EPERI (2018), <https://blog.eperi.com/en/data-privacy-act-a-brief-history-of-modern-data-privacy-laws> (last visited Apr 5, 2023).

⁷⁰⁰ *See e.g.* Leiser criticizes such a view on personal data protection (in the context of dark patterns), and calls for regulatory pluralism to also include protection of consumer interests. *See* Leiser, *supra* note 466.

⁷⁰¹ Article 6: "Everyone has the right to liberty and security of person". *See* CFREU, *supra* note 43, art. 6.

⁷⁰² *Id.*, art. 10.

⁷⁰³ *Id.*, art. 11.

⁷⁰⁴ *Id.*, art. 16.

⁷⁰⁵ *Id.*, art. 17.

⁷⁰⁶ While Title II refers to "Freedoms", its normative core is personal autonomy. Such an argument is further defended in the section about Capabilities Approach (*section 5.1.4*) How the interests protected by these rights come under pressure will be addressed in *th section 5.2*.

rights in Title III (*equality*) of the CFREU, such as non-discrimination,⁷⁰⁷ equality between women and men,⁷⁰⁸ the rights of the child,⁷⁰⁹ the rights of the elderly,⁷¹⁰ and persons with disabilities.⁷¹¹ The rights-based approach can also see adverse effects on social and economic rights listed in Title IV (*solidarity*) of CFREU, such as environmental protection,⁷¹² consumer protection,⁷¹³ and the right to access services of general economic interests.⁷¹⁴ Scholars often see OBA as instrumentalizing consumers by commodifying personal data and manipulating them, raising the question of to what extent this practice directly challenges the fundamental commitment to human dignity and the core quality of life that dignity rights aim to protect.⁷¹⁵ At first glance, the rights-based approach to consumer manipulation reveals a comprehensive picture of what is at stake by listing interests negatively affected by the practice. However, such an approach is characterized by at least four limitations.

Firstly, theories of human rights frameworks are typically judge-made – they are constructed through adjudication and legislative action and rarely achieve a level of coherence attributed to frameworks of normative ethics.⁷¹⁶ Even in the EU, where human rights adjudication has relatively solid normative foundations, different interpretations of *human dignity* can lead to different, at times opposing, outcomes regarding crucial social issues such as euthanasia or abortion.⁷¹⁷

Secondly, while the EU recognizes social and economic rights, they are rarely considered equally important as other interests.⁷¹⁸ Meanwhile, OBA is a market practice that has enabled the rise of businesses that are together valued at more than four trillion euros.⁷¹⁹ As these companies generate revenue through OBA, they have significant economic effects on consumers directly and indirectly by affecting advertisers and publishers.⁷²⁰ To fully understand the consumer manipulation harms

⁷⁰⁷ CFREU, *supra* note 43, art. 21.

⁷⁰⁸ *Id.*, art. 23.

⁷⁰⁹ *Id.*, art. 24.

⁷¹⁰ *Id.*, art. 25.

⁷¹¹ *Id.*, art. 26.

⁷¹² *Id.*, art. 37.

⁷¹³ *Id.*, art. 38.

⁷¹⁴ *Id.*, art. 36.

⁷¹⁵ See ZUBOFF, *supra* note 20.

⁷¹⁶ See generally Martha C. Nussbaum, *Capabilities and Human Rights*, 66 FORDHAM L. REV. (1997).

⁷¹⁷ See C. McCrudden, *Human Dignity and Judicial Interpretation of Human Rights*, 19 EUR. J. INT. L. 655, 692 (2008).

⁷¹⁸ See DUPR, *supra* note 674 at 108–110.

⁷¹⁹ See Zingales and Lancieri, *supra* note 12 at 6. See also Largest Companies by Market Cap, *supra* note 13.

⁷²⁰ See e.g., CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33. See also European Parliament Study Online Advertising & Consumer Choice, *supra* note 36.

of OBA, these economic effects must be integrated into the overarching framework for assessing its harms, which may be difficult via an exclusively rights-based approach.

Thirdly, the rights-based approach points to normatively powerful stakes, such as boundaries that human dignity commitment poses. While some scholars claim that consumer manipulation via OBA allows gatekeeper platforms to wield power to cross such fundamental commitments,⁷²¹ others are skeptical of the OBA industry amounting to the weight of tyrannical governments.⁷²² Human dignity commitment protects humanity against harms of the highest magnitude, such as torture, slavery, and arbitrary killing. Systematic manipulation of consumers may theoretically amount to crossing this boundary.⁷²³ However, arguing for or against such a view is extraordinarily controversial and most likely can only be resolved by a clear judicial stance.⁷²⁴ Without such evaluation, a rights-based framework does little to shed light on the boundaries of consumer manipulation without adopting an additional normative framework that fills these gaps.

Fourthly, a rights-based approach grounded in human dignity is often criticized because it focuses on the individual instead of the collective and society.⁷²⁵ Such a view is understandable – human dignity recognizes, respects, protects, and promotes humanity in each individual. However, it also acts as a constitutional tool that protects groups of individuals, such as children or consumers, and collective, societal values, such as democracy.⁷²⁶

In sum, human rights provide a comprehensive framework for evaluating consumer manipulation harms, but they also have certain limitations, such as prioritizing civil ahead of economic interests and lacking a coherent normative substance. With this in mind, section 5.1.4 attempts to synthesize market-based and human rights approaches to create a holistic framework that captures the consumer manipulation harms of OBA.

5.1.4. Unifying Strands: Capability Approach

Constitutional documents are primarily concerned with promoting people's well-being and protecting their fundamental rights by limiting state power so that

⁷²¹ See ZUBOFF, *supra* note 20. See also Blaire Rose, *The Commodification of Personal Data and The Road to Consumer Autonomy through the CCPA*, 15 (2021).

⁷²² See Calo, *supra* note 38 at 1031.

⁷²³ See about human dignity as the boundaries of capitalism in DUPR, *supra* note 674 at 108–110.

⁷²⁴ Richards was one of the first scholars to call for legal and social restrictions for the online businesses in the Age of Surveillance, and also highlighted the challenges to such rulemaking. See Neil M. Richards, *The Dangers of Surveillance*, 126 HARV. L. REV. 1934 (2013).

⁷²⁵ G.A. van der Wal, *The Individualism of Human Rights*, 18 RECHTSFILOS. EN RECHTSTHEOR. 195 (1989).

⁷²⁶ See DUPR, *supra* note 674 at 66–70.

individuals can express their autonomy and live fulfilling lives.⁷²⁷ However, as the twenty-first century gave way to the rise of non-state power, modern “digital” constitutionalism is also concerned with applying fundamental rights horizontally to limit private power and establish a minimum standard of well-being while continuously creating a competitive market environment for increasing quality of life.⁷²⁸ The EU, particularly in digital markets, is concerned with balancing the free market and human rights goals.⁷²⁹ Traditional political theories, primarily focused on *fairness* in the allocation of resources, have not been able to create a synthesis between market and human rights perspectives in a way that adequately responds to the rise of “algorithmic” power.⁷³⁰ In the absence of a coherent normative framework, market, and human rights goals are sometimes seen as clashing.⁷³¹ As a result, the philosophical study of *ethics* has been increasingly informing the EU digital policy.⁷³²

The *capability approach* is a normative theory that can help synthesize market-based and rights-based perspectives for formulating consumer manipulation harms of OBA.⁷³³ One of the imperatives of the capability approach is the same as the free

⁷²⁷ See DE GREGORIO, *supra* note 154 at 3.

⁷²⁸ *Id.*

⁷²⁹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and Committee of the Regions 2030 Digital Compass: the European way for the Digital Decade, (2021), <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0118> (last visited Apr 8, 2023). (“[O]ur stated ambition is more relevant than ever: to pursue digital policies that empower people and businesses to seize a human centred, sustainable and more prosperous digital future.”) See also EUROPEAN COMMISSION, *Shaping Europe’s Digital Future* (2020). (“A European way to digital transformation which enhances our democratic values, respects our fundamental rights, and contributes to a sustainable, climate-neutral and resource-efficient economy.”) See DE GREGORIO, *supra* note 154 at 31–32.

⁷³⁰ Rawls’s theory of political liberalism articulated in *A Theory of Justice* is the most influential political theory in twentieth century that attempts to synthesize market and rights based goals. See RAWLS, *supra* note 634. However, Rawls’s theory has a strong emphasis on fairness in resources, and is often criticized for being “egalitarian version” of free market approach and unable to address other systemic forms of inequalities, such as racial or gender inequality. See NUSSBAUM, *supra* note 635 at 56–58. Much has been written about how algorithmic power exacerbates particularly racial or gender inequalities, and forms of oppression. See e.g., VIRGINIA EUBANKS, *AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH* (2019). See also CATHY O’NEIL, *WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY* (2017). Crawford captures breadth and depth of societal issues raised by algorithmic power that are not necessarily egalitarian welfare problems, See generally KATE CRAWFORD, *ATLAS OF AI: POWER, POLITICS, AND THE PLANETARY COSTS OF ARTIFICIAL INTELLIGENCE* (2021).

⁷³¹ See DE GREGORIO, *supra* note 154 at 3.

⁷³² See for an overview of the processes, and also taken philosophical approaches Luciano Floridi, *The European Legislation on AI: a Brief Analysis of its Philosophical Approach*, 34 PHILOS. TECHNOL. 215 (2021).

⁷³³ Capability Approach has been largely developed by Amartya Sen and Martha Nussbaum to deal with the issue of measuring the development of the countries. Traditionally Gross Domestic Product has been adopted to measure the well-being of people and their quality of life. Sen and

market economy – to maximize people’s well-being in any given society.⁷³⁴ However, this approach expands the notion of well-being from economic welfare to a broader *quality of life*. It provides a tool to measure harm to the quality of life by looking at different “functionings” or types of human functioning (e.g., being healthy, being safe, being politically involved) and evaluating the extent to which people are *capable* of exercising personal autonomy with regard to those types of functioning.⁷³⁵ Moreover, the capability approach also adopts the human rights imperative of protecting basic-level human interests – it acknowledges that there are certain types of functioning about which all human beings must be able to express a certain degree of autonomy for their life to be worthy of human dignity.⁷³⁶

Instead of prescribing a rigid set of capabilities, theorists leave the list open for democratic discussion within the community.⁷³⁷ In the EU, the CFREU provides a ledger of values and interests the community deems worthy of protection in the list of human rights.⁷³⁸ Interpreting these values and interests with the aid of the capability approach normative framework provides a tool to identify harms, measure them, and qualify whether they are acceptable in the EU. This chapter uses capabilities theory to fill in the normative gaps left by purely market-based or rights-based approaches and to create a typology of consumer manipulation harms of

Nussbaum have argued for shifting focus from economic evaluations that were only one of many different proxies, to the approach that better captured people’s quality of life. *See generally*, NUSSBAUM, *supra* note 635.

⁷³⁴ Ingrid Robeyns & Morten Fibieger Byskov, *The Capability Approach*, in THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta & Uri Nodelman eds., Summer 2023 ed. 2023), <https://plato.stanford.edu/archives/sum2023/entries/capability-approach/> (last visited Apr 8, 2023). (“The capability approach is a theoretical framework that entails two normative claims: first, the claim that the freedom to achieve well-being is of primary moral importance and, second, that well-being should be understood in terms of people’s capabilities and functionings.”)

⁷³⁵ *Id.*

⁷³⁶ The difference between functionings and capabilities is of essential importance in capability approach. Capability refers to an ability to select between options and functioning to already actualized capabilities. For example, the capability to have safe and loving romantic relationships suggests the potentiality of an option to enter such relationships. In contrast, functioning refers to a person’s choice to be in such a relationship. People can also choose to be single or to organize their private life differently. Moreover, capabilities approach regards commodities such as money and material resources as instrumental to such functionings. *See* Basu Kaushik & Luis F. López-Calva, *Functionings and Capabilities*, 2 in HANDBOOK OF SOCIAL CHOICE AND WELFARE 153 (Kenneth J. Arrow, Amartya Sen, & Kotaro Suzumura eds., 2011).

⁷³⁷ While Sen avoids prescribing any specific set of capabilities altogether, Nussbaum prescribes set of ten capabilities that are very closely related to CFREU framework, and include: (1) life; (2) bodily health; (3) bodily integrity; (4) senses, imagination, and thoughts; (5) emotions; (6) practical reason; (7) affiliation; (8) other species; (9) play; and (10) control over one’s environment, that includes political participation, and participation in free market, as a consumer or entrepreneur (hereinafter Nussbaum’s Ten Capabilities). *See* NUSSBAUM, *supra* note 635 at 33–34.

⁷³⁸ *See* DUPR, *supra* note 674 at 108–110.

OBA. This typology of harms is further elaborated in section 5.2 across seven capabilities.⁷³⁹

5.2. Typology of Consumer Manipulation Harms

This thesis identifies seven types of consumer manipulation harms of OBA that are discussed in sections 5.2.1 to 5.2.7. These types of harms include *economic harms* – adverse effects on the capability to participate in the market as a consumer or an entrepreneur (section 5.2.1);⁷⁴⁰ *environment harms* – adverse effects on the capability “to live in concern for and about animals, plants, and the world of nature”, including environmental and animal welfare harms (section 5.2.2);⁷⁴¹ *affinity harms* – adverse effects on the capability to connect and be vulnerable with others, including in the online environment, and to form a social group without oppression or discrimination (section 5.2.3);⁷⁴² *privacy harms* – adverse effects on the capability to have attachments to things and people, to have emotions, and to deliberate on them without the intrusion of others (section 5.2.4);⁷⁴³ *authenticity harms* – adverse effects on the capability to make one’s own decisions and live according to one’s genuine wishes, including holding, practicing, and expressing philosophical or religious beliefs and political views (section 5.2.5);⁷⁴⁴ *integrity harms* – adverse effects on the capability to live a life of regular length, be physically and mentally healthy, and live without physical violence, emotional abuse, or behavioral conditioning (section 5.2.6);⁷⁴⁵ and *dignity harms* – adverse effects on the capability to be vulnerable (capability to develop capabilities), including capability to exercise agency without systematic threat of

⁷³⁹ The list of capabilities developed in this thesis is an updated version of Nussbaum’s Ten Capabilities to better fit the context of consumer manipulation, and also reflect CFREU values and interests. Note that, when economic harms are addressed in this thesis, private law, including consumer protection law, and competition law interpretations takes priority. When rights-based harms are addressed human rights interpretation takes priority. Capabilities approach is merely used to bind such interpretations together as a holistic overview of harms.

⁷⁴⁰ See “Control over one’s environment” in NUSSBAUM, *supra* note 635 at 36.

⁷⁴¹ See “Other species” in *Id.*

⁷⁴² See “Affiliation” in *Id.*

⁷⁴³ This capability refers to right to privacy, as well as personal data protection CFREU, *supra* note 43, Article 7, 8.

⁷⁴⁴ The capability of authenticity together with capability of decisional privacy create life lived in autonomy. Decisional privacy is the shield that enables authentic choice, manipulation violates this. Autonomy rights are protected as “Freedoms” under the Title II of the CFREU, such as freedom of thought, freedom of expression, also liberty and security.

⁷⁴⁵ This capability combines capability (2), (3), (4) from Nussbaum’s Ten Capabilities. Note however that “senses, imagination, and thoughts are taken as mental integrity. Further, this capability unifies all “dignity rights” from Title I of CFREU such as right to integrity of a person, prohibition of torture, and slavery. CFREU, *supra* note 43, arts. 2, 3, 4, 5.

instrumentalization or exploitation (section 5.2.7).⁷⁴⁶ The structure of the typology follows the hierarchy of capabilities within the capability approach, as well as a listing of interests within CFREU (dignity-solidarity), starting from the economic harms (e.g., capability to economic participation, high-level consumer protection) to dignity harms that have the highest weight.

5.2.1. Economic Harms

Consumer manipulation undermines personal autonomy concerning a person's capability for economic participation. From a market perspective, this may cause personal detriment by incurring direct economic loss (section 5.2.1.1).⁷⁴⁷ Moreover, this, at the same time, causes a structural detriment to the market (section 5.2.1.2).⁷⁴⁸

5.2.1.1 *Economic Loss: Personal Detriment*

Manipulated consumers may incur an economic loss by engaging in transactions they would not otherwise take and that do not reflect their authentic preferences.⁷⁴⁹ Such potentially unwanted transactions can happen by manipulating consumers to buy products or services that are not in their actual preferences (transaction extraction) or by manipulating consumers to pay more than they otherwise would (price extraction).⁷⁵⁰ For example, using (one or several) manipulative practices described in section 4.3.2, event organizers can target consumers' vulnerabilities (e.g., hardship targeting, affect targeting) to manipulate consumers into a temporary state of anxiety to purchase concert tickets they do not originally intend to attend.⁷⁵¹ In practice, such instances of transaction extraction can be challenging to detect. Also, the fact that a consumer has already purchased the ticket can become a precursor for updating their preferences and deciding to attend and even enjoy the concert.⁷⁵² In other cases, consumers may detect they have been manipulated, but they may discard it—for example, €10 a consumer pays for a club ticket on an upcoming Friday night may be considered a minor loss (also

⁷⁴⁶ Nussbaum does not single out this capability, but basis her capability theory on human dignity, and the idea that human beings are born vulnerable, and they are entitled of being treated as humans. See NUSSBAUM, *supra* note 635 at 19. This capability relates to Article 1 of CFREU “human dignity”. CFREU, *supra* note 43, art. 1.

⁷⁴⁷ See Zarsky, *supra* note 38 at 172.

⁷⁴⁸ See Calo, *supra* note 38 at 1025.

⁷⁴⁹ See Zarsky, *supra* note 38 at 172.

⁷⁵⁰ *Id.* See also SUNSTEIN, *supra* note 271 at 218. See also Spencer, *supra* note 295 at 991.

⁷⁵¹ See similar argument on the sale of running shoes in Zarsky, *supra* note 38 at 172.

⁷⁵² From the market perspective, if the consumer decides to attend the concert and has fun, it *can* be argued that manipulation contributes to their emotional well-being. In other words, consumer is made to do what they did not actually want, but it turns out good for them in the end.

referred to as “small and scattered damage”⁷⁵³) that cannot account for actual harm to a consumer.⁷⁵⁴

Manipulative practices of OBA may lead to uninvited price extraction – consumers may be manipulated to pay more than they otherwise would.⁷⁵⁵ For example, airlines could target consumers that they profiled to have lower levels of digital literacy or willingness to pay higher prices with advertisements for airplane tickets with higher prices than digitally literate consumers would pay.⁷⁵⁶ In practice, consumers are unlikely to detect this: airline ticket prices fluctuate for a variety of reasons, such as seat availability and departure date, and businesses can use this to cover price discrimination (e.g., *MEP6: covert personalization*).⁷⁵⁷ In addition, applied in such a way, some scholars argue that price discrimination can reward wealthier consumers at the expense of the poor, exacerbating economic inequality.⁷⁵⁸

While the economic loss is a personal detriment, it also causes a structural detriment, leading to inefficiencies in the market and causing various other harms. Such structural detriment is addressed in section 5.2.1.2.

5.2.1.2 *Market Harms: Structural Detriment*

Consumer manipulation via OBA can be exposed, and consumers can have negative experiences when they become aware of its manipulative influences

⁷⁵³ For “small and scattered damage” or “strooischade” in Dutch see W.H. VAN BOOM, B.J. DRIJBER, J.H. LEMSTRA, V.C.A. LINDIJER, T. NOVAKOVSKI, STROOISCHADE (RAPPORT I.O.V. MIN. ECONOMISCHE ZAKEN), DEN HAAG: PRDF ADVOCATEN 2009.

⁷⁵⁴ Calo, for example, finds questionable to what happens when manipulation results in purchase of a bottle of water that does not cause physical harm. See Calo, *supra* note 38 at 1026.

⁷⁵⁵ Zarsky, *supra* note 38 at 172. See also Calo, *supra* note 38 at 1026.

⁷⁵⁶ See Zuiderveen Borgesius and Poort, *supra* note 137 at 349. See also Jeffrey Moriarty, *Why Online Personalized Pricing Is Unfair*, 23 ETHICS INF. TECHNOL. 495 (2021).

⁷⁵⁷ See for an old argument about such form of price extraction in Andrew Odlyzko, *Privacy, Economics, and Price Discrimination on the Internet* (2003). Further, see Andrew Odlyzko, *Network Neutrality, Search Neutrality, and the Never-Ending Conflict between Efficiency and Fairness in Markets*, 8 REV. NETW. ECON., 50 (2009), <https://www.degruyter.com/document/doi/10.2202/1446-9022.1169/html?lang=en> (last visited Mar 27, 2023). (“We do not know exactly what forms of price discrimination society will accept. So we should expect experimentation, *hidden as much as sellers can manage*, but occasionally erupting in protests, and those protests leading to sellers pulling back, at least partially. And occasionally we should expect government action, when the protests grow severe.”)

⁷⁵⁸ See an argument about “regressive distribution effects” in Laura Moy & Amanda Conley, *Paying the Wealthy for Being Wealthy: The Hidden Costs of Behavioral Marketing* (Unpublished Manuscript), <https://sites.law.berkeley.edu/privacylaw/2013/05/24/laura-moy-amanda-conley-paying-the-wealthy-for-being-wealthy-the-hidden-costs-of-behavioral-marketing/> (last visited Mar 27, 2023). See also Jennifer Valentino-DeVries, Jeremy Singer-Vine & Ashkan Soltani, *Websites Vary Prices, Deals Based on Users’ Information*, WALL STREET JOURNAL, Dec. 24, 2012, (last visited Mar 27, 2023).

(section 5.2.4).⁷⁵⁹ For example, a person who visits a mental health-related website and is later targeted by a related advertisement may experience stress and anxiety.⁷⁶⁰ In one example, *BetterHelp*, an online counseling service, has repeatedly and covertly disclosed consumers' mental health information to Facebook and other platforms for OBA purposes.⁷⁶¹ In general, due to the prevalence of manipulative practices, consumers worry about how their personal information is used and may feel vulnerable online.⁷⁶² Exposure to manipulative practices may significantly reduce consumers' trust in markets through negative subjective experiences of their own or general awareness of such practices online.⁷⁶³ For example, the consumer may think that other online counseling services also share their data with third parties and decide not to seek their services.

Consumers may lose trust in online markets, withdraw from valuable services, and adversely affect consumer welfare.⁷⁶⁴ The reduction of consumer trust may also be harmful from a distributive fairness perspective – poor, elderly, individuals with physical and mental disabilities, illiterate or digitally illiterate (people who lack skills to navigate the digital world) are perhaps more vulnerable to such experiences, causing them to be cut off from valuable digital services.⁷⁶⁵ For example, a person who avoids seeking in-person counseling due to the associated stigma of the community (in their country of residence) towards mental health issues may feel anxious about losing control over their mental health information and decide not to use online counseling services that could otherwise provide crucial support for their well-being (section 5.2.3).

⁷⁵⁹ See e.g., *Consumer Scoreboard*, EUROPEAN COMMISSION, https://ec.europa.eu/commission/presscorner/detail/e/ip_23_1891 (last visited Mar 30, 2023).

⁷⁶⁰ See also Zarsky, *supra* note 38 at 173.

⁷⁶¹ FTC to Ban BetterHelp from Revealing Consumers' Data, Including Sensitive Mental Health Information, to Facebook and Others for Targeted Advertising, FEDERAL TRADE COMMISSION (2023), <https://www.ftc.gov/news-events/news/press-releases/2023/03/ftc-ban-betterhelp-revealing-consumers-data-including-sensitive-mental-health-information-facebook> (last visited Mar 30, 2023). ("According to the complaint, BetterHelp pushed consumers to hand over their health information by repeatedly showing them privacy misrepresentations and nudging them with unavoidable prompts to sign up for its counseling service.")

⁷⁶² *Consumer Scoreboard*, *supra* note 759. ("With regards to online advertising in particular, 94% [of consumers] expressed concerns about it, with 70% worried about inappropriate use and sharing of personal data, 66% about the collection of online data and related profiling without explicit knowledge or agreement and 57% about cookies' installation.")

⁷⁶³ See Zarsky, *supra* note 38 at 173. ("[Consumers] might even opt to shun the relevant market altogether due to their loss of trust in the vendor's conduct, while assuming that other vendors will follow suit.")

⁷⁶⁴ See about the importance of consumer trust in online markets in Yassine Jabil, Nripendra P. Rana & Yogesh K. Dwivedi, *Understanding the Drivers of Online Trust and Intention to Buy on a Website: An Emerging Market Perspective*, 2 INT. J. INF. MANAG. DATA INSIGHTS 100065 (2022).

⁷⁶⁵ See Zarsky, *supra* note 38 at 173.

Consumers aware of manipulative practices in the online environment may decide to circumvent them by investing (their time and money) in avoidance measures.⁷⁶⁶ For example, consumers may install *ad-blockers* or *Virtual Private Networks (VPNs)* to help them avoid being tracked or presented by advertisements.⁷⁶⁷ Avoidance measures may reduce consumer welfare in various ways: for example, some ad-blockers are available for free and block advertisements but leave tracking possible.⁷⁶⁸ Such free ad-blockers may expose consumers to cybersecurity threats (e.g., malware).⁷⁶⁹ In contrast, paid ad-blockers, often provided with VPN services, may cost around €3 per month.⁷⁷⁰ This does not protect against manipulative advertising but all advertising, taking away valuable devices from a market perspective.⁷⁷¹ In sum, manipulative practices of OBA, even when they do not successfully manipulate consumers, can lead to a loss of consumer trust and, therefore, a decrease in consumer welfare.⁷⁷²

Moreover, looking at manipulative practices of OBA in isolation, for example, by evaluating consumer harms of an individual cookie banner dark pattern, misses one of the central issues of consumer manipulation via OBA, a phenomenon this thesis refers to as a “consumer manipulation market trap.” This phenomenon arises as the gatekeepers lock in other businesses, including providers of other platforms, publishers, and advertisers, into an advertisement configuration and infrastructure that continues to extract surplus from consumers via manipulation.⁷⁷³ Since adopting OBA as their business model, gatekeepers, such as Alphabet and Meta, have generated unprecedented revenue, part of which they have extracted through manipulative practices on their platforms.⁷⁷⁴ For example, Alphabet covertly scanned Gmail messages for selling advertisements until 2017, and Meta identified

⁷⁶⁶ See Calo, *supra* note 38 at 1027.

⁷⁶⁷ See Zarsky, *supra* note 38 at 187. See also Calo, *supra* note 38 at 1027. See generally Jan Whittington & Chris Jay Hoofnagle, *Unpacking Privacy’s Price*, 90 N. C. LAW REV. (2012).

⁷⁶⁸ See generally Tolga Tekbasan, *The Effects of Ad-Blocking on the Online Customer Behavior* (University of Twente, Master Thesis, 2019), <https://essay.utwente.nl/79763/>.

⁷⁶⁹ See Lee Mathews, *A Dangerous Flaw In Popular Ad Blockers Put 100 Million Users At Risk*, FORBES (2019), <https://www.forbes.com/sites/leemathews/2019/04/17/a-dangerous-flaw-in-popular-ad-blockers-put-100-million-users-at-risk/> (last visited Mar 30, 2023).

⁷⁷⁰ See, e.g., *VPN cost?*, NORDVPN (2022), <https://nordvpn.com/pricing/> (last visited Mar 29, 2023). See, e.g., *AdBlock VPN: Get It Now*, ADBLOCK VPN, <https://vpn.getadblock.com/en/purchase/> (last visited Mar 30, 2023).

⁷⁷¹ The Cost of Ad Blocking, DARKPONY DIGITAL, <https://www.darkpony.com/blog-en/the-cost-of-ad-blocking/> (last visited Mar 30, 2023). (“Ad block usage in the United States resulted in an estimated \$5.8B in blocked revenue during 2014.”)

⁷⁷² Zarsky, *supra* note 38 at 187. See also Calo, *supra* note 38 at 1027.

⁷⁷³ Zuboff describes the emergence of the “behavioral futures markets” in which Alphabet and Meta maintain dominance by building “moat around the castle”. See for behavioral futures markets ZUBOFF, *supra* note 20 at 96–97. See for “moat around the castle” *Id.* at 98–127.

⁷⁷⁴ Trzaskowski explains that sometimes public learns about the practices platforms engage or have engaged through their announcements. See TRZASKOWSKI, *supra* note 41 at 15.

and deliberately targeted consumers' identities, such as their sexual orientation and political affiliation, on Facebook and Instagram until 2022.⁷⁷⁵

Meanwhile, providers of these platforms have consistently generated profits that surpass market predictions and set benchmarks.⁷⁷⁶ Gatekeepers have also created an infrastructure to allow other publishers to join and benefit from the surplus profits of OBA configuration.⁷⁷⁷ This infrastructure traps all other businesses into joining: not participating in an OBA infrastructure and not allowing the OBA configuration can be detrimental for publishers and advertisers whose competitors may collect excess profits.⁷⁷⁸ As the OBA configuration and the excess profits it allows require the sharing of consumer information, these businesses (including publishers and advertisers) compete for consumer manipulation and have populated the entire online environment with manipulative practices.⁷⁷⁹ Nevertheless, having access to most of consumers' attention, time, and data online, gatekeepers maintain the position of power in this consumer manipulation market

⁷⁷⁵ See for Google's Gmail scanning Douglas MacMillan, *Tech's 'Dirty Secret': The App Developers Sifting Through Your Gmail*, WSJ (2018), <https://www.wsj.com/articles/techs-dirty-secret-the-app-developers-sifting-through-your-gmail-1530544442> (last visited Mar 30, 2023). See also As G Suite gains traction in the enterprise, G Suite's Gmail and consumer Gmail to more closely align, GOOGLE (2017), <https://blog.google/products/gmail/g-suite-gains-traction-in-the-enterprise-g-suites-gmail-and-consumer-gmail-to-more-closely-align/> (last visited Mar 30, 2023). See for Facebook's identity targeting Mike Isaac & Tiffany Hsu, *Meta Plans to Remove Thousands of Sensitive Ad-Targeting Categories*, THE NEW YORK TIMES, Nov. 9, 2021, <https://www.nytimes.com/2021/11/09/technology/meta-facebook-ad-targeting.html> (last visited Mar 30, 2023). ("[...] Meta has often struggled with how to take advantage of consumer data without abusing it.") See also *Removing Certain Ad Targeting Options and Expanding Our Ad Controls*, META FOR BUSINESS, <https://www.facebook.com/business/news/removing-certain-ad-targeting-options-and-expanding-our-ad-controls> (last visited Mar 30, 2023).

⁷⁷⁶ UK's CMA analyzed profitability of these platforms through return-on-capital employed (ROCE) to measure profitability of these companies. CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 67. ("We have found through our profitability analysis that the global return on capital employed for both Google and Facebook has been well above any reasonable benchmarks for many years.")

⁷⁷⁷ See ZUBOFF, *supra* note 20 at 82–85.

⁷⁷⁸ See European Commission Study Recent Digital Advertising Developments, *supra* note 433 at 136. See Stigler Committee, *Digital Platforms: Final Report* 336, 62 (2019).

⁷⁷⁹ During this writing, majority of websites online employ manipulative practices, at least in (but not limited to) the context of cookie banners. See *More Cookie Banners to go: Second wave of complaints underway*, NOYB, <https://noyb.eu/en/more-cookie-banners-go-second-wave-complaints-underway> (last visited Mar 30, 2023). See also Midas Nouwens et al., *Dark Patterns after the GDPR: Scraping Consent Pop-Ups and Demonstrating Their Influence*, in PROCEEDINGS OF THE 2020 CHI CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS 1, 10 (2020), <http://arxiv.org/abs/2001.02479> (last visited Mar 29, 2023). See also European Commission Study Dark Patterns & Manipulative Personalization, *supra* note 53 at 6. ("According to the mystery shopping exercise, 97% of the most popular websites and apps used by EU consumers deployed at least one dark pattern.") Note that consumer manipulation market refers to the incentive of publishers and advertisers to adopt manipulative practices in order to gain OBA's excess profit, and "trap" refers to their dependance on continuing this practice.

and are its primary beneficiaries, as both publishers and advertisers depend on them for their profits.⁷⁸⁰

Such a consumer manipulation market trap *inhibits innovation*, making it improbable that new forms of digital services can emerge that can revolutionize society as online platforms of the gatekeepers such as Alphabet and Meta once did.⁷⁸¹ In particular, such a market trap makes it difficult for autonomy-preserving alternatives to emerge: it is unlikely that such alternatives can compete with businesses that generate revenue through consumer manipulation that extracts excess profits.⁷⁸² Such a trap and reduced innovation can also decrease the overall *quality* of digital services and content consumers receive.⁷⁸³ In the *laissez-faire* market, which is free and competitive, businesses have an incentive to continuously increase the quality of their service to satisfy the demands of ever-evolving consumer preferences.⁷⁸⁴ Businesses that face the risk of competitors increase the quality of their services by offering new functionalities users may find more valuable (e.g., easier to use) or lower prices to increase consumer welfare.⁷⁸⁵ However, consumer manipulation via OBA allows businesses to continue to extract surplus from consumers without improving quality, arguably resulting in lower-quality digital services.⁷⁸⁶ One study measures such a reduction in quality by

⁷⁸⁰ European Commission Study Recent Digital Advertising Developments, *supra* note 433 at 136. (“Advertisers are highly reliant on data to measure the performance of ads, but say they have difficulty accessing it, especially when working with Google and Meta. This had led to a lack of trust. Several advertisers also feel that they do not have enough information about how Google sets its prices. [...] Publishers described Google and Meta as their most important competitors, as they are often perceived by advertisers as simpler and sometimes cheaper options for digital advertising. Publishers explained that they struggle to compete with large platforms for reasons primarily related to data, reach and pricing. Platforms are seen as an easy way for advertisers to reach large numbers of potential customers.”)

⁷⁸¹ CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 308. (“Google and Facebook themselves were able to emerge, with limited resources, on the back of a good idea, producing new and innovative services that [...] are highly valued by consumers. We are concerned that, without reform, existing market dynamics will mean that the next great innovation cannot emerge to revolutionize our lives in the way that Google and Facebook have done in the past.”) Note however, that the emergence of ChatGPT was the first time threatening Google Search dominance. As of Meta’s Facebook and Instagram, TikTok has risen as its major competitor that also employs OBA as its central business model.

⁷⁸² *Id.* at 311. See similar argument in Stigler Committee, *supra* note 778 at 62.

⁷⁸³ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 313.

⁷⁸⁴ *Id.*

⁷⁸⁵ *Id.*

⁷⁸⁶ *Id.* See also European Parliament Study Online Advertising & Consumer Choice, *supra* note 36 at 39.

looking at the number of advertisements shown to the consumers – Instagram, for example, increased ad impressions by 200% in 2019 compared to 2016.⁷⁸⁷

Consumer manipulation via OBA can also be evaluated from the *total welfare* standard. Such a market-based perspective requires the inclusion of all consumer harms into cost-benefit analyses that consider the profit the businesses have derived from consumer manipulation via OBA.⁷⁸⁸ Such a view may suggest that consumer manipulation via OBA is justifiable because while consumer manipulation via OBA causes consumers to be distracted, lose time, and occasionally buy things they do not need, it also creates a business model that enables free services such as WhatsApp, Gmail, and Google Maps, which have become essential for many consumers. In other words, the total welfare perspective may justify tolerating autonomy-undermining technology because it increases overall welfare in the long run.⁷⁸⁹

Authoritative studies from the EU, UK, and US that attempted to measure the total economic effects of the OBA infrastructure suggest that it may reduce the overall welfare of consumers when it leads to anti-competitive effects that this thesis conceptualizes as the consumer manipulation market trap.⁷⁹⁰ These studies argue that while OBA allows consumers to access digital services and content without monetary payment, OBA favors large platforms with data advantages, causing a lack of competition and decreased returns to consumers. It is even argued that without the anticompetitive effects of OBA, consumers could profit monetarily (or through other rewards) for accessing digital services and content.⁷⁹¹

The indicator of this potential is revealed in the amount of excess profit generated by the gatekeepers that exceed all market predictions and set benchmarks—the UK’s CMA found that only in 2018, Alphabet and Meta earned £2 billion more profit than what was required for fair returns to shareholders.⁷⁹² The reports of competition authorities suggest that, without the anti-competitive effects of their

⁷⁸⁷ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 313.

⁷⁸⁸ See Stigler Committee, *supra* note 778 at 66.

⁷⁸⁹ *Id.* at 64. (“We caution, however, that the legal structure of US antitrust law is not well set up to accommodate this complexity as it opens the door for judges to weigh all manner of social concerns as well as traditional economic effects.”)

⁷⁹⁰ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 70. See generally Stigler Committee, *supra* note 778. See also DIGITAL COMPETITION EXPERT PANEL, *Unlocking Digital Competition: Report of the Digital Competition Expert Panel* (2019). See CNMC (Spain) Study Competition in Online Advertising, *supra* note 34 at 148–189.

⁷⁹¹ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 70, 317.

⁷⁹² *Id.*

business model (which this thesis identifies as manipulative practices of OBA), such excess profits would have been shared amongst consumers.⁷⁹³

Lastly, the consumer manipulation market trap can contribute to increased prices for goods and services that are being advertised.⁷⁹⁴ Gatekeepers that generate surplus profits from the consumer manipulation market heavily tax advertisers and publishers in the OBA industry for relying on their advertising intermediation.⁷⁹⁵ As a result, higher advertising prices increase prices for goods and services for consumers.⁷⁹⁶

5.2.2. Environment Harms

Consumer manipulation via OBA can exacerbate environmental harms by adversely affecting the Earth's ecology or the welfare of the animals sharing the planet with human beings.

As OBA requires large data centers and servers to store and process swaths of consumer behavioral data, it consumes vast energy and has a significant CO₂ footprint.⁷⁹⁷ One study calculates the yearly carbon impact of the online advertising industry to be around 60 million tonnes (Mt) of CO₂, seven times more than the emissions of the Netherlands in 2021.⁷⁹⁸ Also, these data centers require much water, which sometimes takes away supply from communities with limited access to water.⁷⁹⁹ While no data is available to measure how much *consumer manipulation* contributes to such environmental impact, its exacerbating effect is undeniable – manipulative extraction practices such as infinite scrolling extract more data and

⁷⁹³ See *Id.* ⁷⁹³ See Stigler Committee, *supra* note 778 at 91. See generally Veronica Marotta et al., *The Welfare Impact of Targeted Advertising Technologies*, 33 INF. SYST. RES. 131 (2022).

⁷⁹⁴ See Stigler Committee, *supra* note 778 at 91. See European Parliament Study Online Advertising & Consumer Choice, *supra* note 36 at 39. See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 313.

⁷⁹⁵ See European Commission Study Personalization, *supra* note 33 at 24. (“Intermediary services can typically charge a fee of up to 12% of the cost of an ad impression.”)

⁷⁹⁶ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33 at 314.

⁷⁹⁷ See generally Patrick Hartmann et al., *Perspectives: Advertising and Climate Change – Part of the Problem or Part of the Solution?*, 42 INT. J. ADVERT. 430 (2023). See generally Matti Pärssinen et al., *Environmental Impact Assessment of Online Advertising*, 73 ENVIRON. IMPACT ASSESS. REV. 177 (2018).

⁷⁹⁸ Between 12Mt and 159Mt EqCO₂ when considering uncertainty. See Pärssinen et al., *supra* note 797 at 177. See Hannah Ritchie, Max Roser & Pablo Rosado, *Netherlands: CO₂ Country Profile*, OUR WORLD DATA (2020), <https://ourworldindata.org/co2/country/netherlands> (last visited Apr 10, 2023). See also Kimberley Derudder, *What Is The Environmental Footprint For Social Media Applications? 2021 Edition*, GREENSPECTOR (2021), <https://greenspector.com/en/social-media-2021/> (last visited Apr 10, 2023).

⁷⁹⁹ See Nikitha Sattiraju, *Secret Cost of Google's Data Centers: Billions of Gallons of Water* (2020), <https://time.com/5814276/google-data-centers-water/> (last visited Jul 5, 2023).

attention, while manipulative personalization leads to needless transactions.⁸⁰⁰ Exaggerated consumption that leads to the extraction of attention and time causes faster drainage of the batteries on consumer devices, contributing to significant electronic waste.⁸⁰¹ At the same time, needless economic purchase decisions contribute to needless consumerism, which has the most significant impact on global greenhouse emissions.⁸⁰²

Consumer manipulation via OBA can also affect consumers' relationships with other species.⁸⁰³ It may have positive effects on animal welfare—for example, social media has contributed to the increase in pet adoption rates.⁸⁰⁴ However, consumer manipulation via OBA can also harm animal welfare in at least four ways. Consumers increasingly acquire pets through online ads that allow them immediate access to young and fashionable pets, unlike physically verified sources with a limited supply of pets that take more time.⁸⁰⁵ While the online pet trade is booming, most dogs, cats, and exotic wild animals arrive online through illegal cross-border trade.⁸⁰⁶ Such illegal trade can affect animal welfare and health through an increased risk of dehydration, heat stress, the spread of infectious diseases, and cosmetic surgeries that result in highly fearful animals.⁸⁰⁷ OBA gives illegal trades increased capability to exploit consumers' desires for pet adoption, leading to harm to animal welfare.

⁸⁰⁰ See Lindsay Dodgson, *Why TikTok Makes the Hours Seem to Melt Away, According to Experts Who Study How Our Brains Perceive Time*, INSIDER, Jul. 26, 2022, <https://www.insider.com/why-time-passes-so-quickly-scrolling-on-tiktok-2022-7> (last visited Apr 10, 2023).

⁸⁰¹ Pärssinen et al., *supra* note 797 at 181.

⁸⁰² More than 70% of global greenhouse emissions directly arise from consumption decisions. Hartmann et al., *supra* note 797 at 430.

⁸⁰³ Generally, social media has impacted the way humans perceive animals. *See generally* Elizabeth Riddle & Jill R. D. MacKay, *Social Media Contexts Moderate Perceptions of Animals*, 10 ANIM. OPEN ACCESS J. MDPI 845 (2020).

⁸⁰⁴ See Jacey Birch, *Social Media Now Having Influence on Pet Adoptions*, WPLG (2023), <https://www.local10.com/news/local/2023/02/28/social-media-now-having-influence-on-pet-adoptions/> (last visited Apr 10, 2023).

⁸⁰⁵ EUROGROUP FOR ANIMALS, *The Illegal Pet Trade: Game Over*, 22 (June 2020).

⁸⁰⁶ *Id.*

⁸⁰⁷ Digital Services Act: How Does It Protect Animals From The Illegal Online Trade?, EUROGROUP FOR ANIMALS, <https://www.eurogroupforanimals.org/news/digital-services-act-how-does-it-protect-animals-illegal-online-trade> (last visited Apr 10, 2023). (“During transport, many welfare issues arise such as risk of dehydration and heat stress, lack of enough space to be able to stand/lay down, high potential for spreading of infectious diseases among the transported animals and beyond, and a higher likelihood of pregnant dogs & cats transported too close to their estimated due dates to name but a few. In relation to breeding practices, cosmetic and convenience surgeries vastly performed outside the EU, resulting in severe pain and impairing of social communication (through tail docking, ear cropping, debarking, declawing,...), lack of socialisation resulting in extreme fearful and anxious animals, lack of genetic variation as a consequence of inbreeding leading to poor health and unfitness to carry a normal life.”)

In sum, the impact on the environment and animal welfare of a single manipulative practice may be minuscule, but the aggregate effect of these manipulative practices has significant potential to affect the globe, decrease animal welfare, and adversely affect how humans relate to other species and the world around them.

5.2.3. Affinity Harms

OBA can lead to discriminatory advertising delivery, such as excluding particular groups from advertisements that offer essential opportunities, such as employment or housing.⁸⁰⁸ For example, in job advertisements, OBA campaigns have favored men over women.⁸⁰⁹ In another example, inferring racial identity from people's names has had a discriminatory effect on people's employment opportunities.⁸¹⁰ Studies have demonstrated that the discriminatory outcomes of OBA directly stem from the spillover of socially existing biases in the relevance optimization algorithm, linking the discrimination harms to OBA's manipulative imperative.⁸¹¹ OBA has also allowed advertisers to include and exclude traditionally marginalized groups in advertising campaigns, leading to further discrimination and oppression. For example, Facebook has been used to target young LGBTQ+ users with "gay cure" advertisements.⁸¹² Such targeting is, in essence, manipulative as it exploits consumers' vulnerabilities and is oppressive and discriminatory, affecting the person's sense of belonging to a group and society.

Providers of the largest platforms, such as Alphabet and Meta, have removed the possibility in their OBA configuration to target groups explicitly profiled into categories relating to race, ethnicity, and sexual orientation.⁸¹³ However, this does not mean that the optimization algorithm does not implicitly infer such categories.⁸¹⁴ In particular, the feat of "lookalike" or "similar" audiences can group people according to the similarity of their online behavior without explicitly naming them as related to sensitive categories – having exploitative and discriminatory effects that can also be disguised under algorithmic neutrality.⁸¹⁵ Lastly, consumer

⁸⁰⁸ See generally Wachter, *supra* note 80.

⁸⁰⁹ L. Elisa Celis, Anay Mehrotra & Nisheeth K. Vishnoi, *Toward Controlling Discrimination in Online Ad Auctions* (2019), <http://arxiv.org/abs/1901.10450> (last visited Apr 10, 2023).

⁸¹⁰ See Latanya Sweeney, *Discrimination in Online Ad Delivery - ACM Queue*, 11 ACM DIGIT. LIBR. 10 (2013).

⁸¹¹ Muhammad Ali et al., *Discrimination through Optimization: How Facebook's Ad Delivery Can Lead to Skewed Outcomes*, 3 PROC. ACM HUM.-COMPUT. INTERACT. 1 (2019).

⁸¹² See Zard and Sears, *supra* note 1 at 839. See also Wachter, *supra* note 80 at 378.

⁸¹³ See e.g. Removing Certain Ad Targeting Options and Expanding Our Ad Controls, *supra* note 775. See Personalized Advertising, *supra* note 120.

⁸¹⁴ See Zard and Sears, *supra* note 1 at 835.

⁸¹⁵ See Wachter, *supra* note 80 at 401.

manipulation may lead to exacerbating economic inequalities by exploiting low-income people.⁸¹⁶

Such discrimination and oppression impair the right to non-discrimination protected by the Article 21 of the Charter of Fundamental Rights of the EU (CFREU).⁸¹⁷

5.2.4. Privacy Harms

Manipulative practices of OBA do not always lead to successful manipulation, but consumers sometimes identify them as manipulative. Whether they are successful or not, they violate consumers' *privacy*. For example, the consumer who sees an advertisement for online counseling may guess that they have been targeted because a mental health-related website covertly shared the information with an advertising platform. In such cases, an advertisement violates consumers' *informational* privacy because it accesses consumers' personal information against their wishes.⁸¹⁸ Manipulative advertising practices also undermine consumers' *decisional* privacy – as they attempt to influence consumer choices hiddenly.⁸¹⁹ Decisional privacy provides essential breathing space to make authentic choices and exercise personal autonomy.⁸²⁰ In response to becoming aware of interferences with their decisional privacy, consumers may experience *emotional distress*, such as “annoyance, frustration, fear, embarrassment, anger, and various degrees of anxiety”.⁸²¹ Many of the manipulative practices of OBA also act as *disturbances* to consumers' piece of mind, similar to telemarketing communications.⁸²² As a result, consumers often experience OBA as “creepy” and “intrusive”.⁸²³

⁸¹⁶ See an argument about “regressive distribution effects” in Moy and Conley, *supra* note 758. See also Jennifer Valentino-DeVries, Jeremy Singer-Vine & Ashkan Soltani, *Websites Vary Prices, Deals Based on Users' Information*, WALL STREET JOURNAL, Dec. 24, 2012, (last visited Mar 27, 2023). Ariel Ezrachi & Maurice E. Stucke, *The Rise of Behavioural Discrimination*, 37 EUR. COMPET. L. REV. 484 (2016).

⁸¹⁷ Consolidated Version of the Charter of Fundamental Rights of The European Union, October 26, 2012, O.J. (C326)391 [hereafter CFREU], *supra* note 520 at 21.

⁸¹⁸ See generally WESTIN, *supra* note 694. See also Marolijn Lanzing, *The Transparent Self: A Normative Investigation of Changing Selves And Relationships In The Age Of Quantified Self* (University of Eindhoven, Dissertation, 2019).

⁸¹⁹ See ROESSLER, *supra* note 636 at 9. See also Marolijn Lanzing, *supra* note 820 at 75. (“Decisional privacy is broadly defined as the right to defend against unwanted access and interference in our decisions and actions. Roughly, ‘being interfered with’ means that (un)known actors or entities have access to one’s behaviour and decisions, which allows them to comment upon, interpret or change one’s behaviour and steer one’s decisions, while this access does not fall under the reasonable expectations of the user or subject or was not granted in the first place.”)

⁸²⁰ See Marolijn Lanzing, *supra* note 820 at 75–76.

⁸²¹ See Citron and Solove, *supra* note 625 at 841.

⁸²² *Id.* at 846.

⁸²³ See de Groot, *supra* note 555 at 62.

Using the information consumers did not intend to provide or expect to be used for targeting thwarts their expectations of privacy.⁸²⁴ The “reasonable expectation of privacy” is a benchmark in the EU human rights framework for analyzing treatment regarding people’s privacy that they are entitled to.⁸²⁵ Collecting information about consumers without their knowledge violates such entitlements. As a result of thwarted expectations, consumers may lose the sense that they are in control of information about themselves.⁸²⁶ Indeed, such information can be used against consumers’ interest in many ways: for example, mental health information can be accessed by others, causing consumer reputational damage or affecting their relationships. Therefore, such loss of control disables consumers from managing risks related to their information and can lead to anxiety.⁸²⁷

The EU human rights framework protects individuals’ informational and decisional privacy under the rights of private life and personal data protection. Privacy harms, however, can also be relevant from a market-based perspective. Consumers can theoretically request compensation for psychological detriment or the emotional cost of these practices.⁸²⁸ This can be particularly difficult to quantify due to the nature of consumer manipulation harms that are often “small and scattered.” Each instance potentially causes small distress, and these instances can be completely unrelated as they emerge from different actors.

5.2.5. Authenticity Harms

Consumer manipulation via OBA can lead to potentially unwanted transactions with direct economic loss, but this is not always the case. However, it always leads to loss of *time*, and thus, manipulation can be understood as time theft.⁸²⁹ By interacting with manipulative practices, consumers spend more time online than without such influence.⁸³⁰ Human time is of essential importance under the EU human rights framework.⁸³¹ The principle of *self-determination* that stems from the human dignity root of this framework can be interpreted as the “freedom to construct one’s own time.”⁸³² It protects authenticity conditions of personal autonomy, including decisions about how to spend one’s time in accordance with

⁸²⁴ See Citron and Solove, *supra* note 625 at 851.

⁸²⁵ Perry v. United Kingdom, no 63737/00, ECHR 2003-IX. See also Benedik v. Slovenia, no. 62357/14 (ECHR, 24 April 2018).

⁸²⁶ See Citron and Solove, *supra* note 625 at 851.

⁸²⁷ *Id.* at 854.

⁸²⁸ See European Commission Study Dark Patterns & Manipulative Personalization, *supra* note 649 at 40.

⁸²⁹ Cass R. Sunstein, *Manipulation As Theft* (2021), <https://papers.ssrn.com/abstract=3880048> (last visited Mar 20, 2023).

⁸³⁰ The Commission Dark Patterns and Manipulative Personalisation Study, *supra* note 36 at 90.

⁸³¹ See DUPR, *supra* note 674 at 141–170.

⁸³² *Id.* at 152.

the “self”.⁸³³ The German constitutional tradition refers to this as “the right to free development of personality,” which also protects the interest of personal data protection right emerging in the EU.⁸³⁴ Consumer manipulation undermines such authenticity interest by taking away the capability to construct one’s own time.⁸³⁵

While the CFREU nor the ECHR do not explicitly list such a right to authenticity, this principle permeates many of the “freedom rights” in Title II. The “freedom of thought, belief and religion” is a particularly relevant right that consumer manipulation can directly impair by limiting consumers’ capability to hold religious beliefs authentic to them. For example, the *Mormon Ads* campaign mentioned in section 4.3.2 demonstrated that OBA could manipulate consumers to change their life-long religious beliefs.⁸³⁶ Consumer manipulation can also have *chilling effects* on “freedom of expression” – consumers often use digital services, such as social media, to express their authentic selves, including political opinions. Nevertheless, either through interruptions or through causing emotional distress, manipulative practices may trigger consumers to avoid voicing their options or being on social media altogether.

One can also speculate that consumer manipulation challenges the “right to liberty and security”. However, such an argument that consumer manipulation via OBA crosses the legal threshold of this right that protects individuals from arbitrary detentions by the state would be difficult to defend for three reasons.⁸³⁷ Firstly, in contrast to the state’s coercive deprivation of liberty by arbitrary arrest, the magnitude of spending time online against one’s authentic wishes is, intuitively, relatively smaller. Secondly, even when taking time as a measure, instances of consumer manipulation limit the consumer’s capability for authentic action by minuscule amounts of time. It is also challenging to aggregate these instances into overall time-theft that happens through often competing actors in various unrelated contexts.

⁸³³ ROESSLER, *supra* note 636. See also Dupr, 155 (“[Human dignity] can be further understood as promoting the acknowledgement and protection of individual identities and human personalities.”)

⁸³⁴ See Grundgesetze[GG][Basic Law], translation at: https://www.gesetze-im-internet.de/englisch_gg/englisch_gg.html (accessed October 31, 2023)., 2. See also BVerfG, 1 BvR 209/83, Dec. 15, 1983, *supra* note 655.

⁸³⁵ Franklin et al., *supra* note 39. Casey Newton, ‘Time Well Spent’ Is Shaping up to Be Tech’s next Big Debate, THE VERGE (2018), <https://www.theverge.com/2018/1/17/16903844/time-well-spent-facebook-tristan-harris-mark-zuckerberg> (last visited Mar 29, 2023).

⁸³⁶ Faddoul, Kapuria, and Lin, *supra* note 457 at 4.

⁸³⁷ See James Griffin, *Autonomy*, in ON HUMAN RIGHTS (James Griffin ed., 2008), <https://doi.org/10.1093/acprof:oso/9780199238781.003.0009>. EUROPEAN COURT OF HUMAN RIGHTS, *Guide on Article 5 of the European Convention on Human Rights* (2022).

In 2022, social media users spent more than two hours daily on average on social networking sites.⁸³⁸ Manipulative practices in the online environment are sometimes attributed the role of distractors that largely contribute to such time spent on social networking services.⁸³⁹ However, there is no empirical data available that quantifies the extent to which manipulative practices contribute to the increasing amounts of time people spend online.

From a market perspective, loss of time can be detrimental to the consumer via the loss of opportunities, for example, *loss of earnings* due to losing time consumers could spend at work.⁸⁴⁰ The market approach also recognizes the *loss of consortium* as the time lost that could have been spent in interpersonal relationships, as well as *leisure*, more broadly.⁸⁴¹ Similar to ad-blockers, new tools have emerged for consumers to protect their time, making time loss a tangible harm of consumer manipulation.⁸⁴²

5.2.6. Integrity Harms

In order for people to construct time of their own and live autonomous, authentic lives, they need to have a certain level of health and specific physical and mental capabilities.⁸⁴³ Market-based and rights-based approaches protect such capabilities. Consumer manipulation can undermine consumers' physical and mental integrity in a variety of ways. Consumer manipulation can lead to purchasing goods that can harm one's health ("demerit goods").⁸⁴⁴ For example, consumer manipulation can lead to physical injury by promoting excessive consumption of products and services, such as cigarettes, alcohol, junk food, gambling, or pornography.⁸⁴⁵ Such detriment is also recognized from the market-based perspective that sees an increased sale of demerit goods as an externality that leads to market failure.⁸⁴⁶

⁸³⁸ See *Global daily social media usage 2022*, STATISTA, <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/> (last visited Mar 29, 2023).

⁸³⁹ See OLIVER BURKEMAN, *FOUR THOUSAND WEEKS: TIME MANAGEMENT FOR MORTALS* (2021).

⁸⁴⁰ See European Commission Study *Dark Patterns & Manipulative Personalization*, *supra* note 649 at 25.

⁸⁴¹ *Id.* at 39.

⁸⁴² RescueTime: Fully Automated Time Tracking Software, RESCUETIME, <https://www.rescuetime.com/> (last visited Apr 1, 2023).

⁸⁴³ Griffin, *supra* note 839.

⁸⁴⁴ Demerit goods are contrasted with "merit goods" that authorities want to see greater consumption of. See Richard A. Musgrave, *Merit Goods*, in *THE NEW PALGRAVE DICTIONARY OF ECONOMICS* 1 (2017), https://doi.org/10.1057/978-1-349-95121-5_1139-2 (last visited Mar 28, 2023).

⁸⁴⁵ See Calo, *supra* note 38 at 1025.

⁸⁴⁶ *Id.*

The online environment permeated with manipulative practices leads to increased impulsivity and compulsive behavior.⁸⁴⁷ In some cases increase in impulsivity has been argued to lead to certain behavioral addictions, such as “porn addiction” or “social media addiction”, imposing systematic limitations on consumer behavior and authentic choice.⁸⁴⁸ To maximize the consumer’s time spent online, some practices, such as content personalization, may adversely affect the consumer’s self-esteem.⁸⁴⁹ The issues of self-image can be developed into full-fetched body self-image issues.⁸⁵⁰ One such effect, for example, has been labeled as “Snapchat Dysmorphia”.⁸⁵¹ Such body-dysmorphic effects significantly increase cosmetic surgeries to which OBA’s manipulative practices have undeniably contributed.⁸⁵²

Systematic exposure to manipulative practices (e.g., covert personalization, infinite scroll, auto-play) can also cause and exacerbate mental health issues. It is closely linked to an increase in anxiety and depression symptoms. In extreme cases, this may lead to self-harm and even death. In one real-life case from the United Kingdom, the coroner who examined the death of fourteen-year-old Molly Powel suggested that the personalization algorithm that exacerbated her depression was the direct cause of her self-harm and eventual suicide.⁸⁵³ This case illustrates the potential of consumer manipulation to threaten the essential core of human rights interests, such as human life and physical and mental integrity. The CFREU draws a clear boundary for the minimum core quality of life at the physical and mental health and integrity.⁸⁵⁴ Crossing this line constitutes the mistreatment of consumers in a way that is not worthy of their dignity as human beings.⁸⁵⁵

5.2.7. Dignity Harms

Consumer manipulation in the online environment can also be seen as an affront to the *dignity* of individuals, which envelops the most significant harms of consumer manipulation.⁸⁵⁶ The dignity argument typically refers to the

⁸⁴⁷ Maartje Boer et al., *Attention Deficit Hyperactivity Disorder-Symptoms, Social Media Use Intensity, and Social Media Use Problems in Adolescents: Investigating Directionality*, 91 CHILD DEV. 853 (2020).

⁸⁴⁸ See Qinghua He, Ofir Turel & Antoine Bechara, *Brain Anatomy Alterations Associated with Social Networking Site (SNS) Addiction*, 7 SCI. REP. 45064 (2017).

⁸⁴⁹ See Susruthi Rajanala, Mayra B. C. Maymone & Neelam A. Vashi, *Selfies—Living in the Era of Filtered Photographs*, 20 JAMA FACIAL PLAST. SURG. 443 (2018).

⁸⁵⁰ See Ledger of Harms, *supra* note 48.

⁸⁵¹ See Rajanala, Maymone, and Vashi, *supra* note 851.

⁸⁵² See *Id.*

⁸⁵³ See Franklin et al., *supra* note 39. Molly Russell inquest, *supra* note 39; In her own words - Molly Russell’s secret Twitter account, *supra* note 39.

⁸⁵⁴ See DUPR, *supra* note 674 at 75–76.

⁸⁵⁵ *Id.*

⁸⁵⁶ See Zarsky, *supra* note 38 at 175.

instrumentalization of consumers and the undermining of the deontological “humanity formula” not to treat humans merely as a means to an end.⁸⁵⁷ Such understanding of human dignity is the core interest protected by the EU human rights framework and acts as a boundary to what is acceptable in society.⁸⁵⁸ In this framework, human dignity violations are ascribed to phenomena with adverse effects of the most significant magnitude (e.g., torture, slavery).⁸⁵⁹ Therefore, arguing that consumer manipulation via OBA undermines human dignity requires solid normative and empirical foundations.⁸⁶⁰

While observers of EU constitutionalism see developments towards the expansion of dignity to cover all economic roles of human beings, protection of “consumer dignity” is not yet definitive in the EU human rights adjudication.⁸⁶¹ Still, in the landmark *Omega Judgment*, the CJEU justified in a commercial context the prohibition of laser-tag games that simulated killing other humans because they threatened human dignity.⁸⁶² Following the court’s logic, determining dignity boundaries, including for OBA, requires evaluating whether this phenomenon poses “a genuine and sufficiently serious threat to a fundamental interest of society.”⁸⁶³ Human dignity is not only the foundational core of human rights, but the CFREU also singles out human dignity in Article 1 as a separate right, which can lead to the conclusion that dignity can be challenged directly by undermining core societal interests without necessarily violating other rights of any specific individual.

With this in mind, this section elaborates on the dignity harms of consumer manipulation via OBA in three parts: first, it addresses the threat to the dignity of a child (section 5.2.7.1); second, it addresses the threat to democracy as a core societal interest (section 5.2.7.2); and third, it addresses the systematic threat of consumer exploitation online as an affront to consumer dignity (section 5.2.7.3).

⁸⁵⁷ See KANT, *supra* note 622 at 42. (“Act in such a way that you treat humanity whether in your own person or anyone else’s, never merely as a means, but also always as an end.”) SUNSTEIN, *supra* note 271 at 84. Sunstein for example uses dignity argument to refer to consumer manipulation as a form of human experimentation, where consumers are exposed to influences they are unaware of, for goals they cannot perceive, by actors, they do not recognize.

⁸⁵⁸ See DUPR, *supra* note 674 at 75–77.

⁸⁵⁹ See *Id.* at 75.

⁸⁶⁰ Empirical argument is outside the scope of this thesis. Empirical evidence to the risks and potential of manipulation, has been very difficult to gather. However, Digital Markets Act in particular includes provisions that will give more insights into OBA practices, and possibility to evaluate harms in more empirically sound terms. Nevertheless, normatively speaking, this thesis regards existing evidence enough to conclude that consumer manipulation via at least challenges the fundamental interest in human dignity.

⁸⁶¹ Dupr discusses expansion of dignity to envisage protection of “worker’s dignity” in response to the industrial threats. For example equation of forced labour to slavery or violation of dignity is the clear expression of this. See DUPR, *supra* note 674 at 113–139. In Information Age not a worker, but a consumer is under systemic threat of exploitation, raising questions about “consumer dignity”.

⁸⁶² Case C-36/02, *Omega*, 14 October 2004, ECLI:EU:C:2004:614.

⁸⁶³ *Id.* See also Case C-54/99, *Église de Scientologie*, 14 March 2000, ECLI:EU:C:2000:124.

5.2.7.1 *Threat to Children*

Practices that extract attention, time, and data through manipulation can seriously harm *children*.⁸⁶⁴ One study found that pre-schoolers who use social media for more than one hour each day demonstrate significantly less development in brain regions involved in language and literacy.⁸⁶⁵ More screen time correlates with a lower development of social and problem-solving skills and levels of alcohol use later in life.⁸⁶⁶ Manipulative OBA practices can also lead to an increase in unhealthy food consumption by children, as well as attention problems⁸⁶⁷ and depression.⁸⁶⁸ One study shows that many children cannot adequately distinguish between facts (e.g., real news) and advertisement content.⁸⁶⁹ Therefore, their exposure to increased amounts of advertising can be detrimental to their future life decisions.⁸⁷⁰ Another study found that 85% of the YouTube videos aimed at kids below the age of eight contained advertisements, 20% of which contained violent, sexual, political, or substance-related content.⁸⁷¹

Generally, children cannot fully grasp how advertisement is targeted via OBA.⁸⁷² Manipulative personalization practices in OBA can exploit children's vulnerabilities for needless purchase behaviors. For example, in 2019, Facebook categorized 740,000 minors as interested in gambling.⁸⁷³ Such information about children can be used to exploit their impulsivity and target them with advertising

⁸⁶⁴ There has been a call for banning OBA towards children for some time now See Mie Oehlenschläger, *Open Letter: Children Are Subjected To Behavioural Advertising - End It!* · Dataetisk Tænkehandle tank, DATAETISK TÆNKEHANDLETANK (Oct. 19, 2020). See for an overview on online harms for children Ledger of Harms, *supra* note 48.

⁸⁶⁵ See John S. Hutton et al., *Associations Between Screen-Based Media Use and Brain White Matter Integrity in Preschool-Aged Children*, 174 JAMA PEDIATR. e193869 (2020).

⁸⁶⁶ See Elroy Boers, Mohammad H. Afzali & Patricia Conrod, *A Longitudinal Study on the Relationship between Screen Time and Adolescent Alcohol Use: The Mediating Role of Social Norms*, 132 PREV. MED. 105992 (2020).

⁸⁶⁷ See Susanne E Baumgartner et al., *The Relationship Between Media Multitasking and Attention Problems in Adolescents: Results of Two Longitudinal Studies*, 44 HUM. COMMUN. RES. 3 (2018).

⁸⁶⁸ See Amaal Alruwaily et al., *Child Social Media Influencers and Unhealthy Food Product Placement*, 146 PEDIATRICS e20194057 (2020).

⁸⁶⁹ Sue Shellenbarger, *Most Students Don't Know When News Is Fake, Stanford Study Finds*, WSJ, Nov. 28, 2016, <https://www.wsj.com/articles/most-students-dont-know-when-news-is-fake-stanford-study-finds-1479752576> (last visited Apr 10, 2023).

⁸⁷⁰ *Id.*

⁸⁷¹ JENNY S. RADESKY ET AL., *Young Kids and YouTube: How Ads, Toys, and Games Dominate Viewing*, 3 (2020).

⁸⁷² See European Parliament Study Consent in Targeted & Behavioral Advertising, *supra* note 36.

⁸⁷³ Alex Hern & Frederik Hugo Ledegaard, *Children "interested in" Gambling and Alcohol, According to Facebook*, THE GUARDIAN, Oct. 9, 2019, <https://www.theguardian.com/technology/2019/oct/09/children-interested-in-gambling-and-alcohol-facebook> (last visited Apr 10, 2023).

gambling-like video games. Such online interfaces configured to facilitate OBA infrastructure raise issues regarding children's entitlements to recreation, health, and protection from economic exploitation.⁸⁷⁴

OBA infrastructure can harm children and may constitute an affront to dignity because of systematic violation of the rights of the child enshrined in the Convention on the Rights of the Child, including a right to protection from economic exploitation (Article 32 UN CRC) and the right to play and leisure (Article 31 UN CRC).⁸⁷⁵ Further, CFREU entails taking responsibility for "future generations" as a core societal interest that comes under systematic threats in the online environment configured for OBA.⁸⁷⁶ The newer generations may find manipulative practices normal and accept practices that threaten and risk their integrity. The concept of human dignity in the EU human rights framework acts as a north star for governing change in time and as a reaffirming hope for a better future.⁸⁷⁷ Accepting that the future holds the deterioration of human capabilities can be seen as a direct threat to human dignity.

5.2.7.2 *Threat to Democracy*

Consumer manipulation via OBA has the potential to erode democratic political ordering. It can lower the *quality of journalism* by incentivizing attention-grabbing, fast-paced reporting that gets prioritized over well-researched and evidenced content that typically takes more time.⁸⁷⁸ It can also significantly contribute to *polarization* in society by amplifying extreme content, as such content typically incites more engagement.⁸⁷⁹ It also contributes to *misinformation*, as false claims about facts are often made to drive visitors and maximize surplus from OBA.⁸⁸⁰ In extreme cases, malicious actors can exploit OBA infrastructure with "bots" for their misinformation campaign, which can be destructive to society and democratic processes.

Furthermore, a systematic threat to the ability to be vulnerable in the online environment can have a chilling effect on freedom of expression. Some people

⁸⁷⁴ See Simone van der Hof et al., *The Child's Right to Protection against Economic Exploitation in the Digital World*, 28 INT. J. CHILD. RIGHTS (2020). See in the context of video game interfaces and children's rights Simone van der Hof et al., "Don't Gamble With Children's Rights"-How Behavioral Design Impacts the Right of Children to a Playful and Healthy Game Environment, 4 FRONT. DIGIT. HEALTH 822933 (2022).

⁸⁷⁵ G.A. Res. 44/25, Convention on the Rights of the Child (Nov. 20, 1989).

⁸⁷⁶ CFREU, *supra* note 43, Preamble.

⁸⁷⁷ See DUPR, *supra* note 674 at 157–160.

⁸⁷⁸ See CMA (UK) Study Online Platforms & Digital Advertising Final Report, *supra* note 33.

⁸⁷⁹ See Steve Rathje, Jay J. Van Bavel & Sander van der Linden, *Out-Group Animosity Drives Engagement on Social Media*, 118 PROC. NATL. ACAD. SCI. e2024292118 (2021).

⁸⁸⁰ Ledger of Harms, *supra* note 48; Ryan Mac Silverman Craig, *Facebook Has Been Showing Military Gear Ads Next To Insurrection Posts*, BUZZFEED NEWS (2021), <https://www.buzzfeednews.com/article/ryanmac/facebook-profits-military-gear-ads-capitol-riot> (last visited Apr 12, 2023).

“disconnect” or avoid engaging with digital services to avoid manipulative practices, taking away their contributions to public debate that increasingly occurs online.⁸⁸¹ Consumer manipulation via OBA can erode the capability of consumers to make authentic choices, which could later lead to difficulty in making such choices in the political realm. These effects pose a threat to individuals as a source of political power. This threat can be understood as an affront to human dignity, which acts as the concept providing humans “the power, and freedom, to choose how to shape their own time individually, and collectively, the power to construct boundaries between human time and non-human time, perhaps as well the duty to protect the time of mankind”.⁸⁸²

5.2.7.3 *Threat to Vulnerability*

Consumer manipulation can be understood as undermining human dignity “through thousand cuts” for individuals.⁸⁸³ Singled-out instances of OBA’s manipulative practices cause relatively small harm to individuals economically, psychologically, and physically when it comes to losing exact time.⁸⁸⁴ However, consumer manipulation harms are *numerous*.⁸⁸⁵ For example, exposure to a single dark pattern in a cookie banner can be a minor inconvenience, but being exposed to hundreds of such patterns can constitute a significant distraction and loss of time.⁸⁸⁶ This also works the other way—some companies, such as providers of platforms, may cause a small amount of harm to millions of people.⁸⁸⁷ This makes consumer manipulation a large-scale problem—from a societal perspective, aggregating the harm to everyone, the total harm is substantial.⁸⁸⁸

The harms of online manipulative practices, including in the context of OBA, are not fully quantifiable, what has historically been considered a threshold for tort law.⁸⁸⁹ For example, manipulative personalization and infinite scrolling increase the consumer’s time spent with digital services, but it is impossible to generalize precisely what harm this leads to in all cases. In essence, such manipulative

⁸⁸¹ Hong Tien Vu & Magdalena Saldaña, *Chillin’ Effects of Fake News: Changes in Practices Related to Accountability and Transparency in American Newsrooms Under the Influence of Misinformation and Accusations Against the News Media*, 98 JOURNAL. MASS COMMUN. Q. 769 (2021).

⁸⁸² See DUPR, *supra* note 674 at 152.

⁸⁸³ See Lingchi - Wikipedia, <https://en.wikipedia.org/wiki/Lingchi> (last visited Apr 12, 2023).

⁸⁸⁴ See Citron and Solove, *supra* note 625 at 816. See also COHEN, *supra* note 28.

⁸⁸⁵ Daniel J. Solove, *Introduction: Privacy Self-Management and the Consent Dilemma*, 126 HARV. LAW REV. (2013), <https://harvardlawreview.org/print/vol-126/introduction-privacy-self-management-and-the-consent-dilemma/> (last visited Apr 12, 2023).

⁸⁸⁶ See generally Bart W. Schermer, Bart Custers & Simone van der Hof, *The Crisis of Consent: How Stronger Legal Protection May Lead to Weaker Consent in Data Protection*, 16 ETHICS INF. TECH. 171 (2014). See also Citron and Solove, *supra* note 625 at 816.

⁸⁸⁷ See Citron and Solove, *supra* note 625 at 816.

⁸⁸⁸ *Id.*

⁸⁸⁹ *Id.* at 817.

practices create an unmanageable *risk* of future harm related to any of the fundamental capabilities, starting from mental and physical well-being to economic participation.⁸⁹⁰ In the end, consumer manipulation via OBA leads to an online environment that is untrustworthy, that consumers cannot use without the increased threat that their vulnerability will be exploited and they will be made fragile.

In the EU law, human dignity can be understood as the right to have rights.⁸⁹¹ The capability approach enriches such understanding by contributing an ontological human vulnerability as the normative foundation of human dignity.⁸⁹² This thesis understands “human dignity” as the human capability, entitlement, and, to some extent, a right to be vulnerable in certain societal contexts. The human capability to be vulnerable enables people to be intimate, connect with others, reshape themselves, and build communities. In the context of OBA, respect for human dignity means giving human beings space to be vulnerable when receiving digital services without the continuous threat that their vulnerability will be observed, inferred, and exploited by providers of these services (or their customers).

The systemic threat that their vulnerabilities are exploited in the online environment can lead some consumers to have subjective experiences of insecurity, anxiety, and worthlessness. Yet, human dignity protects consumers beyond their subjective experiences and instead safeguards consumers as a group. Such an understanding of “consumer dignity” protects consumers from their interests in non-exploitation being subjected to the financial profit of the companies providing them with digital services whether or not they subjectively experience being harmed. In other words, consumer dignity can be said to be harmed when there is a clear and systematic asymmetry between the benefits and risks of the consumer and the shareholder – when the consumer takes the most risks while the shareholder takes the most benefit.

Lastly, threats of OBA to consumer dignity can be understood by focusing on the often involuntary and hidden risk-bearing by consumers in the online environment. An online environment that monetizes digital services via OBA infrastructure can be compared to gambling environments that are often designed to exploit consumer vulnerabilities.⁸⁹³ In gambling environments, people are aware of the context as entertainment, and they consciously choose to take associated risks. Online environments have become an inescapable part of daily life in a variety of societal contexts, including work, play, and social communication. By systematically exposing the consumers navigating these contexts to exploitative

⁸⁹⁰ See Solove and Citron, *supra* note 631.

⁸⁹¹ See DUPR, *supra* note 675 at 157.

⁸⁹² Luciano Floridi, *On Human Dignity and a Foundation for the Right to Privacy*, 29 PHILOS. TECHNOL. 307 (2016); Robeyns and Byskov, *supra* note 734; NUSSBAUM, *supra* note 635.

⁸⁹³ See generally SCHULL, *supra* note 496.

practices, digital service providers facilitating consumer manipulation via OBA take away their capability to be vulnerable within these contexts and harm their dignity.

5.3. Conclusion: Consumer Manipulation Harms of OBA

This section answers the fourth sub-question of the thesis:

SQ4: what are the harms of consumer manipulation via OBA?

Consumer manipulation via OBA undermines the consumer’s autonomy, and it may lead to seven types of harms: economic harms, environmental harms, affinity harms, privacy harms, authenticity harms, integrity harms, and dignity harms.

Economic harms include a direct economic loss to the consumer or structural harms through market failures, such as reduced innovation, reduced quality of content and services, increased prices, reduced welfare, and reduced trust in the market. *Environment harms* include adverse effects on the environment, such as increased carbon emission, battery overuse, an increase in waste, and adverse effects on animal welfare. *Affinity harms* include discrimination and oppression of specific (often marginalized) groups. *Privacy harms* include negative subjective experiences for the consumer, such as emotional distress, disturbance, thwarted expectations, and anxiety. *Authenticity harms* entail the loss of “time of one’s own,” including loss of consortium, leisure, and earnings. *Integrity harms* include adverse effects on mental and physical health and fitness, including self-harm and loss of life. *Dignity harms* envisage systematic threats to individuals, groups of individuals, and core societal interests, such as democracy.

Lastly, Table 5-1 provides the list of consumer manipulation harms identified in this thesis, with some examples for each type of harm.

Table 5-1. Consumer manipulation harms of OBA

Harms		Examples
Economic harms (section 5.2.1)	<i>Economic loss: personal detriment</i> (section 5.2.1.1)	<ul style="list-style-type: none"> • consumer buys an unwanted product (e.g., a concert ticket) • consumer pays more than they otherwise would
	<i>Market harm: structural detriment</i> (section 5.2.1.2)	<ul style="list-style-type: none"> • reduction of consumer trust in online markets • investment in avoidance measures (e.g., adblockers) • emergence of the consumer exploitation market • inhibition of innovation • increased prices for advertised goods • poor returns to consumers

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Environment harms (section 5.2.2)		<ul style="list-style-type: none"> • increase in CO2 emissions • increase in electronic waste (killing device batteries) • increase in freshwater consumption • exploiting consumers' attachments to pets • facilitating illegal pet trade
Affinity harms (section 5.2.3)		<ul style="list-style-type: none"> • discrimination (e.g., targeting STEM jobs only to men) • oppression (e.g., targeting young LGBTQ+ consumers with "gay cure" advertisements)
Privacy harms (section 5.2.4)		<ul style="list-style-type: none"> • emotional distress (e.g., anxiety due to revealing mental health condition) • reputational harm (e.g., by disclosing sexual preference) • disturbance (e.g., due to intrusive or creepy ads)
Authenticity harms (section 5.2.5)		<ul style="list-style-type: none"> • loss of time (e.g., consortium, earnings, leisure)
Integrity harms (section 5.2.6)		<ul style="list-style-type: none"> • distorting self-image (e.g., Snapchat Dysmorphia) • encouraging self-harm
Dignity harms (section 5.2.7)	<i>to children</i> (section 5.2.7.1)	<ul style="list-style-type: none"> • systematic threat to children's integrity
	<i>to democracy</i> (section 5.2.7.2)	<ul style="list-style-type: none"> • disinformation • polarisation • lowering the quality of journalism
	<i>to vulnerability</i> (section 5.2.7.3)	<ul style="list-style-type: none"> • systematic threat to exploit vulnerabilities of online consumers