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EU consumer law and technology

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11. EU consumer law and technology

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1. INTRODUCTION

With the rapid uptake of digital technologies in consumer markets, consumer law has become an increasingly important field in which law and technology intersect. Similarly to data protection, the protection of consumers as weaker parties – once a subject that mostly drew the attention of an expert audience – now regularly makes the headlines of major news outlets.² This is especially due to the mounting controversies around the problematic practices of the leading information technology companies, such as Meta (Facebook), Alphabet (Google) and Amazon. Companies of this kind offer digital services to consumers – from social networks and search engines to online marketplaces – which have become an indispensable part of markets and society. However, there is also a growing recognition that their business models can expose consumers to different kinds of harm and therefore should be kept in check, among others by means of consumer law (Calo, 2013; Pasquale, 2015; Jabłonowska et al., 2018; Helberger et al., 2021; Pałka, 2021).

The development of consumer law in liberal democracies dates back to the post-war period and, like labour law, was a response to the observed asymmetries in socio-economic relations (Tonner, 2014). In Europe, its expansion coincided with the process of European integration and the field is now primarily shaped by directives and regulations adopted by the EU legislature (Micklitz, 2021). The European Union is at the same time one of the leading global actors in the more recent wave of digital market regulation, as illustrated by the much-publicised Digital Services Act (DSA).³ How the established rules of consumer law and the new legal instruments targeting the digital economy come together is one of the important questions faced by policymakers and by legal scholars.

Prominent platform markets are not the only setting in which consumer law and scholarship meet digital technologies. On the one hand, the logic of extracting value from data, which the big techs have introduced and perfected (Cohen, 2019; Zuboff, 2019), appears to spill over to many other markets, including brick-and-mortar stores (Turow, 2021). On the other hand, there is a significant interest in the ways in which other technologies, such as 3D printing and

¹ The research leading to this publication was funded by the National Science Centre in Poland (project no. 2018/31/B/HS5/01169).

² Consider, for example, the Cambridge Analytica scandal or the so-called Facebook Files published by the *Wall Street Journal*.

³ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) [2022] OJ L277/1. See also: Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) [2022] OJ L265/1; proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, COM(2021) 206 final.

blockchain, can transform production and consumption and what it would mean for consumer law (De Franceschi, 2016; Howells, 2020).

Against this background, the chapter maps the debates at the intersection of consumer law and technology and reflects on several themes deemed particularly important. It begins with a short introduction to the EU consumer law (Section 2). The impact of digital technologies on consumer markets is discussed thereafter, considering both the practices of online platforms and other socio-technical developments (Section 3). In the remainder of the chapter, the scholarly debates on several selected topics are reconstructed and reflected upon. Particular attention is drawn to the problem of exploitation through personalisation and to the division of responsibility in multi-party settings. Key points are summarised and highlighted in the conclusions.

2. CONSUMER LAW: A FIELD OF RE-ADJUSTMENT

Consumer law may not be among the first associations that come to mind when thinking about law and technology. Situated between public and private law in the traditional continental European understanding (Reimann, 2014), the field has long developed on the margins of mainstream reflection. At its core, consumer law is a response to the observed asymmetries in socio-economic relations. It is also a problem-oriented field, and thus a field of constant re-adjustment.

In Europe, the trajectory of consumer law development has been profoundly shaped by the concurrent expansion of EU integration (Micklitz, 2021). Accordingly, the relevant consumer rules do not aspire for coherence as an end in itself, but rather follow an instrumentalist rationality, characterising EU law (Michaels, 2011; cf. Weatherill, 2012; Comparato, Micklitz & Svetiev, 2016; Brownsword, 2019). At the same time, this close entanglement with the European project has also left its mark on the substance of the adopted rules. While a comprehensive overview of the EU consumer law would far exceed the limits of this chapter, it is useful to characterise its major building blocks.⁴ Four broadly applicable directives are discussed in the next sections, roughly following the lifecycle of consumer transactions.

2.1 Unfair Commercial Practices

The first building block of the EU consumer law – and one which also merits close attention in view of digital markets – is Directive 2005/29/EC concerning unfair business-to-consumer commercial practices (UCPD).⁵ The Directive applies to commercial practices “before, during and after a commercial transaction in relation to a product” (Article 3(1) UCPD). As such, it can be triggered early on in the lifecycle of consumer transactions and maintains its relevance thereafter. Prominent examples of commercial practices include advertising and marketing,

⁴ For a comprehensive overview, see Reich et al., 2014.

⁵ Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council (“Unfair Commercial Practices Directive”) [2005] OJ L149/22.

but the notion is much more encompassing (Article 2(d) UCPD). The UCPD adopts a principle-based approach with a general prohibition of unfair commercial practices at its very core (Article 5(1) UCPD).

Unfair commercial practices can be divided into three categories. The first, and most general one, refers to practices that are contrary to the requirements of professional diligence and is the subject of Article 5(2) UCPD. The two other categories are misleading practices (specifically, actions and omissions) and aggressive practices, addressed by Articles 6–7 and 8–9 UCPD, respectively. Each of them can be relevant to various traders' practices in the digital economy. Indeed, in its recent guidelines the European Commission highlighted that the UCPD applies to “practices and products that involve the use of technologies” and went on to assess a variety of practices, such as the use of tracking and personalisation, under the relevant provisions of the said Directive.⁶ Moreover, the 2019 reform of the UCPD by means of the Modernisation Directive,⁷ enriched the act with several provisions targeting online commerce, such as the presentation of product rankings and online reviews.

All categories of unfair commercial practices share a common basic construction, whereby the classification of a commercial practice as unfair depends on two main factors: the trader's breach of a given standard of conduct and the (likelihood of) material distortion of the consumer's economic behaviour. Violation of diligence requirements is therefore not sufficient to deem a given practice unfair and, in effect, prohibited. The additional criterion concerning consumer behaviour has been subject to vigorous debate in recent years, focusing especially on the relevant consumer benchmark (Mik, 2016; Ebers, 2018). The UCPD makes room for two distinct consumer images: the average consumer – that is one who is reasonably well-informed and reasonably observant and circumspect⁸ – and the vulnerable consumer. As will be discussed further in the chapter, the existing benchmarks have been a subject of critique, leading scholars to call for the embracement of “digital asymmetry”, understood as a structural phenomenon affecting all consumers (Helberger et al., 2021, 2022).

2.2 Pre-Contractual Disclosure

The second important piece of the EU consumer *acquis* is Directive 2011/83/EU on consumer rights (CRD).⁹ The Directive defines traders' pre-contractual disclosure obligations as well as consumers' right to withdraw from the contract in certain situations. Traders are required, among others, to inform the consumers about the main characteristics and the price of the goods or services. A significant part of the CRD applies to so-called distance contracts, which

⁶ Commission Notice – Guidance on the interpretation and application of Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market [2021] OJ C526/1.

⁷ Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules [2019] OJ L328/7, hereafter: Modernisation Directive.

⁸ See: recitals 18–19 and Articles 5(2)–5(3) UCPD.

⁹ Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council [2011] OJ L304/64.

also include online contracts. The importance of digital markets is further acknowledged in the more recent amendments to the act. A prominent example is the additional disclosure duties designed specifically for contracts concluded on online marketplaces (Article 6a CRD).

The Consumer Rights Directive stresses the role of information rules in market regulation and as such relies on the information paradigm (cf. Grundmann et al., 2001). Rules of this kind have a strong political appeal as they can correspond with several objectives, like fostering autonomy, efficiency or fairness (Wilhelmsson & Twigg-Flesner, 2006; Schauer, 2011; Busch, 2016; Seizov et al., 2019). In the EU context, disclosure duties can be connected to the idea of an active consumer, with his or her own role to play in the development of the internal market (Micklitz, 2012, 2018; Hesselink, 2016; Mak, 2016; Twigg-Flesner et al., 2018). By reducing information asymmetries between both parties, information rules are supposed to allow consumers, acting in a rational manner, to make better decisions and thereby contribute to more efficient market outcomes (Rischkowsky & Döring, 2008). Not unlike other EU rules, the CRD therefore has a dual objective, concerning consumer protection and market growth.

Nowadays, the vision of consumers as rational utility maximisers is subject to growing critiques, coming primarily from behavioural research (Howells, 2005; Marotta-Wurgler, 2012; Ben-Shahar & Schneider, 2014). It is observed that consumer rationality is bounded due to cognitive limits intrinsic in the human mind, among other things (Simon, 1955; Thaler & Sunstein, 2008). This, however, has not led to the eventual demise of the information paradigm in EU consumer law. Instead, closer attention is currently being paid to the modalities of disclosure, so as to improve the relevance of information for consumer decision-making.

2.3 Unfair Contract Terms

While the previously discussed disclosure duties are focused mostly on the traders' processes, EU consumer law can also interfere directly with the substance of consumer transactions. This is the case for one of the oldest pieces of EU consumer legislation, namely Directive 93/13/EEC on unfair terms in consumer contracts (UCTD).¹⁰ At its core, the Directive provides that unfair terms in contracts concluded by sellers and suppliers with consumers shall not be binding on the latter. On a closer look, the UCTD testifies to the difficulties in finding a workable compromise within the European Union, especially in areas that touch upon the core of contract law. These difficulties translated into a number of unobvious choices, drawing from the legal norms in place in various Member States and reflecting different varieties of justice (Wilhelmsson, 2008; Reich & Micklitz, 2014).

The heart of the UCTD is the fairness test in Article 3(1), providing that a contractual term that has not been individually negotiated shall be regarded as unfair if, contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer. Accordingly, the fairness test applies to business-to-consumer (B2C) contracts and allows for a substantive control of terms whose content has not been influenced by the consumer. Standard-form B2C transactions are certainly a major group of contracts that fall under this notion. Pre-formulated terms of service in digital consumer markets provide a prominent example. To illustrate, clauses excluding or

¹⁰ Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts [1994] OJ L95/29.

limiting the legal liability of the trader in the event of the death or personal injury of the consumer resulting from the trader's acts or omissions are generally regarded as unfair.¹¹

Not all terms of non-individually negotiated B2C contracts are subject to the fairness test, however. Pursuant to Article 4(2) UCTD, assessment of the unfair nature of the terms shall relate neither to the definition of the main subject matter of the contract nor to the adequacy of the price and remuneration, on the one hand, as against the services or goods supplied in exchange, on the other, in so far as these terms are in plain intelligible language. Core terms are thus excluded from the assessment of substantive fairness, provided that the transparency requirement is complied with. A general transparency requirement for terms offered in writing is also anchored in Article 5 UCTD, emphasising the connection between transparency and fairness.

2.4 Conformity with the Contract

The UCTD is not the only EU act affecting the content of consumer transactions. An important role in this regard is also played by rules determining contractual conformity and the associated rights and obligations. Until recently, the focus on the relevant EU law remained on the sale of goods. However, following the adoption of Directive 2019/770 on digital content and digital services (DSD),¹² the scope of the *acquis* was extended to services provided in the digital economy.

The DSD defines digital services as: (a) services that allow the consumer to create, process, store or access data in digital form; or (b) services that allow the sharing of or any other interaction with data in digital form uploaded or created by the consumer or other users of that service (Article 2(2) DSD). Services provided by major online platforms, e.g. social media, are therefore covered by the scope of the act.

Crucially, in defining the requirements of conformity of digital content and services with the contract, the Directive adopts a mixed approach, combining subjective and objective criteria. The former refers to various features which digital services should have as stipulated by the contract, the latter, in turn, are anchored directly in the EU law. A notable objective criterion is found in Article 8(1)(b) DSD which provides that digital services shall

be of the quantity and possess the qualities and performance features ... normal for digital content or digital services of the same type and which the consumer may reasonably expect, given the nature of the digital content or digital service and taking into account any public statement made by or on behalf of the trader, or other persons in previous links of the chain of transactions (with several exceptions).

Two distinct criteria must therefore be fulfilled: normality and reasonableness.

Both criteria are known from the pre-existing rules on consumer sales.¹³ Applied to the digital services, however, they remain far from straightforward (Namysłowska & Jabłonowska,

¹¹ Point 1(a) of UCTD Annex.

¹² Directive (EU) 2019/770 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L136/1.

¹³ Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees [1999] OJ L 171/12, Article 2. The Directive was recently replaced by Directive (EU) 2019/771 of the European Parliament and of

2022). Indeed, considering the high level of concentration in key digital markets, what is deemed “normal” for a given service may factually be determined by a handful of big tech companies. This draws attention to the intersection between consumer contract law and other legal norms, including digital market regulation, with the latter having a role to play in defining the scope of legitimate design choices. The second important constraint comes from the DSD itself and involves situations when the normal quality of a service does not meet reasonable consumer expectations (Schulze, 2022).

The notion of reasonableness is not especially well-grounded in continental legal systems, but draws inspiration from the common law, with several adjustments (Staudenmayer, 2020). As clarified in recital 46 DSD, the standard of reasonableness “should be objectively ascertained, having regard to the nature and purpose of the digital content or digital service, the circumstances of the case and to the usages and practices of the parties involved”. The scholarship observes, moreover, that references to reasonableness as a model of conduct in EU law do not, in themselves, provide much guidance on the relevant degree of diligence (Troiano, 2009). They merely imply that a party is required to balance the conflicting interests in a given situation, yet what constitutes a reasonable balance depends on other factors (Troiano, 2009, p. 773). In the case of the DSD, attention must be drawn to the rationale of a “high level” of consumer protection, which is stressed in the Directive itself and in EU primary law.¹⁴ When choosing the right conduct, traders can thus be required to pay careful attention to consumer interests, and not only prioritise their own commercial gain.

2.5 Interim Conclusions: Between Transparency and Fairness

As seen from above, EU consumer law has significantly developed over past decades and sets out multiple provisions on transparency and fairness. Its overall complexion remains ambivalent: while explicitly committed to a high level of consumer protection, the vision of an active consumer with his or her role to play in the internal market continues to be prominent in parts of the *acquis*. Still, EU law also contains notable provisions that go deeper into the content of the bargain, as illustrated by the UCTD and the DSD. Rules of this kind appear to be based on the premise that consumers are especially vulnerable to detriment in certain economic settings and require greater protection, offered by rules that focus on the outcomes and not only processes (Willett, 2018). Crucially, this idea of vulnerability is not something connected to consumers’ personal features, but relates more generally to their more limited resources to avoid the risk of harm and more limited ability to respond to harm, as compared to traders (cf. Herring, 2016). Put differently, this idea of vulnerability, already present in consumer law, is broader than the notion of vulnerable consumers in the UCPD.

Key aspects of the existing EU consumer rules took shape when the currently observed expansion of the digital economy was not yet in sight. Before discussing the associated challenges, it is helpful to take a closer look at the ways in which digital technologies transform consumer markets.

the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC [2019] OJ L136/28.

¹⁴ Article 1 DSD; Articles 114(3) and 169(1) of the Treaty on the Functioning of the European Union, consolidated version [2012] OJ C326/47.

3. TECHNOLOGY AND THE CONSUMER

3.1 The Growth of “Platforms”

Notable digital technology companies, like Alphabet (Google), Meta (Facebook), or Amazon, have started as providers of software to consumers and essentially maintain this line of business until today. Their spectacular growth is closely linked to the early days of the internet when new products and services were needed to exploit its potential, which the legislatures actively promoted via liability exemptions (Cohen, 2019). The increasing amount of information available online and the rise of Web 2.0 (O’Reilly, 2012) prompted innovative companies to offer their solutions for addressing consumer needs.¹⁵ Search engines made it possible to organise the wealth of information, social media enabled easy communication, while online marketplaces opened new possibilities for online commerce. Through this, access to knowledge and economic opportunities was supposed to be democratised while commercial actors allowing that to happen began to brand themselves as “platforms”, highlighting their seemingly neutral position (Gillespie, 2010).

For a number of years, this supposed neutrality of online platforms kept the more worrisome aspects of their development out of sight. This concerns not only the possible exposure of platforms to liability for third-party content and actions, but also the degree to which the functioning of algorithms depends on the processing of personal data and the risks this could pose in the long term (Pałka, 2021). To illustrate, while the original algorithm used by Google primarily ranked webpages, over time the company began to also leverage the subjective component of information retrieval and to serve results that particular users may find relevant to them (Desai, 2015). That, coupled with the business decision to monetise its services via advertising, created an incentive for a massive collection of personal data and allowed Google to establish itself as a key player in the digital advertising ecosystem (CMA, 2020).

The risks at play when essential digital services are monetised through advertising become particularly apparent when the business model of Facebook (now Meta) is considered. Van Dijck (2013) shows how the company, on the one hand, mobilised the ideas of “sharing” to make its social network appealing to consumers and, on the other hand, imposed a particular framework for online interactions through interface design. Crucially, what has been promoted through this framework is a double meaning of sharing, which Van Dijck describes as connectedness and connectivity. The former is user-centred, and refers to users distributing information to each other, while the latter is owner-centred and directed at sharing user data with third parties (Van Dijck, 2013, pp. 46–47, 50). Over time, different aspects of the Facebook platform – and even of external websites¹⁶ – have been progressively redesigned to promote the sharing’s second meaning. The nature of this shift, however, has remained largely unknown to the consumers. While scholars have warned about it for quite some time (Pasquale, 2015; Zuboff, 2015), the damaging potential of large-scale commercial

¹⁵ According to O’Reilly, the core competencies of Web 2.0 companies include: “services, not packaged software, with cost-effective scalability; control over unique, hard-to-re-create data sources that get richer as more people use them; trusting users as codevelopers; harnessing collective intelligence; leveraging the long tail through customer self-service; software above the level of a single device; light-weight user interfaces, development models, *and* business models”.

¹⁶ For illustration, consider the expansion of the “Like” button.

surveillance only gained broader recognition when the Cambridge Analytica scandal was revealed. It became apparent that data collected via Facebook can be exploited to target users with personalised messages that can affect their real-life behaviour (Wylie, 2019). Since then, the logic of extracting value from data, which platforms have perfected, remains in the spotlight of academic debates (Cohen, 2019; Zuboff, 2019; Turov, 2021) and meets with an increased attention from the regulators, across and beyond consumer law.

3.2 Emerging Technologies

While the importance of platforms cannot be overstated, other related phenomena also inspire the narratives about transforming markets. Looking at the Gartner hype cycle for emerging technologies (Gartner, 2022), one of such themes is certainly the accelerated development of artificial intelligence (AI). Following the paradigm shift in AI from rule-based programming to machine learning systems, the discipline is now experiencing a phenomenal revival (Russell & Norvig, 2021). Important actors behind this development are again online platforms, having access to both the needed datasets, programming talent and processing power. A tangible example are the so-called virtual assistants offered by most big techs (Stucke & Ezrahi, 2017; Turov, 2021), yet there are also countless systems, such as those underlying the selection of personalised content, that remain unembodied (Yeung, 2017). Not surprisingly, this further exacerbates the concerns referred to earlier in this chapter.

Online platforms, however, are not the only actors involved in the AI game. Companies active in different sectors are now deploying machine learning to optimise their processes. Examples range from credit scoring and fraud identification over AI-assisted diagnostics and autonomous vehicles to machine translation and chatbots (Jabłonowska et al., 2018). Much of the recent media buzz is also triggered by the so-called generative AI, able to produce content such as text and images. Realistic pictures and pieces of writing generated on the basis of textual prompts by OpenAI's DALL-E 2 and ChatGPT make us wonder about the transformative potential of this line of research, which now even enters creative domains (Davenport & Mittal, 2022).

Other technological phenomena, whose impact on consumer markets is being debated, include 3D printing, the Internet of Things, distributed ledger technology (blockchain) as well as virtual and augmented reality (Howells, 2020). While there is indeed a certain uptake regarding each of them, its pace remains unhurried. At present, the two most widely discussed topics appear to be smart contracts and the metaverse. The former, following Durovic and Janssen (2018), refer to “software programmes which are often, but not necessarily, built on blockchain technology as a set of promises, specified in digital form, including protocols within which the parties perform on these promises”. In short, if an if-then rule is triggered by the relevant event, smart contracts are capable of automatically enforcing it, for example by transferring an asset. The concept of the metaverse, in turn, has been popularised by Mark Zuckerberg who in 2021 announced the rebranding of Facebook to Meta. The CEO of the notorious social network painted the vision of an immersive platform making it possible for everyone “to teleport instantly as a hologram” and “move across ... experiences on different devices – augmented reality glasses to stay present in the physical world, virtual reality to be fully immersed, and phones and computers to jump in from existing platforms” (Zuckerberg, 2021). The investment in the metaverse is seen as the company's attempt to move beyond its existing revenue stream, coming primarily from online advertising. One year after the

rebranding took place, however, the value of the Meta stock has seen a downward trend and the future of the company remains uncertain.

4. STATE OF DEBATE: RECONSTRUCTION AND REFLECTION

The European debates on consumer law and technology characteristically focus on the question of whether existing rules are adequate for the digital age (see Pałka and Brożek in this *Research Handbook*). The specific topics discussed can be placed, once again, within the narrative of a contract lifecycle. Of course, such a perspective is merely a simplification. As was already stated, for example, digital advertisements are no longer self-standing acts between the advertisers and consumers, but rather form an integral part of consumers' long-term relationships with platforms. Still, to structure the discussion, it is helpful to start with the problems that typically concern the pre-contractual stage and conclude with those pertaining to contract execution.

4.1 Personalisation and Dark Patterns

The issue that appears to attract the most attention when it comes to approaching consumers with product information is personalisation in marketing and pricing. The notion itself is rather vague and appears to be used strategically by the industry to trigger positive associations with at best ambivalent practices. Broadly speaking personalisation relates to extracting profiles from large datasets to present consumers with offers that the traders believe are suitable for people with their features. To understand the notion better, attempts have also been made to distinguish personalisation from other forms of data-driven marketing and pricing.

As regards advertising, the notion of personalisation is sometimes used interchangeably with other concepts such as online behavioural advertising (Boerman et al., 2017; Laux et al., 2021) and microtargeting (Ebers, 2018). This, in turn, is set apart from the more traditional ways of tailoring content to its viewers, such as those dependent exclusively on context. In today's data-driven economy, in which the amount of generated data is constantly reaching new heights, inferring consumer profiles has become commonplace. As explained by Custers (2018), basic techniques like regression, classification or clustering can be used to infer new attributes from the available ones. Both the degree of precision and the sources of such inferences (coming from the same person or from other persons) may vary. Against this background, leading consumer law scholars have argued that personalisation should not be mistaken for individualisation, but is rather "a pre-designed form of quasi-individualised standardisation" in which the individual is replaced by proxies and in which everyone is potentially vulnerable (Helberger et al., 2021, p. 94). Accordingly, the relevant "control architecture" should not be limited to individual rights, but should also be monitored at a collective level (Helberger et al., 2021, p. 104).

A similar logic can be transferred to the discussion on personalised pricing, which is a buzzword describing a data-driven form of price discrimination. The latter is an established concept in economic theory and refers to the differentiation of prices charged to consumers for the same or similar products in order to maximise profits, where such differences are not motivated by different cost structures, e.g. different supply costs (Stigler, 1966, p. 209). Its most advanced form is the so-called first-degree price discrimination, which consists of

providing an individualised price for each consumer on the basis of his or her willingness to pay (Steppe, 2017).

The prevalence of personalised pricing in digital consumer markets remains a matter of debate. Several surveys carried out in Europe have found no evidence of consistent and systematic use of profiling to implement price variations (BMJV, 2021),¹⁷ although single cases were indeed confirmed (ACM, 2022; cf. Mikians et al., 2012). What appears far more prominent is the so-called dynamic pricing, which refers to the flexible price adjustments in response to market conditions, such as the changes in supply and demand or the behaviour of competitors (Grochowski et al., 2022). On the one hand, this difference is important, as not all forms of rapid price adjustments in the digital economy are necessarily connected to the consumers' personal features. On the other hand, personalised and dynamic pricing share an important similarity, in that they are essentially standardised data-driven practices. Both can, moreover, be applied in ways that can be harmful to consumers, e.g. if prices of travel services are inflated because of urgency resulting from personal circumstances or from a natural disaster affecting more consumers. In both cases, it does not seem sufficient to limit one's perspective to individual rights and obligations, as the European Union currently appears to be doing with the newly added information duty on personalised prices.¹⁸

As observed in the literature, the increasingly sophisticated personalisation of marketing and pricing exacerbates the existing asymmetry between businesses and consumers (Helberger et al., 2022). Importantly, tailoring offers to consumers is not the only driver behind this dynamic. Another, and equally important one, pertains to the design of online interfaces. It becomes increasingly well-understood that the way in which the options are displayed can systematically affect decision-making (Thaler et al., 2013). This is true for both digital and non-digital settings, yet in the digital economy the possibilities for experimenting with choice architectures are particularly remarkable (Kramer et al., 2014; Mik, 2016; Yeung, 2017). Growing attention is thus devoted to what became known as “dark patterns”, described by the European Commission as “a type of malicious nudging, generally incorporated into digital design interfaces”.¹⁹ Both personalisation and dark patterns are the subject of an intense scholarly and policy reflection, which seeks to assess the protective potential of existing rules, such as the UCPD, as well as the need for new responses. Most recently, targeted provisions on deceptive design were added to the DSA,²⁰ yet their relation with existing rules has been subject to criticism.²¹

The discussed pre-contractual problems certainly deserve the attention they currently receive. Beyond envisaging prospective regulatory pathways, further research could examine the prevalence and effectiveness of data-driven marketing and pricing, which still remain relatively obscure. While the impact of dark patterns on decision-making is comparably easy to observe, examining personalised communications poses significant challenges since they place consumers in “experience cocoons” (Bodo et al., 2017, p. 139). This also applies to the

¹⁷ See also European Commission. (2018). *Consumer market study on online market segmentation through personalised pricing/offers in the European Union final report*. Retrieved from <https://data.europa.eu/doi/10.2818/990439>

¹⁸ Article 6(1)(ea) CRD.

¹⁹ Commission Notice (n 6) point 4.2.7.

²⁰ Article 25 DSA.

²¹ See European Law Institute. (2023). *European Commission's Public Consultation on Digital Fairness – Fitness Check on EU Consumer Law*. Response of the European Law Institute.

perspective of marketers who may have to rely on information provided by the platforms to assess the effectiveness of their campaigns. Could it turn out, as suggested by Hwang (2020), that platforms' claims about their targeting capacities are largely overblown? How can personalised environments be monitored so that consumer interests are safeguarded? Which consumer groups are most exposed to the negative effects of personalisation? Can reliable information be provided to advertisers without putting consumer interests at further risk? And finally: is the model of monetising online services through targeted advertisements tenable in the long term?

4.2 Duties and Liabilities in Multi-Party Settings

Another major theme in debates about consumer law and technology concerns the duties of the parties involved in three-party relationships in the platform economy. Of interest are especially the peer-to-peer relationships facilitated by online platforms, whose development is captured by the notion of sharing, or collaborative, economy (Davidson et al., 2018; Hatzopoulos, 2018). With the advent of platforms such as Airbnb and Uber, peer-to-peer e-commerce has moved beyond the sale of goods and has begun to transform service markets. This raised a number of questions concerning, among others, the appropriate allocation of responsibilities between actors involved. Although online platforms typically position themselves as mere intermediaries (Gillespie, 2010; Codagnone et al., 2018), they appear to also be the parties with the strongest factual position. Accordingly, attempts have been made in the scholarship to clarify and possibly expand the scope of platforms' obligations vis-à-vis consumers (Maultzsch, 2018; Tereszkievicz, 2018; Devolder, 2019; Busch et al., 2020). The original responses from the EU law- and policymakers were rather cautious and focused on exploiting the potential of existing rules. In particular, the fairness test set out in the UCPD was elaborated in the Commission's guidelines,²² platforms were called upon to make their standard terms more balanced,²³ and new information duties for contracts concluded through online marketplaces were added to the CRD.²⁴

Further-reaching requirements were only imposed on the platforms through a subsequent legislative initiative, namely the DSA. For example, the regulation clarifies in Article 6(3) that the established liability exemptions for the providers of hosting services do not apply with respect to the liability under consumer protection law, where the platform design could lead an average consumer to believe that the underlying product or service is provided either by the online platform itself or by a recipient of the service who is acting under its authority or control. The act offers no further guidance about the relevant criteria, although a possible scenario could be where the identity of the seller or service provider is not displayed to the consumer and where contacting the contracting party is only possible through the platform. Still, what the DSA ultimately achieves is merely the removal of the liability exemption, leaving it to consumer protection law to determine conditions for liability. It is not even entirely

²² Commission Notice (n 6) points 4.2.1. and 4.2.2.

²³ See, e.g. European Commission, Factsheet of the changes implemented by Airbnb, 2019, https://commission.europa.eu/system/files/2019-07/airbnb_factsheet.pdf

²⁴ Article 4(5) Modernisation Directive.

clear what the latter is supposed to encompass, and particularly whether it is limited to rules on B2C transactions.²⁵

The problematic intersection of EU platform regulation with consumer law as well as other legal acts is not limited to liability exemptions. To illustrate, following recent amendments, the CRD requires the providers of online marketplaces to inform the consumers whether the third party offering the goods, services or digital content is a trader or not, based on the latter's declaration.²⁶ The DSA appears to kick in at a later stage and imposes further traceability requirements concerning the suppliers who qualify as traders.²⁷ In those cases, however, a higher standard of behaviour is expected of platforms, as they should also "make best efforts to assess whether the information [provided by the traders] is reliable and complete". It is not evident why the provisions envisaged for the peer-to-peer economy offer a lower level of consumer protection than those directed at B2C e-commerce. Moreover, the DSA also contains novel provisions requiring online platforms to design and organise their online interfaces in a way that enables traders to comply with their obligations regarding pre-contractual disclosure, compliance and product safety information.²⁸ However, the requirement is limited again to standard B2C transactions. This remains somewhat at odds with the recently proposed regulation on data collection and sharing relating to short-term accommodation rental services,²⁹ which operates with a more neutral notion of a "host". More than six years after the adoption of the European agenda for the collaborative economy,³⁰ the EU legislature is still visibly struggling to find a coherent framework for three-party relationships.

Besides further exploring the allocation of responsibilities in the platform economy, as well as the relation between established instruments of consumer law and the more recent wave of platform regulation, further research could also look into empirical questions, such as the capacity of online platforms to mitigate the risks inherent in their operation. How many problems are actually reported to companies like Airbnb and what measures are typically taken in response? The opacity of platform practices in this domain is quite remarkable, considering their importance for the shaping of consumer expectations, the degree of possible exposure to liability and the related insurance costs. Another noteworthy aspect of the platform economy concerns the existence of the so-called Brussels effect, which is the influence of EU law beyond its geographical borders (Bradford, 2020). Do regulatory initiatives in Europe affect the platforms' global practices? The developments observed in the domain of standard terms, where platforms appear to apply more balanced terms only for certain jurisdictions, challenge this hypothesis.

²⁵ See also: Judgment of the Court of 4 October 2018, C-105/17, Kamenova, ECLI:EU:C:2018:808.

²⁶ Article 6a(1)(b) CRD.

²⁷ Article 30 DSA.

²⁸ Article 31 DSA.

²⁹ Proposal for a Regulation of the European Parliament and of the Council on data collection and sharing relating to short-term accommodation rental services and amending Regulation (EU) 2018/1724, COM(2022) 571 final.

³⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European agenda for the collaborative economy, COM(2016) 356 final.

5. CONCLUSIONS

The chapter examined the intersection of consumer law technology, focusing on the European law perspective. The analysis revealed that the core themes of transparency and fairness maintain their relevance in the platform economy. Existing rules provide a useful starting point for protecting consumers as weaker parties in transforming markets and are treated as such by the law- and policymakers. The protection afforded to consumers could become even stronger in the future, if the existing rules were subject to a more radical re-interpretation. For the UCPD this could be done by embracing the concept of digital asymmetry advocated by Helberger et al. (2022), while with respect to other acts – for example, by giving a bold reading to the notions of transparency and reasonable expectations. Moreover, further research could explore the relationship between consumer law and the more recent wave of platform regulation and pose empirical questions concerning consumer protection in the digital economy.

Due to the limits of this chapter, a number of important topics could not be analysed with the attention they deserve. For example, the impact of emerging technologies, such as artificial intelligence, was only remarked briefly and the associated regulatory developments have been left out of scope. Online platforms of course are leading players in this field, and much of the discussion about the use of personalisation is also a discussion about fair uses of AI. However, as was mentioned, other actors can deploy AI systems too, with credit scoring being a prominent example. These sector-specific developments are certainly substantial and lend themselves to a separate in-depth study.

Some of the other technologies discussed throughout the chapter are yet to show their relevance for consumer markets. At the moment we seem to be quite far from both the vision of the metaverse and a wider use of 3D printing by consumers. The same is generally true for blockchain and smart contracts, although the associated discussions and experiments can provide plenty of food for thought. With their promise of self-execution, smart contracts could bring significant value to consumers, who often benefit from different legal rights but lack the resources to enforce them. Deploying smart contracts to consumers' advantage is nonetheless unlikely to happen at traders' own initiative. Moreover, the consequences of full self-execution, even if only applied to a limited domain, are difficult to estimate, making us wonder if imperfect enforcement is not a design feature of every legal system – as is the (quite convenient) vagueness of the legal rules.

BIBLIOGRAPHY

- ACM. (2022). *Following ACM actions, Wish bans fake discounts and blocks personalized pricing*. Retrieved from www.acm.nl/en/publications/following-acm-actions-wish-bans-fake-discounts-and-blocks-personalized-pricing.
- Ben-Shahar, O. & Schneider, C.E. (2014). *More than you wanted to know*. Princeton: Princeton University Press.
- BMJV. (2021). *Empirie zu personalisierten Preisen im E-Commerce*. Retrieved from www.bmjv.de/DE/Service/Fach-publikationen/Empirie-Studie.html.
- Bodo, B., Helberger, N., Irion, K., Zuiderveen Borgesius, F., Moller, J., van de Velde, B., Bol, N., van Es, B. & de Vreese, C. (2017). Tackling the algorithmic control crisis: The technical, legal, and ethical challenges of research into algorithmic agents. *Yale Journal of Law & Technology*, 19, 133–180.
- Boerman, S.C., Kruijkemeier, S. & Zuiderveen Borgesius, F.J. (2017). Online behavioral advertising: A literature review and research agenda. *Journal of Advertising*, 46(3), 363–376.

- Bradford, A. (2020). *The Brussels effect: How the European Union rules the world*. Oxford: Oxford University Press.
- Brownword, R. (2019). *Law, technology and society: Re-imagining the regulatory environment*. London: Routledge.
- Busch, C. (2016). The future of pre-contractual information duties: From behavioural insights to big data. In Twigg-Flesner, C. (Ed.). *Research handbook on EU consumer and contract law* (pp. 221–240). Cheltenham: Edward Elgar Publishing.
- Busch, C., Dannemann, G., Schulte-Nölke, H., Wiewiórowska-Domagalska, A. & Zoll, F. (2020). An introduction to the ELI model rules on online platforms. *Journal of European Consumer and Market Law*, 9(2), 61–70.
- Calo, R. (2013). Digital market manipulation. *George Washington Law Review*, 82, 995.
- CMA. (2020). *Online platforms and digital advertising: Market study final report*. Retrieved from www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study.
- Cohen, J.E. (2019). *Between truth and power: The legal constructions of informational capitalism*. Oxford: Oxford University Press.
- Codagnone, C., Karatzogianni, A. & Matthews, J. (2018). *Platform economics: Rhetoric and reality in the “sharing economy”*. Binkley: Emerald Group Publishing.
- Comparato, G., Micklitz, H.W. & Svetiev, Y. (2016). The regulatory character of European private law. In Twigg-Flesner, C. (Ed.). *Research handbook on EU consumer and contract law* (pp. 35–67). Cheltenham: Edward Elgar Publishing.
- Custers, B.H.M. (2018). Profiling as inferred data: amplifier effects and positive feedback loops. In Bayamlioğlu, E., Baraliuc, I., Janssens, L. & Hildebrandt, M. (Eds.). *Being Profiled: Cogitas ergo Sum: 10 years of ‘Profiling the European citizen’* (pp. 112–116). Amsterdam: Amsterdam University Press.
- Davenport, T.H. & Mittal, N. (2022). *How generative AI is changing creative work*. Retrieved from www.hbr.org/2022/11/how-generative-ai-is-changing-creative-work.
- Davidson, N.M., Finck, M. & Infranca, J.J. (Eds.). (2018). *The Cambridge handbook of the law of the sharing economy*. Cambridge: Cambridge University Press.
- De Franceschi, A. (Ed.). (2016). *European contract law and the digital single market*. Antwerp: Intersentia.
- Desai, D.R. (2015). Exploration and exploitation: An essay on (machine) learning, algorithms, and information provision. *Loyola University Chicago Law Journal*, 47, 541.
- Devolder, B. (2019). *The platform economy: Unravelling the legal status of online intermediaries*. Cambridge: Intersentia.
- Durovic, M. & Janssen, A. (2018). The formation of blockchain-based smart contracts in the light of contract law. *European Review of Private Law*, 26(6), 753–771.
- Ebers, M. (2018). Beeinflussung und Manipulation von Kunden durch „Behavioral Microtargeting“. *MMR*, 7, 423–428.
- Gartner. (2022). *What’s new in the 2022 Gartner Hype Cycle for Emerging Technologies*. Retrieved from www.gartner.com/en/articles/what-s-new-in-the-2022-gartner-hype-cycle-for-emerging-technologies.
- Gillespie, T. (2010). The politics of ‘platforms’. *New Media & Society*, 12(3), 347–364.
- Grochowski, M., Jablonowska, A., Lagioia, F. & Sartor, G. (2022). Algorithmic price discrimination and consumer protection. A digital arms race? *Technology and Regulation*, 36–47.
- Grundmann, S., Kerber, W. & Weatherill, S. (2001). Party autonomy and the role of information in the internal market – An overview. In Grundmann, S., Kerber, W. & Weatherill, S. (Eds.). *Party autonomy and the role of information in the internal market* (pp. 3–38). Berlin: De Gruyter.
- Hatzopoulos, V. (2018). *The collaborative economy and EU law*. Oxford: Bloomsbury Publishing.
- Helberger, N., Lynskey, O., Micklitz, H.W., Rott, P., Sax, M. & Strycharz, J. (2021). *EU consumer protection 2.0 – Structural asymmetries in digital consumer markets. A joint report from research conducted under the EUCP2.0 project*. Retrieved from www.beuc.eu/sites/default/files/publications/beuc-x-2021-018_eu_consumer_protection_2.0.pdf.
- Helberger, N., Sax, M., Strycharz, J. & Micklitz, H.W. (2022). Choice architectures in the digital economy: Towards a new understanding of digital vulnerability. *Journal of Consumer Policy*, 45(2), 175–200.

- Herring, J. (2016). *Vulnerable adults and the law*. Oxford: Oxford University Press.
- Hesselink, M.W. (2016). Contract theory and EU contract law. In Twigg-Flesner, C. (Ed.), *Research handbook on EU consumer and contract law* (pp. 508–534). Cheltenham: Edward Elgar Publishing.
- Howells, G. (2005). The potential and limits of consumer empowerment by information. *Journal of Law and Society*, 32(3), 349–370.
- Howells, G. (2020). Protecting consumer protection values in the fourth industrial revolution. *Journal of Consumer Policy*, 43(1), 145–175.
- Hwang, T. (2020). *Subprime attention crisis: Advertising and the time bomb at the heart of the internet*. New York: FSG originals.
- Jabłonowska, A., Kuziemski, M., Nowak, A.M., Micklitz, H.W., Pałka, P. & Sartor, G. (2018). *Consumer law and artificial intelligence: Challenges to the EU consumer law and policy stemming from the business' use of artificial intelligence: Final report of the ARTSY project*. EUI Working Paper LAW 2018/11. Retrieved from <https://cadmus.eui.eu/handle/1814/57484>.
- Kramer, A.D.I., Guillory, J.E. & Hancock, J.T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences of the United States of America*, 111(24), 8788–8790.
- Laux, J., Wachter, S. & Mittelstadt. (2021). Neutralizing online behavioural advertising: Algorithmic targeting with market power as an unfair commercial practice. *Common Market Law Review*, 58(3), 719–750.
- Mak, V. (2016). The consumer in European regulatory private law. In Leczykiewicz, D. & Weatherill, S. (Eds.). *The image of the consumer in EU law: Legislation, free movement and competition law* (pp. 381–400). Oxford: Hart Publishing.
- Marotta-Wurgler, F. (2012). Does contract disclosure matter? *Journal of Institutional and Theoretical Economics*, 168(1), 94–123.
- Maultzsch, F. (2018). Contractual liability of online platform operators: European proposals and established principles. *European Review of Contract Law*, 14(3), 209–240.
- Michaels, R. (2011). Of islands and the ocean: the two rationalities of European private law. In Brownsword, R., Micklitz, H.W., Niglia, L. & Weatherill, S. (Eds.). *The foundations of European private law* (pp. 139–158). Oxford: Hart Publishing.
- Micklitz, H.W. (2012). The expulsion of the concept of protection from the consumer law and the return of social elements in the civil law: a bittersweet polemic. *Journal of Consumer Policy*, 35(3), 283–296.
- Micklitz, H.W. (2018). *The politics of justice in European private law: Social justice, access justice, societal justice*. Cambridge: Cambridge University Press.
- Micklitz, H.W. (2021). The intellectual community of consumer law and policy in the EU. In Micklitz, H.W. (Ed.). *The making of consumer law and policy in Europe* (pp. 63–92). Oxford: Hart Publishing.
- Mik, E. (2016). The erosion of autonomy in online consumer transactions. *Law, Innovation and Technology*, 8(1), 1–38.
- Mikians, J., Gyarmati, L., Erramilli, V. & Laoutaris, N. (2012). Detecting price and search discrimination on the internet. In *Proceedings of the 11th ACM workshop on hot topics in networks* (pp. 79–84).
- Namysłowska, M. & Jabłonowska A. (2022). Artificial intelligence and platform services: EU consumer (contract) law and new regulatory developments. In Ebers, M., Poncibò, C. & Zou, M. (Eds.). *Contracting and contract law in the age of artificial intelligence* (pp. 221–248). Oxford: Hart Publishing.
- O'Reilly, T. (2012). What is web 2.0? Design patterns and business models for the next generation of software. In Mandiberg, M. (Ed.). *The social media reader* (pp. 32–52). New York: New York University Press.
- Pałka, P. (2021). The world of fifty (interoperable) Facebooks. *Seton Hall Law Review*, 51(4), 1193–1239.
- Pasquale, F. (2015). *The black box society: The secret algorithms that control money and information*. Cambridge: Harvard University Press.
- Reich, N. & Micklitz, H.W. (2014). The court and sleeping beauty: the revival of the Unfair Contract Terms Directive (UCTD). *Common Market Law Review*, 51(3), 771–808.
- Reich, N., Micklitz, H.-W., Rott, P. & Tonner, K. (2014). *European consumer law*. Antwerp: Intersentia.
- Reimann, M. (2014). The American advantage in global lawyering. *The Rabel Journal of Comparative and International Private Law*, 78(1), 1–36.

- Rischkowsky, F. & Döring, T. (2008). Consumer policy in a market economy: Considerations from the perspective of the economics of information, the new institutional economics as well as behavioural economics. *Journal of Consumer Policy*, 31(3), 285–313.
- Russell, S. J. & Norvig, P. (2021). *Artificial intelligence: A modern approach*. Hoboken: Pearson.
- Schauer, F. (2011). Transparency in three dimensions. *University of Illinois Law Review*, 1339.
- Schulze, R. (2022). § 327e BGB. In Schulze, R. (Ed.). *Bürgerliches Gesetzbuch: Handkommentar* (11 edn). Baden-Baden: Nomos.
- Seizov, O., Wulf, A.J. & Luzak, J. (2019). The transparent trap: A multidisciplinary perspective on the design of transparent online disclosures in the EU. *Journal of Consumer Policy*, 42(1), 149–173.
- Simon, H.A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99–118.
- Staudenmayer, D. (2020). The directives on digital contracts: First steps towards the private law of the digital economy. *European Review of Private Law*, 28(2), 219–250.
- Steppe, R. (2017). Online price discrimination and personal data: A general data protection regulation Perspective. *Computer Law & Security Review*, 33(6), 768–785.
- Stigler, G.J. (1966). *The theory of price*. New York: Macmillan.
- Stucke, M.E. & Ezrachi, A. (2017). How digital assistants can harm our economy, privacy, and democracy. *Berkeley Technology Law Journal*, 32(3), 1239–1300.
- Tereszkiewicz, P. (2018). Digital platforms: regulation and liability in the EU law. *European Review of Private Law*, 26(6), 903–920.
- Thaler, R.H. & Sunstein, C.R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven: Yale University Press.
- Thaler, R.H., Sunstein, C.R. & Balz, J.P. (2013). Choice architecture. In Shafir, E. (Ed.). *The behavioral foundations of public policy* (pp. 428–439). Princeton: Princeton University Press.
- Tonner, K. (2014). From the Kennedy message to full harmonising consumer law directives: A retrospect. In Purnhagen, K. & Rott, P. (Eds.). *Varieties of European economic law and regulation: Liber amicorum for Hans Micklitz* (pp. 693–707). Dordrecht Springer.
- Troiano, S. (2009). To what extent can the notion of ‘reasonableness’ help to harmonize European contract law? Problems and prospects from a civil law perspective. *European Review of Private Law*, 17(5), 749–787.
- Turow, J. (2021). *The voice catchers*. New Haven: Yale University Press.
- Twigg-Flesner, C., Schulze, R. & Watson, J. (2018). Protecting rational choice: information and the right of withdrawal. In Howells, G., Ramsay, I. & Wilhelmsson, T. (Eds.). *Handbook of research on international consumer law* (pp. 111–138). Cheltenham: Edward Elgar Publishing.
- Van Dijck, J. (2013). *The culture of connectivity: A critical history of social media*. Oxford: Oxford University Press.
- Weatherill, S. (2012). The Consumer Rights Directive: How and why a quest for “coherence” has (largely) failed. *Common Market Law Review*, 49(4), 1279–1317.
- Wilhelmsson, T. (2008). Various approaches to unfair terms and their background philosophies. *Juridica International*, 14, 51–57.
- Wilhelmsson, T. & Twigg-Flesner, C. (2006). Pre-contractual information duties in the *acquis communautaire*. *European Review of Contract Law*, 2(4), 441–470.
- Willett, C. (2018). Re-theorising consumer law. *The Cambridge Law Journal*, 77(1), 179–210.
- Wylie, C. (2019). *Mindf*ck: Cambridge analytica and the plot to break America*. New York: Random House.
- Yeung, K. (2017). ‘Hypernudge’: Big data as a mode of regulation by design. *Information, Communication & Society*, 20(1), 118–136.
- Zuboff, S. (2015). Big other: surveillance capitalism and the prospects of an information civilization. *Journal of information technology*, 30(1), 75–89.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. London: Profile books.
- Zuckerberg, M. (2021). *Founder’s Letter*. Retrieved from www.about.fb.com/news/2021/10/founders-letter.