

# THE GOVERNANCE OF ALGORITHMS: PROFILING AND PERSONALISATION OF ONLINE CONTENT IN THE CONTEXT OF EUROPEAN CONSUMER LAW

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*Algorithms exploit human weaknesses and emotions to influence users' purchasing behaviour in a context where the line between mere persuasion becomes manipulation.*

*Given, then, the importance of the matter for the protection of consumers, this contribution aims at analysing the current European regulatory framework concerning the protection of online users against the risks of profiling and personalisation practices by online platforms. This article will try to show that, despite the most recent interventions, the supranational law cannot efficiently address the problem of 'digital vulnerability' or 'substantial transparency'.*

*This conclusion seems to be very clear looking at the recent development of consumer law such as the so-called 'Digital Services Acts' (Regulation 2022/2065/EU) which requires, for instance, that online intermediaries provide all relevant information about the main parameters used by them to identify and profile the user. This provision clashes with the extreme complexity of algorithms, which leaves platforms with the discretion to decide which data to provide.*

*In this perspective, an attempt will finally be made to formulate some proposals that are more functional to the objective of maximum protection of online users, disarmed before the power of algorithms and large platforms.*

## 1 THE PROBLEM OF ALGORITHMIC TRANSPARENCY AND INFORMATION OBLIGATIONS IN THE DIGITAL ENVIRONMENT

### 1.1 AN INTRODUCTION OF THE MATTER

In recent years, digital platforms have seen such rapid development that the European Commission, as early as 2016, had already sensed the fundamental role that these economic actors would play in the economic and social development of humanity.<sup>1</sup>

This initial enthusiasm has now been joined by an awareness of the power that platforms have acquired to the point of becoming decisive in economic and, in particular, political decisions.<sup>2</sup> It is no coincidence that the Commission itself has recognised that 'a

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<sup>1</sup> Commission, 'Communication on Online Platforms and the Digital Single Market Opportunities and Challenges for Europe' COM (2016) 288 final, 3, where it is said that 'The platform economy presents major innovation opportunities for European start-ups, as well as for established market operators to develop new business models, products and services'.

<sup>2</sup> Cf Matti Nelimarkka et al, 'Platformed Interactions: How Social Media Platforms Relate to Candidate–Constituent Interaction During Finnish 2015 Election Campaigning' (2020) 6(2) Social Media + Society <<https://journals.sagepub.com/doi/10.1177/2056305120903856>> accessed 01 March 2024; Chris Marsden, Trisha Meyer, and Ian Brown, 'Platform values and democratic elections: How can the law regulate digital

small number of large online platforms increasingly determine the parameters for future innovations, consumer choice and competition'.<sup>3</sup>

To avoid possible abuses from providers, the European Commission started to look for some instruments to guarantee the awareness of users. Traditionally, the consumer has been regarded as a perfectly rational economic actor and, therefore, always capable of making the most efficient choice.<sup>4</sup> According to this approach – typical of classical economic theory – the problem could therefore be solved by providing the subject with all available information so that he could choose the most efficient solution. Therefore, for a long time, the only interest of the Community was to impose increasingly specific and stringent information obligations on professionals. In other words, this tool was considered the most appropriate to guarantee transparency and eliminate the information asymmetry typical of B2C relations.

This neoclassical approach began to be challenged in the 1970s by a growing number of scientific studies that elaborated a new economic model based on the different assumption of human 'bounded rationality'.<sup>5</sup> It was observed that the traditional economic model did not actually represent what happens in reality, because decision-making processes are largely determined by the environmental and social context.<sup>6</sup> Man has limited rationality<sup>7</sup> and, as

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disinformation?' (2020) 36 *Computer Law & Security Review* 105; Patrícia Rossini et al, 'Social Media, Opinion Polls, and the Use of Persuasive Messages During the 2016 US Election Primaries' (2018) 4(3) *Social Media + Society* <<https://journals.sagepub.com/doi/10.1177/2056305118784774>> accessed 01 March 2024; Michael Bossetta, 'The Digital Architectures of Social Media: Comparing Political Campaigning on Facebook, Twitter, Instagram, and Snapchat in the 2016 U.S. Election' (2018) 95(2) *Journalism & Mass Communication Quarterly* 471. For an in-depth look at the platforms' business model see Lina M Khan, 'Amazon's Antitrust Paradox' (2017) 126 *Yale Law Journal* 710; Zoltan J Acs et al, 'The Evolution of the Global Digital Platform Economy: 1971-2021' (2021) 57 *Small Business Economics* 1629; Orly Lobel, 'The Law of the Platform' (2016) 101 *Minnesota Law Review* 87.

<sup>3</sup> Commission, 'Inception Impact Assessment, Digital Services Act package: Ex ante regulatory instrument for large online platforms with significant network effects acting as gate-keepers in the European Union's internal market' Ref Ares (2020) 2877647; Massimiliano Nuccio and Marco Guerzoni, 'Big data: Hell or heaven? Digital platforms and market power in the data-driven economy' (2019) 23(3) *Competition & Change* 312; Michael A Cusumano, Annabelle Gawer, and David B Yoffie, *The business of platforms: Strategy in the age of digital competition, innovation, and power* (HarperBusiness 2019); Laura Ammannati, 'Verso un diritto delle piattaforme digitali?' (2019) 7 *Federalismi.it* 1.

<sup>4</sup> For an in-depth look at the evolution of consumerism see Zygmunt Bauman, *Consumo, dunque sono* (12 edn, Laterza 2010); Antonio Catricalà Guido Alpa, *Diritto dei consumatori* (Strumenti Diritto, Il Mulino 2016); Giampaolo Fabris, *Il nuovo consumatore: verso il postmoderno* (Impresa, comunicazione, mercato, Franco Angeli 2010) 468.

<sup>5</sup> The theory of bounded rationality was developed by Herbert Simon in 1978. For a more in-depth discussion, see (unless Riccardo offers a comparison) Riccardo Viale, 'La razionalità limitata "embodied" alla base del cervello sociale ed economico' (2019) 1 *Sistemi intelligenti, Rivista quadrimestrale di scienze cognitive e di intelligenza artificiale* 193; Antonio R Damasio, *Descartes' Error: Emotion, Reason and the Human Brain* (Random House 2008) according to which 'we are not thinking machines that feel, we are feeling machines that think', precisely to emphasize how the emotional part acts before the rational one and, therefore 'the beginning of everything was emotion. Feeling is therefore not a passive process'. See also Christophe Morin, 'Neuromarketing: The New Science of Consumer Behavior' (2011) 48 *Society* 131.

<sup>6</sup> Piotr Winkielman and Kent Berridge, 'Irrational Wanting and Subrational Liking: How Rudimentary Motivational and Affective Processes Shape Preferences and Choices' (2003) 24(4) *Political Psychology* 657; Richard H Thaler, 'From Homo Economicus to Homo Sapiens' (2000) 14(1) *Journal of Economic Perspectives* 133.

<sup>7</sup> The theory was developed by Herbert Simon. On this point, see Herbert A Simon (edited by Massimo Egidi and Robin Marris), *Economics, Bounded Rationality and the Cognitive Revolution* (Edward Elgar Publishing 1992); Cass R Sunstein (ed), *Behavioral Law and Economics* (Cambridge University Press 2000); Amos Tversky and

such, is subject to various biases that influence him and lead him to make choices that are not necessarily the most efficient ones.<sup>8</sup>

This new awareness has prompted companies to invest in the implementation of machine-learning algorithms capable of studying and predicting users' traits and then using them to personalise offers that are highly suggestive.<sup>9</sup> Not only that, but the practice has amply demonstrated that personalisation not only aims to exploit users' vulnerabilities, but also causes real irrational behaviour as happened in 2014 when Facebook manipulated millions of users' newsfeeds to alter the emotional content of posts. This episode clearly demonstrated that human feelings can be deliberately manipulated by some specific posts<sup>10</sup> and, consequently, even a normally attentive and circumspect subject – answering to the canon of the 'average' consumer – runs the risk of being exposed to practices that have the capacity, by their effectiveness, to make him vulnerable.<sup>11</sup>

However, even though the risks arising from the profiling and personalisation of digital content are obvious, the current European legislation does not seem to be able to provide effective tools to prevent corporate abuse,<sup>12</sup> since information obligations are no longer sufficient; on the contrary, large information obligations are less effective and may even

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Daniel Kahneman, 'Judgment under Uncertainty: Heuristics and Biases' (1974) 185(4157) *Science* 1124; Robert B Zajonc, 'Feeling and thinking: Preferences need no inferences' (1980) 35 *American Psychologist* 151.

<sup>8</sup> For more, see Dagmar Schuller and Björn W Schuller, 'The age of artificial emotional intelligence' (2018) 51(9) *Computer* 38.

<sup>9</sup> Martin Ebers, 'Regulating AI and Robotics' in Martin Ebers and Susana Navas (eds), *Algorithms and Law* (Cambridge University Press 2020) 71, where the author says that: 'In this regard, several studies by researchers from the University of Cambridge have shown that the analysis of (neutral) Facebook "likes" provides far-reaching conclusions about the personality of an individual. [...] With the input of even more Facebook "likes", the algorithm was able to evaluate a person better than their friends, parents, and partners could, and could even surpass what the person thought they knew about themselves'.

<sup>10</sup> Cathy O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy* (Penguin Books 2017) 105 ff.

<sup>11</sup> Jon D Hanson and Douglas A Kysar, 'Taking Behavioralism Seriously: The Problem of Market Manipulation' (1999) 74(3) *New York University Law Review* 630, 637. The authors speak of 'a new source of market failure' in the sense that: 'Rather, it is that manufacturers have incentives to utilise cognitive biases actively to shape consumer perceptions throughout the product purchasing context and independently of government requirements. Advertising, promotion and price setting all become means of altering consumer risk perceptions'.

<sup>12</sup> In this sense, see Ebers (n 9) 75. The author argues that: 'Existing European consumer and data protection law as well as national contract law arguably fail to provide sufficient instruments to effectively sanction such behaviour'. It has to be said, however, that the profiling of users through the collection of personal data (often particularly sensitive data) also raises urgent data protection issues. However, this topic goes beyond the scope of this contribution and, therefore, it must be assumed that the collection of data and their processing for profiling purposes has been carried out in full compliance with the GDPR. In any case, please refer to Frederike Kaltheuner and Elettra Bietti, 'Data is power: Towards additional guidance on profiling and automated decision-making in the GDPR' (2018) 2(2) *Journal of Information Rights, Policy and Practice* <<https://jirpp.winchesteruniversitypress.org/articles/10.21039/irpandp.v2i2.45>> accessed 01 March 2024; Reuben Binns and Michael Veale, 'Is that your final decision? Multi-stage profiling, selective effects, and Article 22 of the GDPR' (2021) 11(4) *International Data Privacy Law* 319 ff; Sandra Wachter, 'Normative challenges of identification in the Internet of Things: Privacy, profiling, discrimination, and the GDPR' (2018) 34(3) *Computer Law & Security Review* 436; Alžběta Solarczyk Krausová, 'Online Behavior Recognition: Can We Consider It Biometric Data under GDPR?' (2018) 12(2) *Masaryk University Journal of Law and Technology* 161; Federico Galli, 'Online Behavioural Advertising and Unfair Manipulation Between the GDPR and the UCPD' in Martin Ebers and Marta Cantero Gamito (eds), *Algorithmic Governance and Governance of Algorithms: Legal and Ethical Challenges* (Springer International Publishing 2021); Elena Gil González and Paul De Hert, 'Understanding the legal provisions that allow processing and profiling of personal data – an analysis of GDPR provisions and principles' (2019) 19 *ERA Forum* 597.

generate the opposite ‘Overload effect’.<sup>13</sup> Therefore, it is not just a question of ensuring that the user knows all the elements needed to make a choice but that he actually understands them. Moreover, it is not a matter of providing as much information as possible (with a view to formal transparency only) but of ensuring the quality of the information provided in the peculiar digital environment (algorithmic transparency).

## 1.2 THE NEW PLATFORM SOCIETY TOWARDS A ‘SURVEILLANCE CAPITALISM’

Given the extreme heterogeneity of the phenomenon, there is currently no unambiguously accepted definition of a ‘platform’.<sup>14</sup>

Nevertheless, it was possible to identify some features that seem to unite most platforms. In particular, it was emphasised<sup>15</sup> that (i) they perform an intermediary function because they allow different groups of users (consumers, professionals, workers, service providers, producers) to interact with each other; (ii) they make it possible to reduce transactional costs such as those arising from the search for the information needed to make a purchase or those dependent on disputes in the event of non-performance or defective products; (iii) they are designed to constantly stimulate user involvement in order to obtain ever greater amounts of data; (iv) they generate barriers to market entry and, in particular, the so-called ‘network effects’, because the more final consumers use the platform, the more professionals will also use it and vice versa; (v) the platform economy is a business model based entirely on a reputational system that customers rely on to steer them towards certain products or services instead of others; finally, (vi) it is a model managed (almost) entirely by the algorithm, which enables it to capture, process and control every user activity in real time.<sup>16</sup>

This last element is, in fact, what increases the economic power of platforms. In other words, algorithms allow providers to collect and process huge amounts of information, both the information provided by users through their consent and the so-called ‘behavioural’

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<sup>13</sup> Omri Ben-Shahar and Carl E Schneider, *More Than You Wanted to Know. The Failure of Mandated Disclosure* (Princeton University Press 2014).

<sup>14</sup> Sersia Kanikka and S K Sasikumar, ‘Digital Platform Economy: Overview, Emerging Trends and Policy Perspectives’ (2020) 61(3) *Productivity* 336; Cusumano, Gawer, and Yoffie (n 3); Ruonan Sun, Shirley Gregor, and Byron Keating, ‘Information technology platforms: Definition and research directions’ (2016) arXiv preprint arXiv:160601445; Juan Manuel Sanchez-Cartas and Gonzalo León, ‘Multisided platforms and markets: A survey of the theoretical literature’ (2021) 35(2) *Journal of Economic Surveys* 452. Among the various proposals, of particular interest is that of José Van Dijck, Thomas Poell, and Martijn De Waal, *The Platform Society: Public Values in a Connective World* (Oxford University Press 2018). The authors define the platform as ‘a programmable architecture designed to organise interactions between users’ and point out that ‘a platform is fuelled by data, automated and organised through algorithms and interfaces, formalised through ownership relations driven by business models, and governed through user agreements’. However, there are those who have proposed adopting a functional approach to the problem, advancing the need to focus attention not so much on the creation of a general definition but, rather, on the different criteria by which to classify the various types of platforms, including, for instance, the activities and functions they serve; their sources of revenue and the business model they follow; the way they use and exploit data; and the level of control they exercise over users’ activities. For an in-depth study, see Andrea Bertolini, Francesca Episcopo, and Nicoleta Cherciu, *Liability of Online Platforms* (European Parliamentary Research Service 2021) III ff.

<sup>15</sup> Frank Nagle, Robert Seamans, and Steven Tadelis, ‘Transaction cost economics in the digital economy: A research agenda’ (2020) Harvard Business School Strategy Unit Working Paper No 21-009.

<sup>16</sup> See Alex J Wood et al, ‘Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy’ (2019) 33(1) *Work, Employment and Society* 56, 75.

information. The latter comes from the tracking of users' online activity and allows them to study their purchasing preferences in order to influence their behaviour through various commercial strategies.<sup>17</sup>

It is clear, then, that there are two main risks of this new 'surveillance capitalism':<sup>18</sup> on the one hand, the constant monitoring of the user, who is only considered as an inexhaustible source of data, and, on the other hand, the manipulation of their behaviour to the detriment of fundamental human values such as autonomy.<sup>19</sup>

### 1.3 GOING DEEPER: PROFILING AND PERSONALISATION OF ONLINE CONTENT

Today, almost all digital platforms use increasingly sophisticated and complex algorithms and AI systems to process the collected data and create responses tailored to users' needs and desires. Technological development has made it possible to move away from the 'ruled based' approach – centred on the logic of '*if then*' – in favour of machine learning. This means that algorithms are no longer limited to executing preordained commands, but can also make autonomous decisions based on the experience they gain from processing large amounts of data. In other words, they improve the accuracy of their responses thanks to the experience gained by adapting them to concrete circumstances. An even more advanced type of machine learning is deep learning, which is based on (artificial) neural networks, i.e. processors organised on several levels and interconnected.<sup>20</sup> This technology is currently the basis of many AI techniques. This is therefore well beyond classic mass communication – directed at an anonymous mass of recipients – because companies tailor their product and service offerings to the needs and desires of each specific consumer.

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<sup>17</sup> See Naveen Kumar et al, 'Detecting Review Manipulation on Online Platforms with Hierarchical Supervised Learning' (2018) 35(1) *Journal of Management Information Systems* 350; Susan Morgan, 'Fake news, disinformation, manipulation and online tactics to undermine democracy' (2018) 3(1) *Journal of Cyber Policy* 39; Cass R Sunstein, 'Fifty Shades of Manipulation' (2016) 1(3-4) *Journal of Marketing Behavior* 213; Patrick Todd, 'Manipulation' in Hugh LaFollette (ed), *The International Encyclopedia of Ethics* (Blackwell 2013); T Martin Wilkinson, 'Nudging and Manipulation' (2013) 61(2) *Political Studies* 341; Daniel Susser, Beate Roessler, and Helen Nissenbaum, 'Technology, autonomy, and manipulation' (2019) 8(2) *Internet Policy Review* <<https://policyreview.info/articles/analysis/technology-autonomy-and-manipulation>> accessed 01 March 2024.

<sup>18</sup> The term was coined by Shoshana Zuboff of Harvard University, see Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (Profile Books 2019); John Bellamy Foster and Robert W McChesney, 'Surveillance Capitalism: Monopoly-Finance Capital, the Military-Industrial Complex, and the Digital Age' (2014) 66(3) *Monthly Review* 1; Shoshana Zuboff, 'Big other: Surveillance Capitalism and the Prospects of an Information Civilization' (2015) 30(1) *Journal of Information Technology* 75; Brett Aho and Roberta Duffield, 'Beyond surveillance capitalism: Privacy, regulation and big data in Europe and China' (2020) 49(2) *Economy and Society* 187.

<sup>19</sup> Morgan (n 17); Edward H Spence, 'Ethics of Neuromarketing: Introduction' in Jens Clausen and Neil Levy (eds), *Handbook of Neuroethics* (Springer Dordrecht 2015); Kathryn T Theus, 'Subliminal advertising and the psychology of processing unconscious stimuli: A review of research' (1994) 11(3) *Psychology & Marketing* 271.

<sup>20</sup> For an in-depth look at how deep learning works, see Yann LeCun, Yoshua Bengio, and Geoffrey Hinton, 'Deep learning' (2015) 521 *Nature* 436; Ian Goodfellow, Yoshua Bengio, and Aaron Courville, *Deep Learning* (MIT Press 2016); John D Kelleher, *Deep Learning* (MIT Press 2019); Nicole Rusk, 'Deep learning' (2016) 13 *Nature Methods* 35; Kumar et al (n 17); Pramila P Shinde and Seema Shah, 'A Review of Machine Learning and Deep Learning Applications' (2018) *Fourth International Conference on Computing Communication Control and Automation (ICCUBEA)* 1, 4 ff.

The highly customised offer of a product or service is a multi-step process. First, algorithms collect the data that the user provides (when agreeing to the contractual terms and conditions or when signing up) as a form of ‘counter-performance’ for using the provider’s services.<sup>21</sup> In fact, the data provided with consent are not the only ones that are collected, since the algorithms also look at the traces left unconsciously by users while surfing online, such as the time they spend with the mouse cursor on a certain product before proceeding with the purchase.

From this information then begins the activity of consumer profiling. This is defined by the Data Protection Regulation (GDPR) as:

any form of automated processing of personal data to evaluate certain personal aspects relating to a natural person, in particular to analyse or predict aspects concerning that natural person’s performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements.<sup>22</sup>

According to this definition, algorithms process all personal data collected to analyse consumer behaviour and preferences and, in doing so, create digital profiles of consumers. At this point, it becomes extremely easy for companies to devise marketing strategies that are much more effective than traditional ones precisely because they are tailored to consumers’ preferences and behaviour. We speak, not by chance, of ‘customization’ of content, i.e. the ‘strategic creation, modification and adaptation of content and distribution to optimise the fit with personal characteristics, interests, preferences, communication styles, and behaviours’.<sup>23</sup>

Content profiling and personalisation are not practices to be avoided *per se*, because they certainly bring many benefits to the market. Indeed, thanks to them, companies can understand and study which products and services consumers want, and which best suit their needs. Not only that, but it also gives companies the incentive to constantly improve their services to ensure that platform users have the best possible shopping experience. On the other hand, consumers can spend less time searching for information on products and services because they only receive advertisements and offers of what they really want to buy or need at that moment.<sup>24</sup> One need only think, for instance, of Amazon’s ‘You may also

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<sup>21</sup> Here we open the age-old debate on the monetisation of personal data and their economic nature. Not being the subject of this contribution, let us refer to Mohammad S Najjar and William J Kettinger, ‘Data Monetization: Lessons from a Retailer’s Journey’ (2013) 12(4) MIS Quarterly Executive 213; Payam Hanafizadeh and Mohammad Reza Harati Nik, ‘Configuration of Data Monetization: A Review of Literature with Thematic Analysis’ (2020) 21 Global Journal of Flexible Systems Management 17; Petri Parvinen et al, ‘Advancing data monetization and the creation of data-based business models’ (2020) 47 Communications of the association for information systems 25; Alberto De Franceschi, *La vendita di beni con elementi digitali, vol 9* (vol 9 Diritto scienza tecnologia law science, Edizioni Scientifiche Italiane 2019).

<sup>22</sup> Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1 (GDPR), Art 2(4).

<sup>23</sup> Nadine Bol et al, ‘Understanding the Effects of Personalization as a Privacy Calculus: Analyzing Self-Disclosure Across Health, News, and Commerce Contexts’ (2018) 23(6) Journal of Computer-Mediated Communication 370, 373.

<sup>24</sup> Several statistical studies have shown that 48% of consumers spend more when the experience is personalised and that 74% of consumers experience a sense of frustration when the content they are shown

like' section where one can find a series of products that algorithms consider to be in line with the user's personal preferences and tastes or that, based on (highly) probabilistic inferences, are considered to be of interest for future purchases.

Any further reflection on the profiling and personalisation of online content poses the need to strike the right balance between market development and the protection of consumers' decision-making autonomy. In this perspective, the next section is then dedicated to Directive 2005/29/EC (UCPD)<sup>25</sup> as it has always been considered a true pillar of EU consumer law. Although it remains a very important tool against such algorithmic commercial practices, this analysis will show how several critical issues can no longer be ignored, given the rapid development of AI systems in recent years.

## 2 PROFILING, PERSONALISATION, AND THE PROTECTION OF CONSUMERS IN THE EUROPEAN UNION

### 2.1 PROFILING AND PERSONALISATION PRACTICES UNDER THE UCPD: A CRITICAL ANALYSIS

The most relevant regulation to the topic is the UCPD, which aims to protect precisely the ability of consumers to make informed and considered choices from those commercial practices that, by impacting on human autonomy, are unfair (and are therefore prohibited).

Although it does not explicitly contain provisions for such activities, the directive can be considered to apply because it provides a very general definition of commercial practice. Indeed, it covers any action, omission, conduct or commercial communication (including advertising and marketing) by a trader to promote, sell or supply a certain product to consumers.<sup>26</sup> This definition includes, as confirmed by the CJEU, all commercial communications between professionals and consumers, including 'one-to-one commercial practices'. It thus also includes highly personalised ones.<sup>27</sup>

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online has nothing to do with what they are looking for. On this point, see Keith Bradley, Rachael Rafter, and Barry Smyth, 'Case-Based User Profiling for Content Personalisation' in Peter Brusilovsky, Oliviero Stock, and Carlo Strapparava (eds), *Adaptive Hypermedia and Adaptive Web-Based Systems* (Springer Berlin 2000); Stephen Searby, 'Personalisation – an Overview of its Use and Potential' (2003) 21(1) *BT Technology Journal* 13; Alastair Reed et al, 'Radical Filter Bubbles: Social Media Personalisation Algorithms and Extremist Content' (2019) *Global Research Network on Terrorism and Technology: Paper No 8* <[https://static.rusi.org/20190726\\_grntt\\_paper\\_08\\_0.pdf](https://static.rusi.org/20190726_grntt_paper_08_0.pdf)> accessed 01 March 2024; Joanna Strycharz and Bram Duivenvoorde, 'The exploitation of vulnerability through personalised marketing communication: are consumers protected?' (2021) 10(4) *Internet Policy Review* <<https://policyreview.info/articles/analysis/exploitation-vulnerability-through-personalised-marketing-communication-are>> accessed 01 March 2024.

<sup>25</sup> 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 (UCPD).

<sup>26</sup> UCPD, Art 2(d). It should be noted that the UCPD was recently amended by the so-called 'Modernisation Directive' (Directive 2019/2161/EU), which aims to adapt consumer law to technological advancement. However, no provision was introduced that expressly deals with the personalisation of content. On this point, see Christian Twigg-Flesner, 'Bad Hand? The "New Deal" for EU Consumers' (2018) 15(4) *Zeitschrift für das Privatrecht der Europäischen Union* 166; Marco Loos, 'The Modernisation of European Consumer Law: A Pig in a Poke?' (2019) 27(1) *European Review of Private Law* 113.

<sup>27</sup> See Case C-388/13 *UPC Magyarország* EU:C:2015:225.

Wishing to protect the freedom of decision of consumers, the legislation in question places a generalised prohibition only on practices that are ‘unfair’, because they are contrary to professional diligence and in any case false or likely to distort the economic behaviour of the ‘average’ consumer to whom the same commercial practice is directed.<sup>28</sup>

In addition to this general clause, two other macro-categories of unfair commercial practices are then identified, respectively misleading ones (divided in turn into misleading acts and omissions in Arts 6 and 7) and aggressive ones in Arts 8 et seq. To these two sub-categories are then added those of the well-known ‘black-list’ which are always considered unfair (and consequently always prohibited) without any possibility of proving the contrary.<sup>29</sup>

Among these, the profiling and personalisation of online content fall within the scope of aggressive business practices, i.e. those that through coercion, harassment, undue influence or physical force are capable of restricting or significantly limiting the freedom of choice or economic behaviour of the average consumer who thereby takes a business decision that he or she would not otherwise have taken.<sup>30</sup> However, this subsumption is not as straightforward as it seems. Certainly, by exploiting human cognitive weaknesses, they induce consumers to engage in certain purchasing behaviour through undue psychological pressure that is often completely unconscious. However, this pressure must be such as to fall within the concept of undue influence, which the UCPD defines as ‘exploiting a position of power in relation to a consumer so as to apply pressure, even without using or threatening to use physical force, in a way which significantly limits the consumer’s ability to make an informed decision’.<sup>31</sup> However, verifying whether in concrete terms such pressure has led to a conditioning such that it has significantly limited the consumer’s freedom of choice is not always so easy, considering that the very purpose of such practices is precisely to identify human weaknesses and exploit them to the company’s advantage in a totally unconscious manner. This makes it difficult to distinguish whether or not the pressure exerted on the user by such practices falls within the margin that the legislation itself allows.

Verification that there has indeed been undue influence is not in itself sufficient, in fact, to determine the unfairness of the practice, but it is also necessary that that influence has been ‘considerable’: that is to say, such as to have prompted the user to take a commercial decision that he would not otherwise have taken. This means that, a contrario, where there has been psychological pressure but not sufficient to considerably alter the consumer’s behaviour, it is not relevant.<sup>32</sup> It is necessary, then, that the undertaking has exploited its

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<sup>28</sup> UCPD, Art 5. It has been observed that this legislation has an ‘intersecting circles’ structure. On this point, see Giovanni De Cristofaro, ‘La nozione generale di pratica commerciale “sleale” nella direttiva 2005/29/CE’ in *Studi in onore di Nicolò Lipari* (Giuffrè 2008) 744 ff; Maurizio Fusi and Paolina Testa, *Diritto e pubblicità* (Lupetti 2006) 438; Bram B Duivenvoorde, *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (1st edn, Springer Cham 2015) 244 ff.

<sup>29</sup> UCPD, Annex I. See Geraint Howells, Hans-Wolfgang Micklitz, and Thomas Wilhelmsson, ‘Towards a Better Understanding of Unfair Commercial Practices’ (2009) 51(2) *International Journal of Law and Management* 69.

<sup>30</sup> UCPD, Art 8.

<sup>31</sup> UCPD, Art 2(j). Cf. Strycharz and Duivenvoorde (n 24).

<sup>32</sup> Cf. UCPD, recital 6. For a comment, see Giuseppe B Abbamonte, ‘The Unfair Commercial Practices Directive and its General Prohibition’ in Stephen Weatherill and Ulf Bernitz (eds), *The Regulation of Unfair Commercial Practices under EC Directive 2005/29: New Rules and New Techniques* (1st edn, Hart Publishing 2007) 24 ff.



position of superiority to its own advantage, and that in doing so it has applied such pressure on the consumer as to cause ‘the forced conditioning of the consumer’s will’.<sup>33</sup>

## 2.2 THE INADEQUACY OF THE ‘AVERAGE CONSUMER’ PARADIGM: A NEED FOR A RECONSIDERATION?

The difficulty of such syndication is further aggravated by the extreme opacity of the functioning of algorithms and the ability of AI to be increasingly efficient and fast in adapting content to the data collected and inferences drawn. This, too, leads to various empirical problems in identifying the very fine line between the psychological pressure that is tolerated by the law and that which goes far beyond.<sup>34</sup>

As is well known, the paradigm against which to measure the unfairness of a commercial practice is that of the average consumer, defined by the CJEU as a subject who is ‘reasonably informed, observant and circumspect’.<sup>35</sup> This model assumes not only that the subject is aware of the persuasive intent of the advertisement, but also that they are familiar with the workings of the algorithm in such a way as to be able to adjust their behaviour rationally. This assumption does not, however, take into account that the algorithms’ ability to detect biases and exploit them to the company’s advantage only further reinforces the information asymmetry between the negotiating parties,<sup>36</sup> eventually turning even the average consumer into a vulnerable one.<sup>37</sup>

The EU has long since recognised that some consumers, by their mental or physical infirmity, age, or naivety, are particularly vulnerable and therefore need even more stringent protection.<sup>38</sup> This means that vulnerability is considered with respect to a series of well-designated subjects while excluding all those hypotheses in which it derives from specific factual and temporary circumstances. It is no secret that companies have used highly customised messages based on the psychological state or factual situation of the consumer at that given moment. Suffice it to say, for example, that the company Uber was repeatedly accused of charging higher prices in bad weather or when the user’s phone battery was low

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<sup>33</sup> Opinion of AG Campos Sánchez-Bordona in Joined Cases C-54/17 and C-55/17 *AGCM v Wind and Vodafone* EU:C:2018:377 para 65.

<sup>34</sup> Cf. also Strycharz and Duivenvoorde (n 24).

<sup>35</sup> On the definition of the average consumer, please refer to Ludovica Sposini, ‘Gli obblighi informativi del professionista e la garanzia commerciale del produttore nella giurisprudenza della Corte di Giustizia. Alcuni spunti a partire dal caso Absolut’ (2023) 1 *Pactum* 135.

<sup>36</sup> Laura Ammannati, ‘Per Una “Nuova” Regolazione Delle Piattaforme Digitali’ (2021) 10 *Astrid Rassegna* 1, 8, where the author said that: ‘In particolare, l’uso di algoritmi di machine learning accresce l’opacità dei meccanismi e della decisione così che non è agevole verificare se il sistema ha reso possibili esiti scorretti o discriminazioni anche grazie all’utilizzo di dati personali e bias cognitivi e comportamentali degli utenti’.

<sup>37</sup> Strycharz and Duivenvoorde (n 24) 11, where it is said that: ‘In particular, the average consumer benchmark disregards that all people may experience vulnerability in some situations’. In the same sense, see also Natali Helberger, ‘Profiling and Targeting Consumers in the Internet of Things – A New Challenge for Consumer Law’ in Reiner Schulze and Dirk Staudenmayer (eds), *Digital Revolution: Challenges for Contract Law in Practice* (Harvard University Press 2016) 22, where the author says that: ‘If one defines “vulnerability” as the “limited ability to deal with commercial practices” one may even wonder at which point digital marketing practices, and in particular if they are based on intrinsic data analysis, opaque algorithms and sophisticated forms of persuasion, turn the normally “average” consumer into a vulnerable one. So while it may be that the quantified consumer is technologically more sophisticated and empowered, it is similarly possible that as the “profiled consumer” she is also more credulous and defenseless against new, more sophisticated forms of personalised marketing in the Internet of Things’.

<sup>38</sup> UCPD, Art 5(3).

because in such situations the consumer's need for the service was greater and, consequently, so was his or her willingness to pay a higher amount.<sup>39</sup>

As has been correctly observed,<sup>40</sup> even with reference to Article 9 UCPD it is evident that the exploitation of the psychological state or weaknesses of consumers cannot integrate, except with difficulty and by way of interpretation, an aggressive commercial practice. This provision requires that, for the assessment of the existence of coercion, harassment or undue influence, one must consider, among other things, 'the exploitation by the trader of any specific misfortune or circumstances of such gravity as to impair the consumer's judgement, of which the trader is aware, to influence the consumer's decision with regard to the product'.<sup>41</sup>

Already, from these considerations, it is possible to realise that the UCPD, although it is a piece of legislation that still plays a central role in consumer protection, seems to leave room for those practices that exploit human vulnerabilities and, in so doing, allow algorithms to circumvent the prohibitions imposed by the legislation.

### 3 PROFILING AND PERSONALISATION OF ONLINE CONTENT BETWEEN RECENT DEVELOPMENT AND FUTURE PERSPECTIVES

#### 3.1 A FIRST STEP FORWARD: THE (AMENDED) CONSUMERS RIGHTS DIRECTIVE

The second relevant piece of regulation is the Consumer Rights Directive (Directive 2011/83/EU, henceforth CRD).<sup>42</sup> It has recently been reformed by Directive 2019/2161/EU, known as the 'Modernisation Directive' because it aims to bring consumer law up to date with technological development.<sup>43</sup> This latter introduced specific provisions with regard to the particular business practice of price customisation, essentially introducing new disclosure requirements for companies that use it.<sup>44</sup> In particular, it is permissible for

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<sup>39</sup> Strycharz and Duivenvoorde (n 24) 8 ff.

<sup>40</sup> *ibid* 16.

<sup>41</sup> UCPD, Art 9(c).

<sup>42</sup> 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 (CRD).

<sup>43</sup> 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 OJ L328/7.

<sup>44</sup> CRD, recital 45 states that:

'Traders may personalise the price of their offers for specific consumers or specific categories of consumer based on automated decision-making and profiling of consumer behaviour allowing traders to assess the consumer's purchasing power. Consumers should therefore be clearly informed when the price presented to them is personalised on the basis of automated decision-making, so that they can take into account the potential risks in their purchasing decision. Consequently, a specific information requirement should be added to Directive 2011/83/EU to inform the consumer when the price is personalised, on the basis of automated decision-making. This information requirement should not apply to techniques such as "dynamic" or "real-time" pricing that involve changing the price in a highly flexible and quick manner in response to market

businesses to customise the prices of their offers for individual consumers or specific categories through automated processes or by profiling their behaviour. In this case, however, the trader must inform the recipient that the price has been automatically personalised, so that the latter is aware of this and can carefully weigh up the consequences of concluding the commercial transaction.<sup>45</sup> Therefore, this change undoubtedly represents an important step forward in the regulation of commercial practices based on profiling and algorithmic personalisation, but it presents several critical issues that risk undermining its effectiveness.

Specifically, it appears from the letter of the rule that the company may merely inform the consumer that that price has been customised by automated means, without, however, having to disclose to him what data has been processed and how the customised price differs from that applied to others.<sup>46</sup> Although the informational remedy is (still) indispensable to guarantee the consumer's freedom of choice, it is doubtful – all the more so after the results of cognitive science – that it is *ex se* sufficiently effective. Indeed, it must be noted that the imposition of a general obligation to inform the recipient that that price has been personalised by an algorithm on the basis of the data collected and on his online behaviour does not allow him, in any case, to understand the data based on which that personalisation was made. The consequence of this is that he is not put in a position to actually understand what biases and inferences the algorithm has detected – and subsequently exploited – to work out the price.

This issue is particularly evident in the digital environment, where the very workings of the algorithms are unclear, considering also all the limitations to disclosure obligations posed by trade secrecy.<sup>47</sup>

### 3.2 A SECOND STEP FORWARD: THE DIGITAL SERVICES ACT

An undeniable step forward is the very recent Regulation 2022/2065/EU (the 'Digital Services Act'(DSA))<sup>48</sup> aimed at creating a safer and fairer digital environment and which provided for new and more stringent disclosure, transparency, and accountability obligations for platforms (especially very large platforms and gatekeepers).<sup>49</sup> To achieve these results, on the one hand, Article 38 requires platform operators and very large search engines using recommendation systems to provide at least one option not based on a recommendation system or profiling (the so-called 'option not to be profiled') and, on the other hand, Article 26, regarding online advertising, requires digital service providers to give the user all relevant

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demands when those techniques do not involve personalisation based on automated decision-making'.

<sup>45</sup> UCPD, Art 4.

<sup>46</sup> Strycharz and Duivenvoorde (n 24) 17-18.

<sup>47</sup> Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press, 2015) 320 ff.

<sup>48</sup> 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 (DSA).

<sup>49</sup> DSA, recital 72 states that: 'Transparency puts external pressure on gatekeepers not to make deep consumer profiling the industry standard, given that potential entrants or start-ups cannot access data to the same extent and depth, and at a similar scale'.

information on the main parameters (criteria and reasons for relative importance) used to identify the recipient of the advertising.

Once again, it must be noted that imposing a general obligation to describe the main parameters used cannot alone effectively guarantee full user awareness. This assertion is justified not only by cognitive studies that have shown that information obligations have a limited effect in reducing the information gap between the two parties,<sup>50</sup> but above all by the consideration that describing only the ‘main parameters’ is likely to result in mere formal compliance on the part of companies. The only result will therefore be a very long and technical list of parameters that will only serve to confuse the consumer and which, in most cases, will not even be read.

However, the DSA imposes to very large online platforms to conduct risk assessments for their systems, including those which are used for personalised recommendations. In this assessment, the provider must assess systemic risks stemming from the design, including algorithmic systems, functioning and use made of their services; at least once every year; and prior to deploying new functionalities.<sup>51</sup> This provision also clarifies that ‘systemic risk’ must include illegal content and actual or foreseeable adverse effects on fundamental rights (such as human dignity and consumer protection).

This is an important step forward in the protection of consumers against the governance of algorithms, since the imposition of risk assessment obligations – although limited to very large online platforms – shows a change of perspective in addressing those practices which exploit human vulnerabilities. In particular, the fact that the EU legislator requires to providers to consider foreseeable systemic risks shows the will to develop a new ‘long-term thinking’ in the industry.<sup>52</sup> As already noted,<sup>53</sup> imposing risk assessment obligations instead of information requirements presents some relevant advantages since they can mitigate harm upstream when products and services are not yet placed on the market. However, even this tool presents some concerns, since it mainly relies on self-assessment. Again, providers of online platforms play a key role even in the enforcement and application of legal provisions.

### 3.3 FINAL CONSIDERATIONS ON THE FUTURE OF CONSUMER PROTECTION AGAINST ALGORITHMS: IS IT ENOUGH?

As has emerged from this discussion, it is essential to ensure adequate protection for consumers against the dangers of profiling and personalisation of content in order to avoid prejudice to their freedom of decision-making. At the same time, it has been shown that the current EU regulatory framework does not always seem to be able to provide the best possible tools and, indeed, despite the fact that consumer discipline remains a fundamental pillar, this discussion has shown that such algorithmic practices have the potential to be

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<sup>50</sup> Sandra Wachter, ‘Affinity Profiling and Discriminatory By Association in Online Behavioral Advertising’ (2020) 35(2) *Berkeley Technology Law Journal* 367 ff; Ben-Shahar and Schneider (n 13).

<sup>51</sup> DSA, Art 34.

<sup>52</sup> Sébastien Fassiaux, ‘Preserving Consumer Autonomy through European Union Regulation of Artificial Intelligence: A Long-Term Approach’ (2023) 14(4) *European Journal of Risk Regulation* 710, 728 ff.

<sup>53</sup> *ibid* 725.

detrimental in several respects. Therefore, it is necessary to adopt a holistic approach, i.e. a system of instruments that, as a whole, can guarantee comprehensive consumer protection.

First, a preliminary intervention is to interpret the UCPD in an evolutionary sense so as to include expressly – and not only by interpretation – also these commercial practices within its scope.

Another intervention could be in the direction of introducing disclosure requirements tailored to the specific risks that profiling and content personalisation bring. For instance, the imposition of a general duty to inform the consumer about the fact that that product or price has been personalised as well as the provision of a generic description of how the algorithm works seems neither sufficient nor effective. On the contrary, it might be more appropriate to introduce a specific duty of disclosure of the data and behavioural traits based on which the profiling and personalisation were carried out. On closer inspection, this measure would substantially implement the principle of transparency, the cornerstone of all consumer legislation.

To truly implement this principle, it is necessary to reconsider consumer law from a behavioural perspective to understand that, even if normally circumspect and careful, when it comes to commercial practices based on profiling and algorithmic personalisation, the individual finds himself vulnerable. Following this approach, one possibility could be to adapt the very concept of vulnerability to the digital environment, since this creates new forms of vulnerability that are often temporary and contextualised with respect to the specific situation.<sup>54</sup> Aware of this issue, in late 2021 the Commission has adopted some guidelines on the interpretation of the UCPD with a specific reference to the concept of vulnerability in the data-driven practices, stating that it should be better conceived as ‘dynamic and situational’.<sup>55</sup> Although this recommendation is welcome since it expresses the awareness of adapting this traditional category to the digital world, its concrete application in cases is still to be analysed by the CJEU.<sup>56</sup>

Along these lines, there is also the proposal that it would be appropriate to introduce an obligation for companies using such practices to expressly disclose which categories of users have been targeted and against which parameters they have been chosen.<sup>57</sup> This latter solution would have the undoubted advantage of making it easier for judicial and supervisory authorities to determine which group to consider when assessing the unfairness or otherwise of such a practice. As we have already seen, this obligation has been provided for in Article 30 of the DSA whereby (only) the largest platforms must publish a database containing the

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<sup>54</sup> Nadine Bol et al, ‘Vulnerability in a tracked society: Combining tracking and survey data to understand who gets targeted with what content’ (2020) 22(11) *New Media & Society* 1996; Strycharz and Duivenvoorde (n 24) 22; Philipp Hacker, ‘Manipulation by algorithms. Exploring the triangle of unfair commercial practice, data protection, and privacy law’ (2021) 29 *European Law Journal* 142; Natali Helberger et al, ‘Choice Architectures in the Digital Economy: Towards a New Understanding of Digital Vulnerability’ (2022) 45 *Journal of Consumer Policy* 175; Fabrizio Esposito and Mateusz Grochowski, ‘The Consumer Benchmark, Vulnerability, and the Contract Terms Transparency: A Plea for Reconsideration’ (2022) 18(1) *European Review of Contract Law* 1.

<sup>55</sup> 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 C/2021/9320 [2021] OJ C526/1.

<sup>56</sup> Fassiaux (n 52). See also Christoph Busch, ‘Self-regulation and regulatory intermediation in the platform economy’ in Marta Cantero Gamito and Hans-Wolfgang Micklitz (eds), *The Role of the EU in Transnational Legal Ordering: Standards, Contracts and Codes* (Edward Elgar 2020).

<sup>57</sup> Strycharz and Duivenvoorde (n 24) 19-22.

targeted consumers for each advertisement displayed. This provision, although it should also be extended to other operators, represents a valuable tool to prevent the exploitation of users' vulnerabilities.

In conclusion, the development of technologies capable of recognising human emotions and exploiting them to guide consumer behaviour requires the presence of appropriate legislation to ensure a reliable system that respects fundamental values. Although the current regulatory framework, and in particular the UCPD, undoubtedly provides effective protection for the consumer, there are nonetheless several problematic nodes that need more attention from the EU legislator and that stem from the impact of algorithms with traditional legal categories.<sup>58</sup>

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<sup>58</sup> Gabriele Spina Ali and Ronald Yu, 'Artificial Intelligence between Transparency and Secrecy: From the EC Whitepaper to the AIA and Beyond' (2021) 12(3) *European Journal of Law and Technology*, 5-6 <<https://ejlt.org/index.php/ejlt/article/view/754>> accessed 01 March 2024.

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