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**Online Choice Architecture and Behavioral Economics –  
The Role for Antitrust Law**

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## I. The State of Things and The State of The Law

Behavioral economics, as well as behavioral theory in general, has been around for half a century. By now, three Nobel prizes have been granted to academics that dedicated their careers to behavior studies.<sup>1</sup> Still, it is uncanny how little behavioral premises have been incorporated into regulation and antitrust or used to concretely assess evolving market realities. As highlighted by Akerlof and Shiller, behavioral economics is relevant not because it shows the irrationality of human beings and the impossibility to predict their actions – on the contrary, this field is relevant for it allows for better prediction of human behavior. Academics have long been able to identify patterns in irrationality<sup>2</sup> – for example, the cost of “free,” procrastination, and decision paralysis.<sup>3</sup> For that same reason, behaviorism facilitates rather than impedes economic debates that are essential in drafting norms. If individuals do not respond as rational agents that are always maximizing their own interests, but frequently fail to reach that goal for recurring reasons, then one can – and should – use that information to design legislation that better protects consumers and incentivizes competition.

It is in that light and with that background that this paper approaches the debate regarding whether online choice architecture (OCA) should be visualized and internalized by policy makers and, notably, courts. The foundations of OCA rely heavily on behavioral economics. The concept of choice architecture itself was first drafted by Thaler and Sunstein, notable economists and legal scholars in the field.<sup>4</sup> The basic assumption is that though choice architecture is somewhat unavoidable – items must be placed on aisles in supermarkets, otherwise consumers will not be able to buy them, just as candidates have to be placed on a ballot so voters can choose among them. The design choice can certainly be employed for better or worse purposes. Because individuals have biases, dominant firms can learn to take advantage of such biases in designing choice architecture. The notable example provided by Thaler, Sunstein & Balz is the director’s power to manipulate the placement of food items in a cafeteria and the different choices of food display that could play into various financial and health incentives.

If courts fail to internalize these concepts, they will very likely arrive at the wrong answer in cases that require an assessment of how economic agents act and how individuals respond to such actions. If users respond to defaults, even if they understand that other available options might be better suited for their needs, users overvalue simplicity and the ease of the standard option – this must be taken into account when assessing competition in a marketplace. For example, can consumers easily switch to a competitor? Does the default position pose an insurmountable entry barrier? Do consumers understand there is no aftermarket competition?

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<sup>1</sup> Herbert Simon was awarded the Nobel Prize in Economic Sciences in 1978, followed by Daniel Kahneman and Vernon Smith in 2002, and more recently by Richard H. Thaler, in 2017.

<sup>2</sup> Akerlof, G. A., & Shiller, R. J. (2015). *Phishing for phools: The economics of manipulation and deception*. Princeton University Press.

<sup>3</sup> Ariely, D. (2008). *Predictably Irrational*. New York: HarperCollins.

<sup>4</sup> Thaler, R. H., & Sunstein, C. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New Haven, CT: Yale University Press.

Again, internalizing behavioral insights does not amount to saying consumers are irrational and that economics has failed. Quite the contrary, behavioral economics shows how real consumers make decisions and follow patterns, meaning its employment enhances rather than hinders predictability.<sup>5</sup> Therefore, this paper will show how seriously taking behaviorism into account and applying its lessons to specific aspects of digital markets – namely OCA – is essential in unveiling how commercial practices focused on designing platform interfaces can amount to illicit actions. Law must not ignore the realities of the marketplace, including the actual consumers in that market, and must assess whether changes in markets would require changes in how law is interpreted in order to preserve the original meaning and objectives of the norms. As will be shown, that is precisely the case with OCA. Preserving competition by protecting consumer welfare requires courts to understand how consumers are being harmed, and what signals demonstrate that their welfare is being impaired. Holding on to proxies such as output to carry out that assessment will fail in markets where output is increased by preventing users from fully understanding what their options are, and especially in markets that deploy manipulation and toxicity to engage users.<sup>6</sup>

## II. Online Choice Architecture – What It Is and Why It Matters

The concept of choice architecture, as stated previously, has been around for decades. However, the deployment of this concept in digital markets is more recent. One could say that insights regarding the relevance of design in drafting choice in online environments have been discussed in reference to many expressions, such as dark patterns,<sup>7</sup> sludge,<sup>8</sup> and others.

What matters for the purpose of this paper is not providing an ironclad definition of each of these concepts, but rather understanding the general idea behind OCA, which is that online environments, just as any physical environment, must be designed. Items have to be displayed in some order, colors have to be chosen for each segment of a page, and so on. Just as it happens offline, how such choices are framed can lead to better or worse outcomes for users. A key distinction that elevates the complexity and the importance of this debate, is that online environments are much easier and less expensive to design and to experiment on. Designers can deploy thousands of A/B tests in online platforms that they would be unable to run offline.<sup>9</sup> The

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<sup>5</sup> Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 632 (1999).

<sup>6</sup> James N. Rosenquist, Fiona M. Scott Morton & Samuel N. Weinstein, *Addictive Technology and Its Implications for Antitrust Enforcement*, 100 N.C. L. REV. 431 (2022).

<sup>7</sup> For more on dark patterns see Arunesh Mathur, Mihir Kshirsagar, Jonathan Mayer, CHI '21: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems, May 2021, Article No.: 360, Pages 1-18, <https://doi.org/10.1145/3411764.3445610>

<sup>8</sup> For more on sludges, see Thaler, Richard H. "Nudge, not sludge." *Science* 361.6401 (2018): 431-431.

<sup>9</sup> A/B testing is an experimentation process, usually randomized, in which different versions of a given framework are tested and their performance is measured. See Optimizely. (n.d.). A/B testing. Retrieved May 19, 2023, from <https://www.optimizely.com/optimization-glossary/ab-testing/>

level of granularity of design options therefore exponentially increases. It is not only a matter of choosing if product 1 or product 2 will be placed first, but also a matter of what color will most engage users, what choice of words will be more appealing, and infinite other options. The difference is heightened by the fact that digital choice architects have more control over the environment, can simultaneously deploy different designs to different users, and, perhaps more importantly, several digital markets monetize attention, while physical markets monetize goods or services.

Looking at OCA through the lens of behavioral economics allows us to see how they intertwine, and how dominant firms can use OCA, with the help of behavioral biases, to accrue profit at the expense of both users and markets. As Akerlof and Shiller point out, we must be aware that economic agents will always take advantage of situations in which they can turn higher profits. If companies identify behavioral biases that would allow for business opportunities, history has shown that these economic agents will take such opportunities time and time again, as demonstrated by the 2008 financial crisis and the pharmaceutical industry.<sup>10</sup>

There is no reason to believe that companies will behave any differently in digital markets; in fact there is ample evidence that the same will likely happen to a worse degree. Studies have shown how platforms can deploy OCA in ways that may harm either users, markets, or both. Notably, reports on the topic by the U.K.'s Competition and Markets Authority (CMA) and the Organisation for Economic Cooperation and Development (OECD) compile evidence that classifies different methods by which such results may be reached. The OECD also provides some potential explanations on why deceptive practices deployed in online environments tend to cause more damage to consumers than analogous practices deployed offline. The OECD claims that businesses are more attuned to online opportunities for exploiting behavioral biases than they are to offline opportunities, but also that consumer behavior online is significantly different than it is offline. Online consumers are less attentive than their offline counterparts, process information less well, default more frequently into simple rules of thumb, and generally are more task oriented. These factors combine to make consumers more likely to ignore content and to underestimate manipulation when they are online as compared to when they are offline.<sup>11</sup>

Deployment of specific choices in online environments plays into particular behavioral biases, such as forced action, interface interference, or sneaking. Forced action involves dark patterns that force the consumer to disclose more personal information than necessary, due to being misled into believing that it's necessary in order to access a functionality.<sup>12</sup> Moreover, interface interference involves framing information to exploit biases, such as through visually obscuring information or preselecting options favorable to the business. Finally, sneaking dark

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<sup>10</sup> Akerlof, G. A., & Shiller, R. J. (2015). *Phishing for phools: The economics of manipulation and deception*. Princeton University Press.

<sup>11</sup> Page 12 of the report. See: (n.d.). Retrieved June 21, 2022, from <https://www.oecd-ilibrary.org/docserver/44f5e846-en.pdf?expires=1676924029&id=id&accname=guest&checksum=3B840D0BFF18D4D59F06A752511D28D0>

<sup>12</sup> (n.d.). Retrieved June 21, 2022, from <https://www.oecd-ilibrary.org/docserver/44f5e846-en.pdf?expires=1676924029&id=id&accname=guest&checksum=3B840D0BFF18D4D59F06A752511D28D0>

patterns hide, disguise, or delay providing information relevant to the consumer’s decision, usually regarding costs and exploiting limited attention and default bias. A more concrete example is if an online travel agency (OTA) chooses to display a message stating that this is the last available hotel room to a viewer, the OTA’s decision is exploiting a specific bias that individuals hold. The OTA understands that people tend to make decisions faster due to their fear of missing out.

As clarified by the CMA, the evidence report that accompanies the study published in April 2022 provides a compilation of OCA practices that are subdivided into three main categories: 1) choice structure, 2) choice information, and 3) choice pressure. The authority identified ten types of practice that fall within the first category, five that fall within the second, and six that fall within the third, for a total of twenty-one practices. The tables drafted by the authority are reproduced in Annex 1. The OECD identifies seven categories of dark patterns, and twenty-four practices in total. The table with a full description of these findings is available in Annex 2.

One example of OCA described by the CMA is virtual currency in gaming. It takes place when the platform makes options within its interface available solely for purchase with a made-up currency that the user must buy from the platform. What is interesting to note is that this practice is easily verifiable in several online games (examples range from Candy Crush to Call of Duty); however, it has also become increasingly common in social media. TikTok, for example, allows users to buy coins, which can be used to acquire “virtual gifts.”<sup>13</sup> Those gifts can be granted to content creators, as an expression of gratitude or appreciation, but also deployed to unlock challenges. The catch is that a TikTok coin does not correspond to the same amount in dollars (or euros, or reais, or any other real currency), meaning one TikTok coin is not one dollar, which can make it harder for the user to fully grasp how much she is spending. If, for instance, 20 TikTok coins cost 5.49 dollars, when using one coin, the user may not realize precisely how much she is actually paying.

Another example of the deployment of OCA is in ranking. Items are displayed to online users in specific orders, and that tends to affect how they choose to engage with that content. For instance, if an online travel agency places Hotel A first on its list, that listing tends to get more views and/or reservations. Sometimes the reasoning behind ranking is clear to users – for instance, if they know they can choose options to be displayed according to price, or according to reviews etc. – but sometimes it is not. The ranking might be purposefully designed to benefit the platform - for example if hotels that show up first are the ones that paid for placement.<sup>14</sup> The CMA highlights that the practice of ranking can also be used by firms for self-preferencing, by positioning their own items or items in which they have a financial interest on, first. The economic agents take advantage of the so-called “position bias,” which describes the “tendency of people to

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<sup>13</sup> <https://www.tiktok.com/legal/page/row/virtual-items/en>

<sup>14</sup> As the CMA further notes, even when users can change the order of items, it is frequent that they will not. See: DCTS Consumer Research Technical Report. (2017, May 4). DCTS Consumer Research Technical Report. <https://assets.publishing.service.gov.uk/media/590b3a92ed915d06b0000275/dcts-consumer-research-technical-report.pdf>

notice or interact with items in certain positions of lists with higher probability, regardless of the items' actual relevance."<sup>15</sup>

The OECD for its turn attempts to provide a list of the consolidated taxonomy of dark patterns, which can be found in scholarly research. One such example is the case of trick questions, which are questions that include intentional or obvious ambiguity. For instance, instead of asking a user whether she would like to accept a policy, the platform can ask whether she is sure she would not like to not accept it. Using a double negative makes the question harder to understand and, as research has shown, leads people to provide the incorrect answer (inconsistent with their actual desire.)<sup>16</sup> Ultimately, there is ample evidence that how information is presented has a relevant impact on how individuals react to it,<sup>17</sup> and that people are biased towards information that appears to be positive rather than negative (also known as the negativity bias).<sup>18</sup>

### **III. Harms to Markets Through Harm to Consumers – OCA and Anticompetitive Behavior**

From the previous sections, we hope it is sufficiently evident how OCA can impact consumers and digital markets. It may not be entirely clear, however, how that impact can be translated into competitive harm that should be addressed by antitrust law. That will be the focus of our final section.

In attempting to tackle that issue, this section will be subdivided into (i) An assessment of digital markets where OCA has already been considered relevant for competition. This will refer to the Google Android case in the European Union as well as to current debates regarding Google in at least one case in the United States. (ii) An assessment of attention markets, which are not the only platforms that deploy zero-cash priced models but are certainly one segment in which that characteristic is prominent and is particularly relevant for antitrust assessment of OCA and harm. (iii) A proposal on how to assess OCA practices within the FTC Section 5 enforcement framework.

#### *A. The Google Android Investigation and the Centrality of OCA*

As mentioned, the deployment of OCA in digital markets can be pervasive given that the costs of implementing A/B testing are low and the opportunities to modulate each and every aspect

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<sup>15</sup> Collins, Andrew & Tkaczyk, Dominika & Aizawa, Akiko & Beel, Joeran. (2018). A Study of Position Bias in Digital Library Recommender Systems.

<sup>16</sup> Jamie Luguri and Lior Strahilevitz, "Shining a Light on Dark Patterns", Coase-Sandor Working Paper Series in Law and Economics, No. 879 (2021).

<sup>17</sup> Irwin P. Levin, Gary J. Gaeth, How Consumers Are Affected by the Framing of Attribute Information Before and After Consuming the Product, *Journal of Consumer Research*, Volume 15, Issue 3, December 1988, Pages 374–378, <https://doi.org/10.1086/209174>

<sup>18</sup> Baumeister, Roy & Bratslavsky, Ellen & Finkenauer, Catrin & Vohs, K.. (2001). Bad Is Stronger than Good. *Review of General Psychology*. 5. 10.1037/1089-2680.5.4.323.

of online environments are abundant. Consequently, this can severely impact consumers and competition. A case in the European Union regarding Google Android, which focused on Google's use of defaults to shore up its market power, provides an example of how a company can deploy OCA to impede competition.

In 2018, the European Commission understood that the agreements signed by Google with manufacturers were illegal under constitutional law. In short, the Commission came to the conclusion that the mechanisms adopted by Google to ensure manufacturers would pre-install its apps - notably Play Store, Search, and Chrome - were abusive. The whole basis of the discussion, however, lies not in the contracts, but in the effects of the requirement for pre-installation. As noted in the decision:

The reason why pre-installation, like default setting or premium placement, can increase significantly on a lasting basis the usage of the service provided by an app is that users that find apps pre-installed and presented to them on their smart mobile devices are likely to "stick" to those apps. (...) Users are unlikely to look for, download, and use alternative apps, at least when the app that is pre-installed, premium placed and/or set as default already delivers the required functionality to a satisfactory level.<sup>19</sup>

The deployment of defaults in the Android case is significant since the user journey to change them requires a number of complex steps with text labels that are not always intuitive.<sup>20</sup> Defaults provide Google a competitive advantage over other search engines through consumer 'status quo bias.'<sup>21</sup> Google's positioning as the highest revenue-generating search engine through its use of default on mobile devices creates feedback loops that make it difficult for competitors to meaningfully improve search quality or build a user base.<sup>22</sup> Companies, like Google, select defaults that are beneficial for its bottom line but not for consumers, creating mild dark patterns in decision architecture.<sup>23</sup> The issue in the Android case that more closely relates to that problem is that Google clearly established mechanisms that prevented manufacturers from pre-installing competing apps, thus making access to markets more difficult and deterring innovation.

In other words, the case above clearly demonstrates that the competition problem in question is not with the setting of defaults – which are, to a large extent, somewhat unavoidable – but rather that competition for defaults was infeasible due to Google's practices. For that reason, one of the main remedies adopted after the EC's decision was the implementation of a Choice Screen for general search providers, by which "users will be presented with a continuous scrollable

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<sup>19</sup> (2018, July 18). [https://ec.europa.eu/competition/antitrust/cases/dec\\_docs/40099/40099\\_9993\\_3.pdf](https://ec.europa.eu/competition/antitrust/cases/dec_docs/40099/40099_9993_3.pdf)

<sup>20</sup> Ibid.

<sup>21</sup> Google Android: The General Court Takes Its Position. (2022, September 20). Google Android: The General Court Takes Its Position. Kluwer Competition Law Blog. <https://competitionlawblog.kluwercompetitionlaw.com/2022/09/20/google-android-the-general-court-takes-its-position/>

<sup>22</sup> (2022, May 21). [https://one.oecd.org/document/DAF/COMP/WD\(2022\)52/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2022)52/en/pdf)

<sup>23</sup> Jamie Luguri and Lior Strahilevitz, "Shining a Light on Dark Patterns", Coase-Sandor Working Paper Series in Law and Economics, No. 879 (2021).

list comprising a choice of up to twelve eligible general search services, which will appear in random order.”<sup>24</sup>

The recent amicus submissions by behavioral economists in *United States v. Google LLC* and *State of Colorado v. Google LLC* highlight similar concerns.<sup>25</sup> Professors Loewenstein, Schmidt, and Heidhues claim that defaults are “sticky” and raise barriers to entry, given that “default competitors must invest capital, above and beyond what would otherwise be required, to reach potential customers.” In the case of Google, it is in fact not disputed that the company pays Apple over 8 billion dollars to make Google Search the default option in Safari, which could eloquently demonstrate the point raised by the brief. The minimum any potential competitor would need to invest in order to pose a credible threat to Google is the same as that amount. And though the existence of the contract in itself may not be a violation of existing antitrust law, it is an obvious and clear recognition that defaults do grant players additional market power. The professors are also clear in stating that the deployment of defaults in zero-cash markets – such as search – can be potentially harder to overcome precisely because services are offered for free. The most obvious way by which entrants could make their services more appealing would be cutting on prices for periods of time to incentivize consumers to switch from defaults to other options; however, this alternative to overcome defaults’ stickiness is not a real alternative.

#### *B. Attention Markets and Output*

Traditional antitrust assessment takes output as a proxy for welfare: when output increases, it means welfare is increasing as well. However, this is clearly not the case in some markets; the obvious examples are markets for addictive or harmful products. If more tobacco is sold, output increases but welfare very likely will not increase.<sup>26</sup> Even if we do not consider all platforms, or all features of platforms, to be addictive (though there is evidence that some might be, and studies that show how this may be true, it would be wise to assume that is not necessarily the case for all platforms, or at least that not all of their features are addictive), once we recognize that some of them broadly fall within the category of attention markets and are fundamentally concerned with engaging users in order to monetize eyeballs, there is good reason to say that, if some form of manipulation is taking place and users have their deliberative capacities impaired,<sup>27</sup> then output would be an equally useless proxy to assess welfare. After all, if the method by which more engagement is achieved is tainted, then the output is certainly not a correct depiction of welfare.

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<sup>24</sup> (n.d.). Retrieved October 19, 2021, from <https://www.android.com/choicescreen/>

<sup>25</sup> 23-02-17 Behavioral Economists ACB. (2017, February 23). 23-02-17 Behavioral Economists ACB. <https://www.documentcloud.org/documents/23689565-23-02-17-behavioral-economists-acb>

<sup>26</sup> For a deep-dive into how output can be harmful in the tobacco context, see: (2005, April 1). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=711882](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=711882)

<sup>27</sup> Cass R. Sunstein (2022) Manipulation as theft, *Journal of European Public Policy*, 29:12, 1959-1969, DOI: 10.1080/13501763.2022.2135757



The hard question is how to measure welfare within these frameworks. We propose that, so long as it is established that output is a bad measure and that welfare tends to diminish in these markets when there is more output, there would be sufficient evidence that welfare will not increase if more of any manipulative strategy is deployed. If that is true, then one could argue that, if users' deliberative capacity is impaired by OCA and firms benefit from that same use of OCA, the burden to prove the practice is not anti-competitive should lie with the economic agent. More concretely, dominant firms would not merely be able to argue that output has increased, they would need to show that OCA is "neutral," meaning that the outcome with the OCA under debate and the outcome without the OCA is sufficiently similar (i.e., users pick in the same proportion as with the deployment of the platform's design).

To pursue this line of reasoning, the first question to be addressed is what we would consider manipulation, or the impairment of deliberative capacities. That is not a black-and-white debate, quite on the contrary. There are several discussions regarding what would amount to online manipulation and whether indeed there is a right to "not be manipulated."<sup>28</sup> Our goal is not to provide a definitive answer to those broader questions, but rather to establish that some form of online manipulation does exist, as well as to identify characteristics that would allow enforcers to depart from a rebuttable presumption that it is taking place and that it is being employed to exploit consumer biases to benefit companies in ways that could entrench market power.

Methods for facilitating the identification of online manipulation would be a welcome addition to this framework, for they could facilitate some form of enforcement. One way we believe this could be done is by further exploring the categories of OCA, such as the ones put forward by the CMA or those discussed in more detail by the OECD in their report on dark patterns. Some of these categories can provide clearer opportunity for manipulation, which could be helpful in providing authorities with clearer targets.

Another welcome addition would be research that contributes to the existing body of work that investigates the specific impact of choice architecture on markets, and more specifically in the entrenchment of market power. The CMA provides a relevant first step in that direction.

### C. *OCA and the FTC Act Unfair Methods of Competition*

Recently, there have been debates about the FTC's rulemaking authority under the FTC Act, more specifically regarding "unfair and deceptive practices" and "unfair methods of competition." The Commission understands that such power comes from Section 6(b) of the Act<sup>29</sup>

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<sup>28</sup> McDermott R, Hatemi PK. Ethics in field experimentation: A call to establish new standards to protect the public from unwanted manipulation and real harms. *Proc Natl Acad Sci U S A*. 2020 Dec 1;117(48):30014-30021. doi: 10.1073/pnas.2012021117. Epub 2020 Nov 23. PMID: 33229586; PMCID: PMC7720186.

<sup>29</sup> As the FTC clarifies: "Under Section 18 of the FTC Act, 15 U.S.C. Sec. 57a, the Commission is authorized to prescribe "rules which define with specificity acts or practices which are unfair or deceptive acts or practices in or affecting commerce" within the meaning of Section 5(a)(1) of the Act. These rules are known as "trade regulation

and has started rulemaking procedures regarding non-compete clauses,<sup>30</sup> as well as released an advanced notice of proposed rulemaking regarding commercial surveillance and data security.<sup>31</sup> Despite the discussion, both the decision in *National Petroleum Refiners v. FTC* and the *Magnum-Moss Act of 1975* firmly establish that the agency indeed can issue rules both regarding UDAP and unfair methods of competition.<sup>32</sup> The more pressing matter regards how precisely that authority will be exercised and to what extent.

Similarly, there have been debates as to how the FTC should carry out enforcement of Section 5. In November 2022, the Commission released a policy statement focusing on unfair methods of competition. The goal of the statement is to reposition the application of Section 5 by departing from the previous understanding that it should be interpreted in the same fashion as the Sherman and Clayton Acts. Thus, the authority clearly states that “Section 5 reaches beyond the Sherman and Clayton Acts to encompass various types of unfair conduct that tend to negatively affect competitive conditions.”<sup>33</sup> The question then is how to substitute the existing parameters and build a new standard. The Commission aimed at answering that question stated that in order for conduct to be considered unfair, it must be a method of competition – meaning “undertaken by an actor in the marketplace – as opposed to merely a condition of the marketplace, not of the respondent’s making, such as high concentration or barriers to entry.” Therefore, by the authority’s words, “unfair” is when competition does not rely on merits, so it must be a form of coercion, exclusion, predation etc., or negatively affect competition conditions.

It is relevant to note what the FTC states about the assessment of unfairness vis-a-vis a practice’s impact on competition:

These two principles are weighted according to a sliding scale. Where the indicia of unfairness are clear, less may be necessary to show a tendency to negatively affect competitive conditions. Even when conduct is not facially unfair, it may violate Section 5. In these circumstances, more information about the nature of the commercial setting may be necessary to determine whether there is a tendency to negatively affect competitive

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rules.” Among other things, the statute requires that Commission rulemaking proceedings provide an opportunity for informal hearings at which interested parties are accorded limited rights of cross-examination. Before commencing a rulemaking proceeding, the Commission must have reason to believe that the practices to be addressed by the rulemaking are “prevalent.” 15 U.S.C. Sec. 57a(b)(3).” See: About the FTC: Enforcement Authority. (n.d.). About the FTC: Enforcement Authority. Federal Trade Commission. Retrieved October 14, 2021, from <https://www.ftc.gov/about-ftc/mission/enforcement-authority>

<sup>30</sup> Non-Compete Clause Rulemaking | Federal Trade Commission. (n.d.). Non-Compete Clause Rulemaking | Federal Trade Commission. Federal Trade Commission. Retrieved October 14, 2021, from <https://www.ftc.gov/legal-library/browse/federal-register-notices/non-compete-clause-rulemaking>

<sup>31</sup> Trade Regulation Rule on Commercial Surveillance and Data Security. (2022, August 22). Trade Regulation Rule on Commercial Surveillance and Data Security. Federal Register. <https://www.federalregister.gov/documents/2022/08/22/2022-17752/trade-regulation-rule-on-commercial-surveillance-and-data-security>

<sup>32</sup> Emerson, B.. (n.d.). The Progress of FTC Rulemaking. Yale Journal on Regulation: Notice & Comment. Retrieved October 19, 2021, from <https://www.yalejreg.com/nc/the-progress-of-ftc-rulemaking-by-blake-emerson/>

<sup>33</sup> Section 5 Policy Statement. (n.d.). Section 5 Policy Statement. Federal Trade Commission. Retrieved October 20, 2021, from [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P221202Section5PolicyStatement.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P221202Section5PolicyStatement.pdf)

conditions. The size, power, and purpose of the respondent may be relevant, as are the current and potential future effects of the conduct.

Both rulemaking and the enforcement of Section 5 should account for the impact of OCA and the well-established research in behavioral economics.

Unfairness, in particular, is one area in which the FTC could significantly benefit from reflections on the relevance of choice architecture. The current standard put forward in Section 5(n) for conduct to be considered unfair requires that the practice (i) leads to (or has the potential to lead to) substantial consumer harm, (ii) that such harm cannot be avoided by consumers themselves, and (iii) that such harm is not counterweighted by benefit to consumers in general or to competition.<sup>34</sup> Deployment of OCA, in many cases, can fulfill all of those criteria. When assessing substantial injury, for instance, it is somewhat obvious that consumers are harmed if they end up buying something they did not want, or even more critically if they end up buying something they thought they wanted but were misguided in the process. For example, if a user chooses what she believes to be the cheapest option for a hotel room in a given city, but that turns out not to be the cheapest option, the user has been injured. That feature is equally perceivable in attention markets. Users exchange the free products and services offered by the platforms for their eyeballs, but if they are being manipulated into staying longer at the platform they are effectively “losing” time, which is an invaluable resource to the individual, in this exchange.

Another example of OCA can be demonstrated in System 1 vs. System 2 thinking. Behavioral science has already demonstrated that in certain scenarios where we deploy System 1 think – what Kahneman refers to as “fast thinking” – in opposition to System 2 or “slow thinking,” our decision-making will be somewhat automatic.<sup>35</sup> There is no real deliberation going on that would even allow for a discussion on avoidance. When OCA exploits System 1 biases, there is ample research that can support the conclusion that the outcome would reasonably be the one expected by the platform.

Lastly, when looking at the benefits to consumers or competition, the FTC carries out a cost-benefit analysis before condemning a practice. In short, what the Commission assesses is whether the practice harms one user but is overall beneficial to other users and to the market. In most cases of OCA, it is easy to verify that not only consumers, but also overall competition, is

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<sup>34</sup> The FTC’s New Unfair Methods of Competition Policy Statement: To What Extent Will the Approach Survive in Court?. (n.d.). The FTC’s New Unfair Methods of Competition Policy Statement: To What Extent Will the Approach Survive in Court?. Competition Policy International. <https://www.competitionpolicyinternational.com/the-ftcs-new-unfair-methods-of-competition-policy-statement-to-what-extent-will-the-approach-survive-in-court-2/>

<sup>35</sup> Kahneman, D. (2013). *Thinking, Fast and Slow*. New York, NY: Farrar, Straus and Giroux. “We are born prepared to perceive the world around us, recognize objects, orient attention, avoid losses, and fear spiders. Other mental activities become fast and automatic through prolonged practice. System 1 has learned associations between ideas (the capital of France?); it has also learned skills such as reading and understanding nuances of social situations. Some skills, such as finding strong chess moves, are acquired only by specialized experts. Others are widely shared. Detecting the similarity of a personality sketch to an occupational stereotype requires broad knowledge of the language and the culture, which most of us possess. The knowledge is stored in memory and accessed without intention and without effort.”

impaired. Consumer biases are, by definition, not specific to one individual, but rather pervasive to all individuals. The chances of all users being similarly impacted by design is very large; in fact, there would be no reason to even deploy OCA if that was not the case. Likewise, as clarified in the previous section, the effects on competition can be tremendous and, in some cases, clearly lead to a race to the bottom, as companies might be competing not on the merits of the product/service, but rather on the effectiveness of their manipulative design strategy.

Going back to the Google Android example, if consumers are devoid of options due to the establishment of defaults and, given inherent behavioral biases, there is no significant way for them to “avoid” such harm. Though they are theoretically able to switch, they almost certainly will not. The practical implication is a direct negative impact on competition due to an increase in barriers to entry. This is an instance in which the design choice has a clear potential to be considered unfair.

Most criticism directed at the 2022 policy statement regarded the lack of clarity and legal certainty regarding the concept of unfair practice. According to such critics, there would be a fundamental clash between the proposal’s “unpredictable standards” and the consumer welfare standard in the FTC’s attempt to revamp Section 5.<sup>36</sup> We propose that looking at OCA and manipulation can be a way to present a more clearly circumscribed framework, a framework that would be less open-ended and consequently allow for more explicit criteria to be developed by the authority and followed by companies. Indeed, this focus would, at least in theory, broadly fulfill the two requirements already set forth by the Commission. On the one side, OCA can certainly be a method of competition, as competition among market agents can focus on design rather than on the features of the product or service itself. This can include: providing more effective defaults, for instance, can be tremendously effective as a way of preserving market power, and the same can be said about other deployments of choice architecture, which can be central in determining how precisely and on what basis competition will take place. On the other hand, OCA can be designed to depart from competition on the merits, and indeed be targeted towards preserving the status quo and making it harder for entrants to challenge incumbents. For example, the combination of rankings and self-preferencing, discussed in section II, can make it harder for competitors to access certain markets and establish effective rivalry. If a platform controls a marketplace and ranks products in that environment in a way that always benefits its own goods or services, regardless of quality or price, that would qualify as a practice that affects competitive conditions.

As discussed in section III.A, requiring dominant firms to demonstrate that their design is neutral and could be a meaningful step in consolidating clear and predictable criteria for market agents, while also protecting consumers and competition.

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<sup>36</sup> The FTC’s New Unfair Methods of Competition Policy Statement: To What Extent Will the Approach Survive in Court?. (n.d.). The FTC’s New Unfair Methods of Competition Policy Statement: To What Extent Will the Approach Survive in Court?. Competition Policy International. <https://www.competitionpolicyinternational.com/the-ftcs-new-unfair-methods-of-competition-policy-statement-to-what-extent-will-the-approach-survive-in-court-2/>

**Annex 1 - Online Choice Architecture Taxonomies according with CMA's OCA Review**

Category	Description	Strength of evidence
<i>Choice Structure</i>		
Defaults	The choice architect applies a predefined setting that the consumer must take active steps to change.	4 out of 5
Ranking	The choice architect displays the order of options in a particular way.	3 out of 5
Partitioned pricing	The choice architect presents individual price components without sharing the total or estimated total costs with the consumer.	3 out of 5
Bundling	The choice architect groups two or more products and/or services in a single “package” at a special price.	3 out of 5
Choice overload and decoys	The choice architect provides too many options to compare.	3 out of 5
	The choice architect adds an option to the choice set to make the other option(s) look more attractive to the consumer.	3 out of 5
Sensory manipulation	The choice architect employs visual, aural and tactile features to steer consumers towards certain options.	3 out of 5
Sludge	The choice architect creates excessive or unjustified friction that makes it difficult for consumers to get what they want or to do as they wish.	3 out of 5

Dark nudges	The choice architect makes it easy or removes friction for consumers to make inadvertent or ill-considered decisions.	3 out of 5
Virtual currency in gaming	The choice architect creates elements of a virtual currency to be used as a substitute for the “real-world” currency.	2 out of 5
Forced outcomes	The choice architect changes the outcome without giving consumers a choice.	2 out of 5
<i>Choice Information</i>		
Drip pricing	The choice architect initially shows only part of the price and reveals the full price of the product or service at later stages of the consumer journey.	4 out of 5
Reference pricing	The choice architect displays a previous (or future) price alongside the current price to make the current price look more attractive.	4 out of 5
Framing	The choice architect decides how decision-relevant information is described or presented to a consumer.	3 out of 5
Complex language	The choice architect makes information difficult to understand by using obscure words and/or sentence structure.	3 out of 5
Information overload	The choice architect gives a consumer too much information about a product or service such that information about the most relevant attributes is difficult to find and assess.	3 out of 5
<i>Choice Pressure</i>		

Scarcity and popularity claims	The choice architect informs consumers about limited stock, limited time to buy or high popularity of an item.	3 out of 5
Prompts and reminders	The choice architect contacts the consumer to induce an action and/or follow up on a previous interaction.	2 out of 5
Messengers	The choice architect provides a platform on which a specific person or group can communicate with consumers.	2 out of 5
Commitment	The choice architect facilitates commitment by consumers to a particular behavior in the future.	2 out of 5
Feedback	The choice architect provides consumers with feedback.	2 out of 5
Personalisation	The choice architect uses data to personalize offers.	2 out of 5

Source: CMA’s OCA Review. 2022.

**Annex 2 - Main Taxonomies When Referring to Dark Patterns (OECD)**

Taxonomies	Definition	Examples
Forced Action	Dark patterns involving forced or unintended action by the consumer	The consumer may be forced to register or be tricked into thinking that the registration for a service is necessary or be forced into disclosing more personal information than desired or required to use it fully (e.g., friend spams, forced enrollment to a service).
Interface interference	Dark patterns involving interface interference aim to privilege specific actions from the consumer favorable to the online business.	Visually obscuring important information (hidden information). Preselection of options favorable to the business by default (preselection). Visual precedence to options favorable to the business (false hierarchy). Displaying a discounted price with reference to an original misleading or false higher price (misleading reference pricing). Disguised ads.
Nagging	Repeated request to do something favorable to the business.	Turn on notifications or location-tracking features, thus exploiting the consumer's limited willpower or time.
Obstruction	Obstruct a task flow or interaction with the intent of exploiting the consumer's inertia.	Making it easier to sign up to a service or opt in to privacy-intrusive settings but hard to cancel the service or opt out to more privacy-friendly settings. Making it hard or impossible to delete an account or consumer information (often termed immortal accounts) or to compare different offers and prices (price comparison prevention).
Sneaking	Hide, disguise, or delay information relevant to the consumer's decision, such as costs.	Adding new and potentially significant non-optional charges to the total price when a consumer is just about to complete a purchase (otherwise known as drip pricing); sneaking an item into a consumer's basket without consent e.g. via a checkbox on a prior page; or automatically renewing a purchase, including following a trial period, without the consumer's explicit consent (i.e. hidden subscription / subscription trap, also known as forced continuity).



Social proof	Triggering a decision based on observations of other consumers' behavior.	Notifications about other consumers' activities or testimonials about their recent purchases. Activity notifications might not be truthful, e.g. where they falsely signal old purchases as if they were sold recently, and testimonials may be misleading or false.
Urgency	Impose a real or fake temporal or quantitative limit on a deal to pressure the consumer into making a purchase.	Include low stock and high demand messages or a countdown timer to indicate an expiring deal or discount.

Source: OECD. "Dark Commercial patterns". 2022.