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Getting under your skin(s)

A legal-ethical exploration of Fortnite's transformation into a content delivery platform and its manipulative potential¹

Marijn Sax & Jef Ausloos²

Abstract

This paper investigates the ethical and legal implications of increasingly manipulative practices in the gaming industry by looking at one of the currently most popular and profitable video games in the world. Fortnite has morphed from an online game into a quasi-social network and an important cultural reference point in the lifeworld of many (young) people. The game is also emblematic of the freemium business model, with strong incentives to design the game in a manner which maximises microtransactions. This article suggests that to properly understand Fortnite's practices – which we predict will become more widely adopted in the video game industry in the near future – we need an additional perspective. Fortnite is not only designed for hyper-engagement; its search for continued growth and sustained relevance is driving its transformation from being a mere video game into a content delivery platform. This means that third parties can offer non game-related services to players *within* Fortnite's immersive game experience. In this paper, we draw on an ethical theory of manipulation (which defines manipulation as an ethically problematic influence on a person's behaviour) to explore whether the gaming experience offered by Fortnite harbours manipulative potential. To legally address the manipulative potential of commercial video game practices such as the ones found in Fortnite, we turn to European data protection and consumer protection law. More specifically, we explore how the European Union's General Data Protection Regulation and Unfair Commercial Practices Directive can provide regulators with tools to address Fortnite's manipulative potential and to make Fortnite (more) forthright.

¹ Special thanks to Leonard de Lange for playing Fortnite with us for an entire afternoon and very patiently explaining the game to us. An earlier draft of this paper was workshopped at the Privacy Law Scholars Conference Europe (Amsterdam, October 2019). We would like to thank all the participants for their helpful feedback. Lastly, we would like to thank the anonymous reviewers for their helpful feedback.

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Keywords: video games; Fortnite; manipulation; autonomy; consumer protection; data protection; GDPR; unfair commercial practices

Table of Contents

1	Introduction	3
2	The Dark (Patterns) Force Rises.....	5
2.1	Beyond Addiction-by-Design: Video Games as Full-blown Content Delivery Platforms.....	5
2.2	Scope.....	8
3	Manipulation as an Ethical Background.....	9
4	Fortnite’s Manipulative Potential Unpacked.....	13
4.1	How the Game Works.....	13
4.2	It Is All About the Skins.....	13
4.3	Engagement-by-Design: Game Mechanics.....	14
4.3.1	Progression Trees	14
4.3.2	Engineering FOMO: Continuous updating of challenges	15
4.3.3	In-Game Shop.....	17
4.4	Fortnite’s Social Significance (Especially to Children) and Its Cultural Omnipresence	18
4.5	Beyond the Game: Fortnite as a Content Delivery Platform	20
5	Fortnite’s Manipulative Tendencies	24
5.1	Targeting Cognitive and Affective Weaknesses	25
5.2	The Attempt to Exert (Partly) Hidden Influences on Players	27
6	Making Fortnite Fortright: Legal Implications.....	29
6.1	(Lack of) Fairness.....	30
6.2	(Lack of) Transparency	37
6.3	(Lack/erosion of) Autonomy.....	40
7	A Fortright Fortnite? Concluding Remarks and Recommendations	44

1 Introduction

Fortnite currently is one of the most popular video games in the world, with 250 million registered players, many of which are children.³ The game is also “a full-fledged pop culture phenomenon”⁴ as its popularity extends far beyond the game itself. Some Fortnite players have become celebrities with millions of followers on Instagram⁵ and with millions of people watching them play Fortnite live on streaming services like YouTube, Twitch, and Mixer.⁶ Fortnite also manifests itself in the offline world. Famous football players like Antoine Griezmann celebrate important goals by performing dance-moves from Fortnite.⁷ There are real world fan festivals where Fortnite players come together to celebrate the game⁸ and there is even a widely reported on Fortnite World Cup with \$30 million in prize money.⁹ Characters in the movie *Avengers: Endgame* are shown playing Fortnite.¹⁰ Parents have observed that the lifeworld of their kids is dominated by Fortnite: “*Fortnite* is everywhere. It is in the back seat during carpool (if also explicitly banned there). It is in the victory dances during basketball. Even when they're not playing, they're talking about it.”¹¹

Fortnite is not only popular, but also incredibly profitable. The game earned Epic Games – the developer of Fortnite – an astonishing profit of \$2.4 billion in 2018 and \$1.8 billion in 2019, despite the fact that the game can be played for free.¹² Fortnite is a typical ‘freemium’ game; to

³ ‘Children’ refer to any person under 18 years, in line with the UN Convention on the Rights of the Child. Since Epic Games does not register the age of players, there are no official figures concerning the age of players. The National Research Group suggests that around 40% of all US teens have played Fortnite: <<http://www.nationalresearchgroup.com/news/fortnite-the-new-social-media>> Accessed 17 January 2020. Other national surveys across EU Member States suggest significant portions of children play(ed) Fortnite as well.

⁴ <<https://www.theverge.com/2019/1/16/18184302/fortnite-revenue-battle-pass-earnings-2018>> Accessed 17 January 2020.

⁵ For example, at the time of writing, Ninja has 14.8 million Instagram followers (see <<https://www.instagram.com/ninja/>> Accessed 17 January 2020.) Tfue has 5.6 million followers (see <<https://www.instagram.com/tfue/>> Accessed 17 January 2020.).

⁶ Ninja’s live play sessions on Twitch have been viewed more than 470 million times (see <<https://www.twitch.tv/ninja>>).

⁷ <<https://www.youtube.com/watch?v=HMGcWHRHjiY>> Accessed 17 January 2020.

⁸ <<https://www.epicgames.com/fortnite/en-US/block-party?sessionInvalidated=true>> Accessed 17 January 2020.

⁹ <<https://www.nytimes.com/2019/07/28/sports/fortnite-world-cup.html>> Accessed 17 January 2020.

¹⁰ <<https://www.theverge.com/2019/4/22/18510842/fortnite-avengers-endgame-event-crossover>> Accessed 17 January 2020. The scene in question can be seen here <<https://www.youtube.com/watch?v=QgwkL2Fylh0>> Accessed 15 May 2020.

¹¹ <<https://www.wired.com/story/kids-fortnite-ubiquity/>> Accessed 17 January 2020.

¹² <<https://www.theverge.com/2019/1/16/18184302/fortnite-revenue-battle-pass-earnings-2018>> Accessed 17 January 2020; <<https://www.theverge.com/2020/1/2/21046920/fortnite-revenue-drop-superdata-nielsen-2019-earnings>> Accessed 21 December 2020.

make money Epic Games relies on engaged gamers buying Battle Passes (which give players faster progression and better rewards) and virtual items in the in-game shop, as well as (advertising) deals with third parties. With Fortnite, Epic Games has clearly managed to build a digital environment that everyone can, in principle, use for free, but that at the same time manages to monetise the attention of its players in a highly efficient and effective manner. For these reasons, Fortnite will be the main focal point of our ethical and legal analysis, even if reference will be made to other industry players as well. After all, we consider Fortnite to be an emblematic (not a unique) example of worrisome trends in the videogaming industry.

In this article, we focus on the specific ways in which Fortnite monetises its user base. Based on an ethical theory of manipulation¹³ – which defines manipulation more narrowly than its usage in everyday language – we argue that the overall gaming experience offered by Fortnite harbours manipulative influences on (some of) its players. Without being able to look at the internal operations of Epic Games, it is near-to-impossible to indisputably establish that the company *intentionally* designed Fortnite to be manipulative. Therefore, we focus on those elements of the gaming experience we can observe as outsiders in order to evaluate whether the *end product* harbours manipulative potential, irrespective of Epic Games' true intentions (which we cannot know or access). With that in mind, we argue that the digital environment Fortnite provides to its players risks influencing them – children in particular – in an undesirable manner. Moreover, we explain how European data protection law and consumer law can step in.

This article is structured as follows. First, we sketch the new developments we seek to critique and explain the scope of this article. Second, we discuss the ethical theory of manipulation¹⁴ that helps us explain why, from an ethical perspective, the recent developments in Fortnite can be considered problematic. Third, we provide a more elaborate analysis of the underlying game mechanisms and design features of Fortnite that help explain in more detail how

¹³ D Susser, B Roessler and H Nissenbaum, 'Online Manipulation: Hidden Influences in a Digital World' (2019) 4 Geo. L. Tech. Rev. 1; D Susser, B Roessler and H Nissenbaum, 'Technology, Autonomy, Manipulation' [2019] 8 Internet Policy Review <<https://policyreview.info/articles/analysis/technology-autonomy-and-manipulation>> Accessed 17 January 2019.

¹⁴ D Susser, B Roessler and H Nissenbaum, 'Online Manipulation: Hidden Influences in a Digital World' (2019) 4 Geo. L. Tech. Rev. 1; D Susser, B Roessler and H Nissenbaum, 'Technology, Autonomy, Manipulation' [2019] 8 Internet Policy Review <<https://policyreview.info/articles/analysis/technology-autonomy-and-manipulation>> Accessed 17 January 2019.

and why Fortnite harbours serious manipulative potential. Fourth, we turn to European data protection law and consumer law to explore how the law can address these challenges.

2 The Dark (Patterns) Force Rises

2.1 *Beyond Addiction-by-Design: Video Games as Full-blown Content Delivery Platforms*

There has already been some attention for potentially problematic aspects of Fortnite. One strand of criticism relates to the alleged *addictive nature*¹⁵ of video games like Fortnite.¹⁶ It has been claimed that Fortnite’s freemium business model necessitates its developer, Epic Games, to make the game addictive by design, because only *engaged* players that keep returning to the game will (eventually) be tempted to spend money on a free-to-play game.¹⁷ There is also a growing literature on how gamers are influenced (some would say manipulated) to conduct microtransactions such as buying gambling-like loot boxes.¹⁸ The UK’s House of Commons DCMS Committee¹⁹

¹⁵ It can be asked whether the term ‘addiction’ is the right term to use in this context. Addiction is a medical term. Using it in a loose manner to address the impact technology has on people and society can come across as an attempt to sensationalize (the impact of) technological developments. At the same time, people do argue that video games like Fortnite can in fact be addicting *in the medical sense of the word*. See Ferris Jabr, ‘Can You Really Be Addicted to Video Games?’ *The New York Times* (New York, 22 October 2019) <<https://www.nytimes.com/2019/10/22/magazine/can-you-really-be-addicted-to-video-games.html>> Accessed 17 January 2020.

¹⁶ See, e.g., P Delfabbro and D King, ‘On Finding the C in CBT: The Challenges of Applying Gambling-Related Cognitive Approaches to Video Gaming’ 31 *Journal of Gambling Studies* 315; M Johnson and T Brock, ‘How Are Video Games and Gambling Converging?’ (2019) *Gambling Research Exchange Ontario* <<https://pdfs.semanticscholar.org/7a6e/bdad525b74dc0cbbf92f964953cbf0c922.pdf>> Accessed 17 January 2020.

¹⁷ Empirical research on video games has found that “acquiring and maintaining the engagement of large user bases is a core activity of free to play games.” N Hanner and R Zarnekow, ‘Purchasing Behavior in Free to Play Games: Concepts and Empirical Validations’, (2015) 48th Conference on System Sciences IEEE, 3326 <<https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=7070216>>. In a study on gamers’ motivation to buy virtual items in free to play games, Hamari (emphasis added) found that initially, “enjoyment of the game reduces willingness to buy virtual goods while at the same time it increases the willingness to play more of the game. *Continued use, however, does positively predict purchase intentions for virtual goods*” J Hamari, ‘Why Do People Buy Virtual Goods? Attitude Toward Virtual Good Purchases Versus Game Enjoyment’ (2015) 35 *International Journal of Information Management* 299. So the better Epic Games is able to engage people in playing Fortnite over longer periods of time, the higher the chances are that gamers will spend some money on Battle Passes or items.

¹⁸ See, e.g., S Schwidessen and P Karius, ‘Watch Your Loot Boxes! – Recent Developments and Legal Assessment in Selected Key Jurisdictions from a Gambling Law Perspective’ (2018) 1 *Interactive Entertainment Law Review* 17; D Zindle and P Cairns, ‘Video Game Loot Boxes Are Linked to Problem Gambling: Results of a Large-scale Survey’ (2019) 14 *PLOS ONE* e0214167.

¹⁹ House of Commons, DCMS Committee, *Immersive and addictive technology inquiry*, HC 1846. Final report <<https://publications.parliament.uk/pa/cm201719/cmselect/cmcmds/1846/1846.pdf>> Accessed 5 March 2020.

questioned Epic Games' general counsel and director of marketing for two and a half hours about the allegedly addictive design of Fortnite.²⁰

We agree that the addiction-by-design perspective is helpful to understand some of the concerns Fortnite gives rise to, although the use of the term 'addictive' can be perceived to be overly alarmist which is why we prefer the term 'engagement-by-design'. In this article, however, we would like to go one step further. The allegedly addictive nature of Fortnite is only part of the issue. Its engagement-by-design serves as the fertile soil in which, more recently, *another* potentially problematic development can be observed. Fortnite is growing to become something *more than a game*. As was made clear by Epic Games' CEO Tim Sweeney, Fortnite is "evolving beyond a game [...] We're a digital ecosystem company." Sweeney explains that the ultimate goal is to build "something like a Metaverse."²¹ Fortnite, we observe, is turning into a **content delivery platform** ('CDP'), where the game itself becomes a means to deliver other non-game related content and services to users by integrating them natively into the engaging video game experience offered by Fortnite.

The game is a perfect example of the video game industry after the 'Agile Turn'.²² When you install Fortnite, you do not install a finished product, but a service that is constantly being changed and developed based on observing users in real time. Epic Games effectively attempts to build the digital infrastructure which powers Fortnite to be as flexible as possible, so as to enable dynamically integrating third party content and services in the Fortnite experience. Consider, for instance, the concert of musician DJ Marshmello that took place *within* the game and that players could attend with their Fortnite avatar.²³ Or consider 'crossover events' during which the game

²⁰ House of Commons, DCMS Committee, Oral Evidence: Immerse and Addictive Technologies, HC 1846 <<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/immersive-and-addictive-technologies/oral/103191.html>> Accessed 17 January 2020.

²¹ <<https://www.businessinsider.nl/epic-games-ceo-tim-sweeney-fortnite-unreal-engine-2019-3/?international=true&r=US>> Accessed 17 January 2020.

²² S Gürses and J Van Hoboken, 'Privacy After the Agile Turn' in E Selinger, J Polonetsky and O Tene (eds), *Cambridge Handbook of Consumer Privacy* (Cambridge University Press, Cambridge 2018).

²³ The release of *Marshmello: Fortnite Extended Set* two weeks later immediately surged in the charts. <<https://www.billboard.com/articles/columns/chart-beat/8498468/marshmello-debuts-no-1-top-dance-electronic-albums-chart>> Accessed 17 January 2020.

itself is changed to resemble, for instance Star Wars,²⁴ the Avengers²⁵ or the John Wick²⁶ universes (including temporary game modes in the spirit of the movie featured in the crossover). As a result, Fortnite players are increasingly treated as consumers who are – often without realising it – browsing a digital marketplace that is intentionally made not to look or feel like a marketplace. We consider this a problematic trend, despite (or because) the enthusiastic response such events have received among many players.

There is an inherent tension between the fully immersed gamer, focusing all their attention on gameplay – a precondition to be successful at the game – and , at the same time, perform their role as rational, critical consumers – a normative benchmark in EU (consumer protection) law. The players’ ability to perform their role as critical consumers is further undermined, we argue, by Epic Games’ efforts to make Fortnite such an engaging experience through the clever design of Fortnite’s game mechanics. We observe that the native integration of content delivery mechanisms in highly immersive video game experiences can end up exerting subtle yet persuasive undue influences on its users – adults and children alike - challenging traditional assumptions underlying EU consumer law.

To help explain why the development of Fortnite into a CDP is potentially problematic, we draw on an ethical theory of manipulation.²⁷ This theory emphasises that the targeting of cognitive and affective biases to attempt to impose (partly) covert influences on people in order to dispose them to someone else’s ends constitutes a problematic influence on behaviour. In our more elaborate description of Fortnite’s game design and the new developments we see there, we rely on this concept of manipulation to evaluate why these developments require legal scrutiny.

²⁴ <<https://www.theverge.com/2019/12/14/21020296/star-wars-the-rise-of-skywalker-fortnite-jj-abrams-lightsabers>> Accessed 17 January 2020.

²⁵ <<https://www.theverge.com/2019/4/22/18510842/fortnite-avengers-endgame-event-crossover>> Accessed 17 January 2020.

²⁶ <<https://www.wired.com/story/john-wick-fortnite/>> Accessed 17 January 2020.

²⁷ D Susser, B Roessler and H Nissenbaum, ‘Online Manipulation: Hidden Influences in a Digital World’ (2019) 4 Geo. L. Tech. Rev. 1; D Susser, B Roessler and H Nissenbaum, ‘Technology, Autonomy, Manipulation’ [2019] 8 Internet Policy Review <<https://policyreview.info/articles/analysis/technology-autonomy-and-manipulation>> Accessed 17 January 2019.

2.2 Scope

Before discussing the concept of manipulation and providing a more in-depth evaluation of Fortnite’s game design and commercial practices, we want to clarify the scope of this article. We focus on Fortnite in particular, because we consider it to be paradigmatic in actively trying to expand itself from mere game into a sophisticated, content delivery platform at such a massive scale.²⁸ At the same time, we believe that more game developers will follow suit in the near future, so the Fortnite case can be considered emblematic for future developments in the game industry. We can expect freemium business models – which necessitate engagement-by-design – to become more popular. Already in 2011, John Riccitiello (then CEO of EA Games, the biggest video game publisher in the world) explained in a secretly recorded shareholder meeting that “play first, pay later” is the way to go for the game industry because it tends to be the most profitable business model.²⁹ Moreover, there is growing attention³⁰ for the ways in which the hyper-engaging and dynamic design of digital environments can shape user-behaviour.³⁰ These insights will increasingly be applied to (attempt to) engineer the continued engagement that freemium games need.

In what follows, we will discuss a wide range of Fortnite characteristics that are relevant in light of our ethical (section 5) and legal (section 6) analysis. Looking at these characteristics *in isolation*, it is tempting to consider them as old wine in new bottles. For example, the fact that Fortnite offers a very engaging experience is not unique to Fortnite, much older and simpler video games like Tetris can also be highly engaging. We have also already seen other freemium games that managed to generate enormous profits (e.g. Candy Crush) and the presence of native

²⁸ To be sure, other game developers have already started to offer their own digital marketplaces years ago, with Valve’s Steam as the most prominent example of this development. Steam, however, is not integrated into the very gameplay experience of video games itself; it is ‘merely’ a marketplace that offers access to video games. We argue that Fortnite goes one step further, by becoming a digital marketplace *itself* without looking and feeling like one.

²⁹ The recording can be found here: <<https://www.youtube.com/watch?v=ZR6-u8OIJTE>> Accessed 17 January 2020. Forbes also reported on it: <<https://www.forbes.com/sites/erikkain/2017/11/14/dont-buy-star-wars-battlefront-ii-if-you-dont-want-to-support-pay-to-win/#376f63a7400f>> Accessed 17 January 2020.

³⁰ See C Gray, Y Kou, B Battles, J Hoggatt and A Toombs, ‘The Dark (Patterns) Side of UX Design’ [2018] Proceedings of the 2018 HCI Conference on Human Factors in Computing Systems <<https://dl.acm.org/doi/10.1145/3173574.3174108>> Accessed 17 January 2020; B Frischmann and E Selinger, *Re-engineering Humanity* (Cambridge University Press, Cambridge 2018); S Zuboff, *The Age of Surveillance Capitalism* (Profile Books, New York 2019).

advertising in Fortnite is also not unique to Fortnite.³¹ What we wish to point out in this article, however, is that the *specific combination* of all these characteristics in Fortnite makes for a unique cocktail, raising important issues and challenges that need further attention.

With this in mind, and in light of the limited word-count, this article should be seen as more exploratory in nature. Indeed, because we advocate for taking a more holistic approach to identifying and tackling complex issues raised by digital environments such as Fortnite, this article will primarily consist in pinpointing key ethical and legal challenges. We hope that as such, it can serve as a valuable encouragement for further research, initiatives by policymakers and enforcement agencies, as well as some self-reflection in the gaming industry itself.

3 Manipulation as an Ethical Background

The term ‘manipulation’ is used quite often in everyday conversation, where manipulation can refer to our treatment of objects (e.g. juggling balls) or persons. Moreover, in our everyday conversations the term manipulation does not necessarily refer to immoral ways of influencing other persons; it is perfectly possible for a friend to explain how she ‘manipulated’ her spouse in a playful, loving manner, without the influences being considered problematic. For analytical purposes, however, it is helpful to use a narrower ethical conception of manipulation which captures what is wrong with manipulation. Susser, Roessler, and Nissenbaum do exactly that when they argue that

At its core, manipulation is a hidden influence – the *covert subversion of another person’s decision-making power*. In contrast with persuasion, which is the forthright appeal to another person’s decision-making power, or coercion, which is the restriction of acceptable options from which another person might choose, manipulation functions by exploiting the manipulee’s cognitive (or affective) weaknesses and vulnerabilities in order to steer his or her decision-making process toward the manipulator’s ends.³²

³¹ <<https://www.theguardian.com/technology/2014/jul/03/six-of-the-best-product-placement-video-games>> Accessed 17 January 2020.

³² D Susser, B Roessler and H Nissenbaum, ‘Online Manipulation: Hidden Influences in a Digital World’ (2019) 4 Geo. L. Tech. Rev. 1, 3.

When we unpack this description of manipulation, we can identify four key features. *First*, a manipulator uses manipulation to influence the target’s decision-making powers in order to make the target serve the ends of the manipulator. *Second* and by logical extension, a manipulator manipulates intentionally, precisely because she attempts to make others serve her ends. *Third*, manipulation operates through the targeting of cognitive or affective weaknesses and vulnerabilities. *Fourth* and last, manipulation happens ‘behind the backs’ of its targets; manipulators attempt to impose a hidden influence on the target’s decision-making powers.

Taken together, these key features also help explain why manipulation feels so *sneaky*. Manipulators effectively try to *use* other people for their own ends without being upfront about this. They find out which buttons to push to “infiltrate” the decision-making of their targets, so they can exert an influence on their targets that is not entirely obvious to the targets themselves.³³

Manipulation is problematic because it undermines the target’s autonomy. As manipulators try to infiltrate the decision-making of their targets to influence them behind their back, they intentionally put their targets in a position where – if the manipulation succeeds – they act or decide for reasons they cannot fully understand, let alone control. An attempt to manipulate is thus an attempt to rob people of their capacity for self-determination. Manipulation alienates persons from their own decision-making capacities.³⁴

Admittedly, this definition of manipulation does not offer a very high ‘manipulation threshold.’ For example, if you fake being nice to a person to get them to do something for you (because you know this person is *especially* responsive to being treated nicely and is very bad at distinguishing between genuine and fake niceness), this could, formally speaking, be construed as acting in a manipulative manner. Some readers may protest that this definition of manipulation labels too many practices as being unethically manipulative. We would like to point out that even though two practices can both be labelled as manipulative, that does not prevent some instances of manipulation to be considered *more* problematic than others. So the ‘fake niceness’ from the

³³ D Susser, B Roessler and H Nissenbaum, ‘Online Manipulation: Hidden Influences in a Digital World’ (2019) 4 Geo. L. Tech. Rev. 1, 17

³⁴ For a much more elaborate ethical analysis of the harms of manipulation, see D Susser, B Roessler and H Nissenbaum, ‘Online Manipulation: Hidden Influences in a Digital World’ (2019) 4 Geo. L. Tech. Rev. 1, 34-43.

example above can, indeed, be seen as a manipulative act and there is no problem labelling this kind of behaviour ethically problematic: other things being equal, we would not want other people to push our buttons by engaging with us in an untruthful manner. It does not follow, however, that this kind of manipulation is necessarily as problematic as *other instances* of manipulation. The kind of manipulative potential inherent to Fortnite, as we argue in the following pages, is much more problematic than the fake niceness, even though both cases can be seen as involving manipulation *stricto sensu*.

In other words, we believe that all manipulation as we defined it is problematic, but that one can still distinguish between less and more problematic instances of manipulation. While fleshing out these different levels of manipulation goes beyond the scope of this article,³⁵ we can at least identify a number of elements to take into account in order to distinguish between varying degrees of problematic manipulation. These include: the aim(s) of the manipulator, the scale at which the manipulation takes place, the techniques used, the duration, and the characteristics of the targets.³⁶ Based on these elements, we argue that Fortnite is a case that warrants close scrutiny, since it operates at a large scale, has a lot of resources to develop and test different techniques to influence behaviour, is often used for extended periods of time, and can be assumed to have children as a significant portion of its userbase (who are entitled to stronger legal protections).

In offline cases of manipulation, we would normally focus on individual cases of interpersonal manipulation and ask whether a particular person was manipulated by a particular act. Such an approach is difficult to maintain for digital environments like Fortnite that has 250 million users and features billions of separate interactions between the digital environment and players. Analysing all those billions of interactions separately is undoable and, more importantly, not very informative. It makes sense to take a more *structural* approach and focus on the design features of the digital environment and ask how we can expect those to shape the behaviour of all the 250 million users.

³⁵ For a more elaborate analysis, see M Sax, 'Optimization of What? For-Profit Health Apps as Manipulative Digital Environments' (2021, forthcoming) *Ethics and Information Technology*; M Sax, *Between Empowerment and Manipulation: The Ethics and Regulation of For-Profit Health Apps* (PhD Thesis, University of Amsterdam, 2021).

³⁶ See also M Sax, 'Optimization of What? For-Profit Health Apps as Manipulative Digital Environments' (2021, forthcoming) *Ethics and Information Technology*; M Sax, *Between Empowerment and Manipulation: The Ethics and Regulation of For-Profit Health Apps* (PhD Thesis, University of Amsterdam, 2021).

Such a structural approach also helps overcoming the obstacle of not being able to definitively identify the intentionality behind some of Epic Games' design and business choices. By taking a more structural perspective, we focus on the observable properties of Fortnite as a service and the effect it has, or can have, on (some of) its users. As will become apparent in the following section, we can argue that *given the observable properties* of Fortnite, there are sufficient reasons to *presume* that the game experience can have exerting manipulative influences on its players. We cannot prove conclusively that Epic Games *intends* Fortnite to be manipulative. So conceptually, this means that 'proving' manipulation is nearly impossible. In practice, and for the purpose of the legal assessment in section 6, we care about the *effect* the digital gaming experience has on its players, regardless of whether this effect was – strictly speaking – fully intended. In sum: we focus on the practices we observe and ask whether they can be regarded as manipulative while acknowledging our lack of access to Epic Games' true intentions.

Before we can use the aforementioned ethical theory of manipulation to analyse Fortnite as a CDP, one more element needs to be clarified. We argued that manipulation involves intentionally imposing a *hidden influence* on someone's decision-making, but what is the precise meaning of a 'hidden' influence? What needs to be hidden? The very *presence* of the influence, or the *strategy* of which the influence is a necessary part, or the *mechanism* through which the influence works? Normatively, the hiddenness of an influence is significant because it helps explain why manipulation is problematic: a hidden influence is one a manipulee cannot (fully) incorporate in her decision-making or stance towards something, thereby undermining that person's autonomy. For our purposes, then, 'hidden' should be understood in a broad, multi-faceted manner to accommodate this normative intuition that there is something *alienating* about manipulation. In practice, this means that an influence can be considered hidden in the relevant sense when either the presence of an influence, the strategy behind an influence, or the mechanism through which the influence is supposed to operate, or any combination of these aspects is hidden to the manipulee. What matters is that the hiddenness of any of these aspects can alienate a person from their decision-making.

In what follows, we establish Fortnite as an intentionally designed digital choice architecture that exerts influences on players and ask whether the digital environment provided by Fortnite

(and the types of influences that come with it) is ethically problematic. This, in turn, will inform our legal analysis of the game's practices.

4 Fortnite's Manipulative Potential Unpacked³⁷

4.1 How the Game Works

Fortnite constitutes what is called a 'Battle Royale' game. The Battle Royale concept is simple: a large number of players is placed in a map, where they all fight each other until one player is left (the winner). In Fortnite, a hundred players start in a flying bus above the map. They jump out of the bus and use their paraglider to drift to any part of the map they desire. Upon landing on firm ground there are basically two things players do to win: building structures (e.g. fortifications, bridges, and towers) to gain a strategic advantage, and searching for weapons to bring damage to other players. Players use their pickaxe to harvest the resources (wood, stone, and metal) needed for building structures. To obtain better weapons, they search the maps for chests and weapons laying around in for instance houses. During a Battle Royale match, the island is surrounded by a storm which gradually moves in, forcing players to an increasingly smaller section of the map.

4.2 It Is All About the Skins

The word 'skins' is inextricably linked with Fortnite. A skin is a purely aesthetic 'upgrade' to one's character, changing the appearance of one's character in the game. Because the game is designed to look cartoony and fun, the game features a (ever expanding) set of over the top skins such as bunny suits, hermits with beards reaching the ground, inflatable tube men costumes and so on. Players can also acquire (solely) aesthetic upgrades to weapons and so-called *emotes* (e.g. dance moves and taunts) that one can perform at any given time. (In the remainder of this paper, we will simply use the term 'items' to refer to skins, weapons, and emotes collectively). Players play the game to earn access to items, but they can also buy these items directly from the in-game shop. None of the items give a competitive advantage to players, they are purely cosmetic

³⁷ The analysis in this chapter is based on Fortnite's practices up until January 2020.

‘upgrades.’ Still, these cosmetic upgrades are incredibly popular and acquiring as many ‘cool’ items as possible is one of the main reasons for people to play the game.³⁸

4.3 *Engagement-by-Design: Game Mechanics*

To be able to ethically evaluate Epic Games’ (commercial) practices in its flagship Fortnite game, we need to understand how the game mechanics are designed to keep players engaged with the game and willing to pay money for Battle Passes or items.³⁹ It bears emphasis that in the end we are mainly interested in the question whether engagement-by-design features (can) play a problematic role in Fortnite’s development beyond a game, into a CDP.

4.3.1 *Progression Trees*

Fortnite’s progression system⁴⁰ is the core mechanic in the game that is used to create an engaging experience through which the game monetises user interactions. In essence, the progression system follows the standard video game logic: play the game and the better you do so (i.e. by progressively completing more challenges and killing enemies) the faster you progress and the more items you earn as a reward for progressing. In Fortnite, things are a bit more complicated since the game is organised in cyclical 10-week seasons. During each season, you are presented with a season-specific progression tree which is subdivided in tiers. For the duration of a season, you can progress on this tree and unlock season-specific items.

Seasonal progression trees are split in a ‘free’ and in a ‘Battle Pass’ track. A Battle Pass is a premium ticket which costs 950 V-Bucks (roughly \$10) and lasts for the duration of one season, unlocking the premium Battle Pass track for that season (more on V-Bucks below). The Battle Pass track contains better and more frequent rewards for progress. Because the game shows the slower, less rewarding ‘free’ track directly above the Battle Pass track, players without a Battle

³⁸ For a study on how and why people value the purchasing of virtual items in online games, see B Park and K Lee, ‘Exploring the Value of Purchasing Online Game Items’ (2011) 27 *Computers in Human Behavior* 2178.

³⁹ Back in 2010, Hamari and Lehdonvirta already proposed “that the design patterns and game mechanics commonly used in games and online hangouts should be viewed as a set of marketing techniques designed to sell virtual goods” J Hamari and V Lehdonvirta, ‘Game Design as Marketing: How Game Mechanics Create Demand for Virtual Goods’ (2010) 5 *International Journal of Business Science & Applied Management* 14. Fortnite is a prime example of a video game that understands that already at the level of the game mechanics marketing techniques to sell virtual goods can be implemented.

⁴⁰ We learned a lot from the YouTube video ‘Manufactured Discontent and Fortnite’ by the Folding Ideas channel, see <<https://www.youtube.com/watch?v=dPHPNgIihR0>> Accessed 17 January 2020.

Pass are constantly confronted with all the cool rewards they miss out on. At the same time, access to the Battle Pass means that players get more frequent and better rewards, which in turn motivates them to keep playing. The Fortnite progression system effectively teaches players that investing some money makes the game much more rewarding, which in turn makes it more likely that players continue playing, which in turn makes it more likely they will buy a Battle Pass for the upcoming season, and so on.⁴¹

4.3.2 *Engineering FOMO: Continuous updating of challenges*

Fortnite works with rotating daily and weekly challenges, which give access to unique items for a limited time. This mechanic incentivises people to play the game every day, since they do not want to miss out on items that are only available through these temporary challenges. People that come back to the game for the temporary challenges are, of course, also confronted with all the other engagement boosting game mechanics, making the daily and weekly challenges an important ‘hook’ for Epic Games to keep people engaged with Fortnite.⁴²

It bears emphasis that the progression system which distributes rewards is carefully designed to maximise both the engagement of users and the potential to monetise the interactions with those users. As UX⁴³ researchers working for Epic Games have explained, structuring the rewards system is an exact science that is taken very seriously at Epic Games (as with other game developers). At the 4C Game Development Conference in Prague (2018), Epic Games UX researcher Ben Lewis-Evans (PhD in psychology) gave a lecture titled ‘Reward Psychology – Throwing out the Neuro-Trash.’⁴⁴ He describes how games like Fortnite use different reward schemes layered on top of each other to create a maximally engaging experience for players. For example, he explains that you want to provide players with timed as well as fixed rewards for which they can accurately anticipate when they receive them. Such rewards serve as reliable guideposts in the future giving a player a reason to play for an additional X hours or minutes before the next reward is awarded. However, providing just fixed and timed rewards would quickly become boring, because they are, by definition, predictable. You should therefore add additional

⁴¹ For an empirical study on such mechanisms, see J Hamari, ‘Why Do People Buy Virtual Goods? Attitude Toward Virtual Good Purchases Versus Game Enjoyment’ (2015) 35 *International Journal of Information Management* 299.

⁴² N Eyal, *Hooked: How to Build Habit-Forming Products* (Penguin, London 2014).

⁴³ Industry term for ‘user experience.’

⁴⁴ <<https://www.youtube.com/watch?v=VjHl8Vrfrfk>> Accessed 17 January 2020.

layers of, ideally, both random and variable rewards. For the variable rewards it is important that the player clearly understands *how* to achieve them, as well as having a sense of *control* over achieving them. If this layering approach is done right, the timed and fixed rewards provide the player with a steady supply of predictable rewards which always give the player reason to continue playing, while the random rewards add exciting uncertainty and the variable rewards give players a sense of control and achievement. Fortnite is a prime example of this layer-approach, with fixed rewards you receive just for participating in a match, timed rewards for coming back to the game, random rewards when players open chests in Battle Royale matches, and variable rewards when completing challenges.

Epic Games' former head of UX research, Celia Hodent, explains important UX design choices in Fortnite in another video.⁴⁵ For example, she explains in great detail how the process of buying and opening bundles of items in the shop is designed to match the “cute” and “fun” “game feel” of Fortnite to make it fun to buy items.⁴⁶ Hodent also explains Fortnite's ‘onboarding’ process. Onboarding refers to the player's first interactions with the game, which afford the game developer the possibility to teach the player how to understand and play the game. Hodent emphasises how Fortnite's onboarding process teaches new players that your avatar and its home base (a permanent personal space where you store items) are ways to express your personal progress and identity: “you have to develop your home base. This is your persona in the game. This is what you progress. This is what you grow.”⁴⁷ Fortnite's onboarding process is thus designed to teach players from the very start how important and valuable it is to collect as many cool items

⁴⁵ <https://www.youtube.com/watch?v=4DE_4HUX94E> Accessed 17 January 2020. Transcript of the video can be found here: <<https://cdn.arstechnica.net/wp-content/uploads/2018/09/7b4a9bd8-3582-46ec-a83b-d293668a8bf4mezzanine.txt>> Accessed 17 January 2020.

⁴⁶ Since January 2019, they are actually called X-Ray Piñatas because players now get to see what is in the llama piñata before they buy it. Before January 2019, players bought a black box llama piñata and only found out what was in it after purchasing it. Epic Games changed this mechanic (referred to as a ‘loot box’ in the game industry) after several European gambling authorities considered regulating them as instances of gambling. FPS Justice Gaming Commission, *Research Report on Loot Boxes* (Brussels, April 2018) <https://www.gamingcommission.be/opencms/export/sites/default/jhksweb_nl/documents/onderzoeksrapport-loot-boxen-Engels-publicatie.pdf> Accessed 5 March 2020; The Netherlands Gambling Authority, *Study into loot boxes: A treasure or a burden?* (The Hague, April 2018) <https://kansspelautoriteit.nl/publish/library/6/study_into_loot_boxes_-_a_treasure_or_a_burden_-_eng.pdf> Accessed 5 March 2020/

⁴⁷ <<https://cdn.arstechnica.net/wp-content/uploads/2018/09/7b4a9bd8-3582-46ec-a83b-d293668a8bf4mezzanine.txt>> Accessed 17 January 2020.

as possible, since those items are what communicate to the world how you progress, while they also set you apart from other players.

4.3.3 *In-Game Shop*

Given the central role items play in Fortnite, the in-game shop through which such items can be acquired is also designed to maximise engagement. First of all, the game uses an in-game currency called V-Bucks which can be purchased with currencies like dollars and euros. Because players buy items and Battle Passes with V-Bucks instead of real money, they are supposed to experience less inhibitions when buying items in the shop. Moreover, the real value of V-Bucks is deliberately made hard to gauge because V-Bucks can be acquired in different quantities and the more you buy at once, the better the ‘exchange rate’ you get. The virtual currency system is thus designed to keep players engaged with the shop, without having (or being able) to think too much about the real monetary value of their acquisitions.⁴⁸

Another important design feature is the fact that the in-game shop does not offer the complete catalogue of items available, but rather offers a very limited daily selection of items. This means that the shop is designed to (1) instil a fear of missing out since that one item that you like and that is currently featured in the shop will soon be gone,⁴⁹ with no indication if or when it will return; (2) lure players back to the game every day because they want to keep a close eye on the quick and unpredictable rotation of items. On social media and discussion websites like Reddit, the daily shop rotations are discussed elaborately. The Fortnite subreddit (1.1 million users) features a daily thread to discuss the daily in-game shop offerings. For example, on 4 July 2019, the daily shop offering contained ‘Fireworks Wrap’ (“show your style”) which changes the appearance of one’s weapons. One of the most upvoted comments was “Firework wrap on point,” to which someone answered, “Is it animated?” Multiple users responded by commenting things like “Yes and it looks amazing,” and “I’m not at home rn [right now] but if there is fireworks going

⁴⁸ There are various instruction books for app developers which emphasise how the use of virtual currencies can help maximize transactions and revenue. See, e.g., W J Au, *Game Design Secrets* (Wiley, Indianapolis 2012), 163; T McCann, *The Art of the App Store: The Business of App Development* (Wiley, Indianapolis 2012), 172-175.

⁴⁹ In Fortnite terminology: vaulted.

off on the wrap it's an insta cop for me."⁵⁰ In threads like these, Fortnite players are simultaneously discussing and establishing the value of the daily offerings. Popular YouTubers and Twitchers who discuss new items serve a similar purpose.

4.4 *Fortnite's Social Significance (Especially to Children) and Its Cultural Omnipresence*

Fortnite's ability to engage players is as much rooted in its clever game design as it is in its strong cultural presence and the social functions the game has. We briefly address two points here. First, Epic Games is proactively trying to engineer the ubiquitous cultural presence of Fortnite. Second, Fortnite performs a social function for many of its users, notably including children, by giving them tools to shape and express their subjectivity.⁵¹

Both online and offline Fortnite becomes or makes itself present in various cultural domains, and these cultural domains in turn get integrated into the game itself. Professional athletes from a wide range of sports have celebrated important moments in important games with Fortnite dance moves.⁵² These dance moves are then imitated by children playing sports in the schoolyard⁵³ and, more importantly, also make these dance moves more desirable objects in the shop. "Fortnite's emotes — the dance moves sold in its in-game store for two dollars and up — have become its most recognisable symbol, as teens (and adults for that matter) all over the world 'floss' and 'Take the L' in schools, on street corners, and in a million YouTube videos."⁵⁴ Many different brands have already had 'crossovers' with Fortnite, where parts of the game world or specific items in the game take on an appearance in the style of the partner brand. There have been crossovers with, for instance, the Avengers and the John Wick movie franchises; Netflix' hit series Stranger Things;⁵⁵

⁵⁰ <https://www.reddit.com/r/FortNiteBR/comments/c8vlg2/daily_shop_2019074/> Accessed 17 January 2020.

⁵¹ Sicart speaks of "the act of playing a computer game as an act of subjectivization" M Sicart, *The Ethics of Computer Games* (The MIT Press, Cambridge MA 2009), 63.

⁵² <https://www.washingtonpost.com/sports/are-pro-athletes-playing-too-much-fortnite-some-teams-are-worried/2018/07/20/664d5ffe-8ab5-11e8-85ae-511bc1146b0b_story.html?utm_term=.0c0ea6f84963> Accessed 17 January 2020.

⁵³ <<https://www.wired.com/story/kids-fortnite-ubiquity/>> Accessed 17 January 2020.

⁵⁴ V Osterweil, 'Well Played: Battle Royale' (2018) Real Life Mag, <https://reallifemag.com/well-played-battle-royale/> Accessed 22 December 2020.

⁵⁵ <<https://www.theverge.com/2019/7/3/20680803/fortnite-stranger-things-season-3-crossover>> Accessed 17 January 2020.

DJ Marshmello;⁵⁶ the NFL;⁵⁷ Weezer (a rock band);⁵⁸ and Nike.⁵⁹ By partnering with many different brands, franchises and entertainers, Epic Games attempts to 1) make the game itself relevant and meaningful to a wide(r) range of people, and 2) make the in-game branded items appealing to people who already like the brands Epic Games partners with. Epic Games also organises offline Fortnite events, such as the Fortnite Summer Bloc Party where, among other things, it paired popular Fortnite players with celebrities from many different industries for the ‘Celebrity Pro-Am’ tournament.⁶⁰ By inviting celebrities from many different industries (e.g. music, TV, movies, comedy, sports) the tournament was made appealing to a wide audience. Epic Games also organised a Fortnite World Cup with a \$30 million prize pool,⁶¹ which was widely covered in traditional media already before the start of the finales,⁶² and, even more so, on social media. The winner of the World Cup, ‘Bugha,’ was invited to Jimmy Fallon’s Tonight Show⁶³ and featured in media such as The New York Times⁶⁴ and The Guardian.⁶⁵

At the same time, Fortnite itself is – especially among teenagers – becoming “a new kind of immersive social network”⁶⁶ where you can hang out with your friends, (voice) chat, and show (and play with) your personality and self-presentation with the endless collection of skins around which Fortnite revolves.⁶⁷ Many of these skins take on a cultural meaning precisely because they

⁵⁶ <<https://www.wired.com/story/fortnite-marshmello-concert-vr-ar-multiverse/>> Accessed 17 January 2020.

⁵⁷ <<https://www.forbes.com/sites/davidthier/2018/11/09/official-nfl-jersey-skins-are-coming-to-fortnite-today-heres-what-time-and-how-much-theyll-cost/#7acb7f14aba5>> Accessed 17 January 2020.

⁵⁸ <<https://arstechnica.com/gaming/2019/03/fortnite-teams-with-weezer-in-attempt-to-become-the-next-second-life/>> Accessed 17 January 2020.

⁵⁹ <<https://www.theverge.com/2019/5/22/18635366/michael-jordan-fortnite-limited-edition-brand-invasion>> Accessed 17 January 2020.

⁶⁰ <<https://www.youtube.com/watch?v=Sb4-jnozMGY>> Accessed 17 January 2020.

⁶¹ <<https://www.epicgames.com/fortnite/en-US/news/fortnite-world-cup-details>> Accessed 17 January 2020.

⁶² <<https://www.theguardian.com/games/2019/feb/22/fortnite-world-cup>> Accessed 17 January 2020; <<https://www.theverge.com/2019/2/22/18235132/fortnite-world-cup-final-date-prize-money-new-york-esports>> Accessed 17 January 2020; <<https://www.forbes.com/sites/gradsoflife/2019/06/20/21st-century-skills-act-an-investment-in-our-workforce/#291a80245342>> Accessed 17 January 2020.

⁶³ <<https://www.youtube.com/watch?v=OMlew5x8IFU>> Accessed 17 January 2020.

⁶⁴ <<https://www.nytimes.com/2019/07/29/us/fortnite-world-cup-winner-bugha.html>> Accessed 17 January 2020.

⁶⁵ <<https://www.theguardian.com/games/2019/jul/29/american-teenager-becomes-first-fortnite-world-cup-champion-kyle-bugha-giersdorf>> Accessed 17 January 2020.

⁶⁶ <<https://www.theverge.com/2019/7/29/8934329/fortnite-world-cup-finals-epic-games-esports-ninja-tfue-bugha-marshmello>> Accessed 17 January 2020.

⁶⁷ <<https://www.theverge.com/2018/12/21/18152012/fortnite-was-2018s-most-important-social-network>> Accessed 17 January 2020.

are often related to social or cultural phenomena outside of Fortnite (see all the examples provided above of athletes, musicians and brands partnering with Epic Games).

There is also an interesting, mutually reinforcing dynamic between Fortnite and the relatively new phenomenon of video game live streamers.⁶⁸ “Live streaming is a major new force in the game industry, creating links between developers and influencers and shifting our expectations of game play and game design, and is consequently a platform whose major structural effects are only now beginning to be understood”.⁶⁹ Popular Fortnite streamers, who can be considered the most important Fortnite influencers,⁷⁰ play the game for large live (digital) audiences.⁷¹ Importantly, popular streamers regularly discuss items they consider cool, thereby bestowing cultural significance and value on these virtual items. Epic Games, being aware of the vital role live streamers play in making Fortnite exciting and engaging for its players, invites the likes of Tfue and Ninja to its events where they are treated as celebrities.⁷² The company also employs ‘influencer relations managers’ who “track and monitor the Fortnite influencer community” to “build relationships with key influencers” and develop “strategies for major campaign beats and influencer support initiatives.”⁷³

4.5 *Beyond the Game: Fortnite as a Content Delivery Platform*

Thus far, we have discussed Fortnite *as a video game* that is very successful at building a digital environment boosting sales of Battle Passes and skins to its players. Looking for an economic expansion, Epic Games appears to want to position Fortnite as a *platform* integrating and offering

⁶⁸ See, e.g., T Taylor, ‘Now You’re Playing with Audience Power’ (2016) 33 *Critical Studies in Media Communication* 293; M Johnson and J Woodcock, ‘It’s Like the Gold Rush: The Lives and Careers of Professional Video Game Streamers on Twitch.tv’ (2017) 22 *Information, Communication & Society* 336; T Taylor, *Watch Me Play: Twitch and the Rise of Game Live Streaming* (Princeton University Press, Princeton NJ 2018).

⁶⁹ M Johnson and J Woodcock, ‘The Impact of Live Streaming and Twitch.tv on the Video Game Industry’ (2019) 41 *Media, Culture & Society* 670, 670.

⁷⁰ Woodcock and Johnson discuss “the role of *Twitch* live streamers as social media influencers, and their potential value to organizations carrying out strategic communication activities.” J Woodcock and M Johnson, ‘Live Streamers on Twitch.tv as Social Media Influencers: Chances and Challenges for Strategic Communication’ (2019) 13 *International Journal of Strategic Communication* 321, 333.

⁷¹ <<https://www.twitchmetrics.net/channels/viewership?game=Fortnite>> Accessed 17 January 2020.

⁷² Ninja did not qualify for the latest World Cup based on his performance in the game. To still make sure that he was present, Epic Games included him in the ‘Pro-Am’ side event which pairs professional gamers with celebrities. <<https://www.theverge.com/2019/7/29/8934329/fortnite-world-cup-finals-epic-games-esports-ninja-tfue-bugha-marshmello>> Accessed 17 January 2020.

⁷³ <<https://imgur.com/a/RpACGF8>> Accessed 17 January 2020.

much more content and services than the game per se. As mentioned before, Epic Games' CEO Tim Sweeney himself describes Fortnite as "evolving beyond a game [...] We're a digital ecosystem company."⁷⁴

A parallel can be drawn with Facebook's evolution into a dominant platform as analysed by Helmond, Nieborg, and Van der Vlist: "partnerships are an essential entry point for tracing a platform's evolution and its shifting boundaries. [...] Through these strategically forged corporate partnerships, platforms instil platform dependencies, become embedded, and gain power in other domains."⁷⁵ Fortnite's current development into a CDP is a clear example of an attempt to shift its boundaries outwards by strategically pursuing corporate partnerships. In what follows we provide a brief outline of (1) how other services and content are already starting to be integrated in the game experience, and (2) what the (near) future might hold.

There is a socio-cultural and a technical side to Fortnite's development into more than a game. From a socio-cultural perspective, Fortnite is already well on its way to resemble a social network; a place online where friends (and strangers) meet to hang out, not only to play together, but also to talk via text or voice chat. "*Fortnite* is evolving far beyond its status as a hit video game to become a meeting place, messaging service and increasingly central social gathering space for its millions of teen and tween players."⁷⁶ Within this social online meeting space, Fortnite can use the increasingly flexible architecture of its game to integrate other types of content and services into the videogame experience. By doing so, the game becomes an immersive *instrument* that can be used to deliver (third party) content and services to players in a manner that makes the advertising and content feel like an authentic, integral part of the video game. As the think-tank National Research Group observes:

In an era defined by immersive experiences, every brand should think like an entertainment company to win and keep consumer attention. In less than two years, Fortnite has attracted more than 250 million users around the world, and for its audience of teens (ages 10-17)

⁷⁴ <<https://www.businessinsider.nl/epic-games-ceo-tim-sweeney-fortnite-unreal-engine-2019-3/?international=true&r=US>> Accessed 17 January 2020.

⁷⁵ A Helmond, D Nieborg and F Van der Vlist, 'Facebook's Evolution: Development of a Platform-as-Infrastructure' (2019) 3 Internet Histories 123, 124.

⁷⁶ <<https://www.forbes.com/sites/dbloom/2019/06/04/is-fortnite-the-new-social-media-home-for-teens/#4b081eef59f9>> Accessed 17 January 2020.

who play at least once a week, Fortnite is consuming a colossal 25% of their free time. Offering brands access to significant young audiences who watch less traditional TV, Fortnite is changing the way consumers and brands are interacting and opening up new opportunities for live experiences.⁷⁷

The first major display of Fortnite's potential as a CDP that uses the game as a *means* to deliver *other services*, was the DJ Marshmello concert⁷⁸ which took place within the game in February 2019. In an in-game area a stage was 'built' on which a digital avatar of DJ Marshmello 'appeared' at the announced time to 'play' a ten-minute set for millions of players. Players could interact with each other and the environment like they can during regular Fortnite matches (weapons were disabled), making the concert an interactive experience. DJ Marshmello also talked to the crowd ("let me see everybody moving," "Okay for this song I wanna see everybody jumping, let's go!") as light effects and fireworks made the concert into a visual spectacle. To make the virtual experience more realistic, the concert was listed on DJ Marshmello's official touring schedule. The millions of players⁷⁹ that attended to concert could do so free of charge, perfectly in line with Fortnite's free-to-play concept. Also, very much in line with Fortnite's free-to-play concept, there were DJ Marshmello skins released for a limited period before the concert. During the scripted concert, DJ Marshmello shouted phrases such as "Okay I wanna see everybody doing their favorite emote right now!" which fits the Fortnite narrative that players can express their authentic personal identity through paid-for skins and emotes. (Similar to the DJ Marshmello concert, the Fortnite World Cup could be watched *within* the game itself.⁸⁰)

The concert benefited Fortnite not just by bringing (new) players to the game to watch the concert, but also by having a big artist confirm/validate the value and importance of the in-game items such as skins and emotes (and the Fortnite brand in general). DJ Marshmello, in turn, experienced a sharp increase in his popularity after the Fortnite concert. There was a clear growth

⁷⁷ <<http://www.nationalresearchgroup.com/news/fortnite-the-new-social-media>> Accessed 17 January 2020.

⁷⁸ Full concert: <<https://www.youtube.com/watch?v=NBsCzN-jfvA>> Accessed 17 January 2020.

⁷⁹ <<https://www.theguardian.com/games/2019/feb/03/marshmello-fortnite-in-game-concert-edm-producer>> Accessed 17 January 2020.

⁸⁰ <<https://www.epicgames.com/fortnite/en-US/news/stream-the-fortnite-world-cup-finals-in-fortnite>> Accessed 17 January 2020.

in music streams,⁸¹ and his social media presence exploded overnight (e.g. his YouTube channel gained around 700.000 new followers the day after the concert).⁸² The event also got incredible media attention, further generating free advertisement benefiting both Epic Games and DJ Marshmello.

The earlier mentioned crossovers with various brands and franchises show that Epic Games is already experimenting with various ways of using the game as a platform for commercial third parties to reach a large captive audience. Some crossovers only revolve around a few temporary items in the in-game store, while other crossovers with movie and television franchises such as John Wick, The Avengers, and Stranger Things involve adjustments to the actual game experience itself, by either changing the aesthetic of the entire in-game world, or by adding temporary game modes. For the duration of the crossover, these brands and franchises actually *become a part of the highly immersive and engaging experience of the video game itself*, making these crossover events some of the most sophisticated forms of native advertising to date.

What set the DJ Marshmello concert apart from other Fortnite-crossovers at the time, is the fact that an actual product/service – namely a concert – could be consumed through/within the game. For the future, we not only foresee more native advertising crossovers in Fortnite, but also more elaborate integrations of actual digital products and services in the game experience itself. One could image new music of artist to be featured within Fortnite, as part of the actual game experience. Another possibility is be the integration of actual TV show or movie footage in the game, either on virtual screen in the game, or in the game lobby or loading screens. As a matter of fact, the latest Star Wars movie *The Rise of Skywalker* was recently promoted in this manner.⁸³ A scripted event that interrupted all Fortnite matches, forcing⁸⁴ everyone to watch the event, saw the virtual invasion of Star Wars themed characters. After a few minutes, a huge virtual screen

⁸¹ <<https://www.forbes.com/sites/bryanrolli/2019/02/08/marshmello-fortnite-concert-boost-streams/#392defdc4c45>> Accessed 17 January 2020.

⁸² <<https://edm.com/news/marshmello-fortnite-social-media-numbers>> Accessed 17 January 2020.

⁸³ <<https://www.theverge.com/2019/12/14/21020296/star-wars-the-rise-of-skywalker-fortnite-jj-abrams-lightsabers>> Accessed 17 January 2020.

⁸⁴ Players were not *literally* forced to participate in the event since it was still possible to close the game and go do something else like reading a book. But for players that decided not to close the entire game there was no option to just continue playing; they were forced to be a spectator to the Star Wars event.

appeared in the air above the Fortnite island, showing a Fortnite-exclusive trailer for the new Star Wars movie.

Inclusion of (simple) video games within Fortnite is also a serious possibility, as this has already happened in a very rudimentary form in, for instance, the Grand Theft Auto series.⁸⁵ It is also imaginable that access to (part of) such digital content could be sold via the already existing in-game store. Lastly, the fact that Fortnite is starting to be seen as a social media platform could also mean that other social media platforms such as Instagram, YouTube, and Twitch will be looking for partnerships with Epic Games to allow for an integration of their platforms in the actual game.

The further materialisation of these probable developments would turn Fortnite more and more into a platform that *looks and feels* like a video game, but that at the same time serves as an engaging, immersive *instrument* to deliver other digital content, services, and sophisticated native advertising to an audience of players.

5 Fortnite's Manipulative Tendencies

Given the ethical theory of manipulation presented in section 3, how should we evaluate Fortnite's development into a CDP that is natively integrated into the video game experience? We will use the four elements of manipulation we identified above to structure our analysis. It should be noted that although we discuss the four elements separately, for something to qualify as manipulation, all four elements need to be present cumulatively. So when, for example, only two out of four elements can be identified, it does *not* follow that there is 'a little bit of manipulation'. All four elements need to be present at the same time. This means that the many social or commercial practices that exhibit *some* of the elements of manipulation (e.g. the targeting of cognitive and affective biases) should not all be considered manipulative. Indeed, the fact that most forms of entertainment target some affective or cognitive biases does not imply that they are all inherently manipulative. This is only the case when *all* four elements of manipulation are present *simultaneously*.

⁸⁵ An overview of simple video games integrated in the video game world of the Grand Theft Auto series can be found here: <https://gta.fandom.com/wiki/Arcade_Games> Accessed 17 January 2020.

So, let us start with the first two elements: (1) an influence is imposed on a target in order to try to make the target serve the interest of the manipulator; and (2) the manipulator does so intentionally. These two elements only require brief analysis because they are typical of any commercial relationship involving a (potential) customer and a vendor. Like any other for-profit company, Epic Games' main interest is to generate profits and it obviously designs Fortnite to be profitable. It should require no further argumentation that Epic Games, at least at a macro-level, intentionally tries to influence persons to make them serve their interests (i.e., generate profits). Because this is characteristic of *every* commercial relationship, it is much more interesting and relevant to evaluate *how* Fortnite is intentionally designed to serve Epic Games' ends: are they (3) targeting cognitive or affective weaknesses of their players and do they (4) impose (partly) hidden influences on their players? As we explained above, from a purely conceptual perspective an influence only qualifies as manipulative when there is an *intent* to target weaknesses to impose (partly) hidden influences on persons. In what follows, we cannot and will not prove the presence of such an intent for each specific practice at a micro-level. We will, however, discuss properties of the game design and experience that can make one *suspect* the presence of such an intent.

5.1 *Targeting Cognitive and Affective Weaknesses*

Does Fortnite provide a gaming experience which ends up targeting cognitive or affective weaknesses of players? We can ask this question at the level of the overall game design, and at the level of Fortnite-as-a-CDP. The answer to the first question is important because the overall engaging nature of the game also determines how Fortnite-as-a-CDP functions.

In the first part of this paper, we have already described several game mechanics and design choices that can be understood as attempts to leverage cognitive and affective weaknesses of players. For example, the use of insights from reward psychology to layer different reward schemes in the progression trees. Another example is the heavily curated in-game shop with its daily rotations of items, instilling in players a constant fear of missing out on a unique opportunity to acquire that-one-item. Yet another example is the cyclical game design with its short seasons, effectively leveraging the sunk cost effect.⁸⁶ Every 10 weeks, players are confronted with the

⁸⁶ See, e.g., P Delfabbro and D King, 'On Finding the C in CBT: The Challenges of Applying Gambling-Related Cognitive Approaches to Video Gaming' 31 *Journal of Gambling Studies* 315.

choice to buy a Battle Pass for the new season. Because players have already acquired many cool achievements and skins in previous seasons, it becomes increasingly attractive to spend some more money (around €10) for another 10 more weeks of skin-earning and to not let the spoils of the previous seasons go to waste.

Lastly, there are a number of patents that suggest a systematic and advanced search of video game developers/publishers for new techniques to leverage cognitive and affective weaknesses of players.⁸⁷ A notable example concerns a patent that details a technique to design match-making features in video games (also present in Fortnite) to engineer the desire to purchase certain virtual goods.⁸⁸ The patent proposes to identify the preferred style of play of a player (the ‘junior’) and couple the player with more successful players who adopt a similar play style (the ‘marquee’). The underlying idea is that when the junior and the marquee are put into the same match, the junior will look up to the more skilled marquee who adopts a similar play style, wanting to mimic the marquee. Then, in a next step, the game will send the junior personalised offers for items the marquee used, which should motivate the junior to purchase the items she saw the marquee use so successfully. The patent shows a clear and deliberate intention to target and exploit cognitive and affective weaknesses of players. There are many other examples we could discuss (again) but the general point should be clear: Fortnite offers a gaming experience which can end up targeting known cognitive and affective weaknesses of players to make the game engaging and lucrative.

The next question we should answer is whether the recent introduction of content delivery mechanisms in the game also can involve the targeting of cognitive or affective weaknesses. Here, the most important observation to make is the fact that the content delivery mechanisms are

⁸⁷ Some examples: US20160005270A1, System and method for driving microtransactions in multiplayer video games, <<https://patents.google.com/patent/US20160005270A1/en>> Accessed 17 January 2020; US20160001181A1, Matchmaking system and method for multiplayer games, <<https://patents.google.com/patent/US20160001181A1/en>> Accessed 17 January 2020; US20170100676A1, System and method for generating personalized messaging campaigns for video game players, <<https://patents.google.com/patent/US20170100676A1/en>> Accessed 17 January 2020.

⁸⁸ US20160005270A1, System and method for driving microtransactions in multiplayer video games. <<https://patents.google.com/patent/US20160005270A1/en>> Accessed 17 January 2020. While this patent was not filed by Epic Games itself (but by Activision, another game developer), it does offer a useful illustration that widely featured in popular media of the research and development initiatives within the gaming industry. See also: Kyle Orland, ‘Activision’s Patented Method to Drive Microtransactions with Matchmaking’, *Ars Technica*, 2017 <<https://arstechnica.com/gaming/2017/10/activisions-patented-method-to-drive-microtransactions-with-matchmaking/>> [accessed 19 May 2020].

natively integrated into the game to resemble its look and feel, so as to become indistinguishable from the game. It is well-established (and known by publishers) that people are notoriously bad at recognising commercial content that is natively integrated in the actual editorial content. “Nearly all the published research on online sponsored content to date clearly shows that a majority of consumers do not realize they are looking at an ad.”⁸⁹ If readers of written media are already notoriously bad at recognising natively integrated commercial content, one can expect the same to be true even more so regarding immersive media such as video games. By choosing to integrate content delivery mechanisms *natively* in the game experience – without the use of any clear disclosures indicating to users that paid-for content is integrated in the game experience –, we consider Epic Games (and its commercial partners) to leverage known cognitive and affective weaknesses of players.

If we focus specifically on children,⁹⁰ it bears emphasis that they are (generally considered to be) even more impressionable and less able to critically reflect on the (partly) commercial nature of the experience that is offered to them. As a population, children exhibit particular cognitive and affective biases associated with their age. We suspect that Epic Games targets children with Fortnite content, for instance by partnering with brands that children like and celebrity influencers particularly popular among children. To the extent this is the case, it can be assumed that Epic Games is knowingly leveraging children’s cognitive and affective weaknesses when it comes to exposure to (natively integrated) commercial material. To be sure, Epic Games is not the first company to specifically target children – it is a normal market practice to do so. We merely argue that the *specific nature* of the entertainment service that Epic Games is offering (i.e. Fortnite) makes the targeting of children within that service *especially* problematic.

5.2 *The Attempt to Exert (Partly) Hidden Influences on Players*

Our discussion of targeting cognitive and affective weaknesses brings us to the question whether the gaming experience offered by Fortnite can end up exerting (partly) hidden influences on its

⁸⁹ B Wojdyski, H Bang, K Keib, B Jefferson, D Choi and J Malson, ‘Building a Better Native Advertising Disclosure’ (2017) 17 *Journal of Interactive Advertising* 150, 150.

⁹⁰ Defined as ‘every human being below the age of eighteen years of age unless under the law applicable to the child, majority is attained earlier’ in Article 1 United Nations Convention of the Rights of the Child, 20.11.1989, <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>> accessed 22 December 2020.

players. It is precisely the targeting of cognitive and affective weaknesses that can result in the exertion of (partly) hidden influences on players. It is no accident that Epic Games seeks to *natively* integrate its content delivery mechanisms into the video game experience; we believe it is precisely the point of their strategy. Video games in general are exceptionally immersive when compared to other media forms. “Although there are of course many other possibilities of escaping mundane reality by immersion in more enchanting ones (for example, watching movies or reading books), virtual game worlds are different from the latter because they require active participation. Instead of being a mere recipient of stimuli, one is part of an interactive play with an important and active role to play oneself.”⁹¹ Video game players can, much like gamblers, get ‘in the zone.’⁹² Being fully immersed in a game is antithetical to being able to act as a critical, circumspect, and rational consumer. Video game developers are very aware of the fact that this tension can be exploited for commercial gain. Illustratively, John Riccitiello, former CEO of EA Games (one of the largest gaming companies in the world), was secretly recorded saying:

When you are six hours into playing Battlefield and you run out of ammo in your clip and we ask you for a dollar to reload you really are not very price sensitive at that point in time. [...] And so what essentially ends up happening – and the reason the ‘play first pay later’ model works so nicely – is that a consumer gets engaged in a property, and they might spend ten, twenty, thirty, fifty hours in the game and then when they are deep into the game and invested in it, we are not gouging, but we’re charging and at that point in time the commitment can be pretty high.⁹³

Riccitiello was speaking about a game-related microtransaction (reloading a virtual gun for a dollar) in the video game Battlefield. As our discussion in section 4 has shown, Fortnite is among the best in the industry when it comes to creating a highly engaging video game experience. Considering this, more critical thought is needed on the social and ethical implications of deploying highly-sophisticated engagement techniques in order to bring players – many of which

⁹¹ J Harambam, S Aupers and D Houtman, ‘Game Over? Negotiating Modern Capitalism in Virtual Game Worlds (2011) 14 *European Journal of Cultural Studies* 299, 304.

⁹² N Schüll, *Addiction by Design: Machine Gambling in Las Vegas* (Princeton University Press, Princeton NJ 2012).

⁹³ Audio fragment can be heard here: <<https://www.youtube.com/watch?v=ZR6-u8OIJTE>> Accessed 17 January 2020. Forbes also reported on it: <<https://www.forbes.com/sites/erikkain/2017/11/14/dont-buy-star-wars-battlefront-ii-if-you-dont-want-to-support-pay-to-win/#376f63a7400f>> Accessed 17 January 2020.

are children – into contact with a wide range of commercial digital content and native advertising integrated into the actual game experience. As Fortnite is turning into a CDP, its players are simultaneously turning into *consumers* in a marketplace that does not look and feel like a marketplace. As people are playing a video game designed to be engaging and immersive, they will not always⁹⁴ be able to at the same time (1) see and understand which commercially inspired influences to promote a service or product are present, (2) *how* those influences operate, and/or (3) what they intend to achieve. Third parties using Fortnite as an advertising or CDP can thus attempt to infiltrate the commercial decision-making procedures of consumers *precisely when they are least likely or able to critically reflect on what is offered to them*. Fortnite thus renders its users susceptible to manipulation.

6 Making Fortnite Forthright: Legal Implications

It has become clear throughout the previous pages that Epic Games both has strong incentives *and* capabilities to build engaging services which can be construed as being manipulative. Moreover, the search for continued growth and sustained relevance also explains Fortnite’s transformation from a mere video game into a Content Delivery Platform (CDP). Both of these trends – i.e. Fortnite’s manipulative potential and its transformation into a CDP – are mutually reinforcing and raise important legal questions. After all, these practices are both used to push the game’s transformation into a CDP (e.g. persuade players to attend ‘live concerts’) *and* are exacerbated/aided by CDP-aspects (e.g. partnerships with movie-franchises to sell skins and emotes). Building on the ethical concerns raised above, the following pages will particularly focus on the legality of Fortnite’s practices we consider potentially manipulative.

When looking at the four key features of manipulation described in section 3 – (a) disposing others to one’s own ends, (b) intentionality, (c) exploitation of cognitive biases/weaknesses, and (d) concealment – in the context of video games such as Fortnite, two of the most important

⁹⁴ It is important to emphasise that we do not argue that *all* players will *always* be *completely* oblivious to the fact that their behavior is cleverly influenced to have them engage in behavior that serves Epic Games’ bottom line. All we propose is that given the scale at which Fortnite operates, it is enough for Epic Games to reliably infiltrate the decision-making of *some* players, *some* of the times. At the aggregate level, this will still yield significant results (as their profits prove).

frameworks in EU law appear to be data protection and consumer protection law. Rather than assessing Fortnite's practices by going through these legal frameworks in detail, we centre our analysis around three core concepts that feature there. This fits the broader exploratory aim of this article, identifying key areas of (legal) concern that require further analysis. Similarly, we also constrain our focus to EU-level legislation.

In the EU, both the data protection and consumer protection frameworks safeguard individual autonomy – something 'manipulation' actively undermines – through safeguards such as transparency, fairness and rational decision-making capacities. In the following pages, we will look more closely at how Fortnite's current practices challenge these key concepts in the General Data Protection Regulation 2016/679 (GDPR) and the Unfair Commercial Practices Directive 2005/29/EC (UCPD). To be clear, Fortnite's practices raise a lot of questions from the perspective of other regulatory frameworks as well (e.g. gambling law,⁹⁵ contract/property law,⁹⁶ copyright⁹⁷ and portrait rights⁹⁸).

6.1 (Lack of) Fairness

Fairness is a pivotal concept in the GDPR and the UCPD, both of which regulate environments characterised by strong power asymmetries. The former lists it as a key data protection principle in Article 5(1)a,⁹⁹ and the latter is aimed in its entirety at preventing unfair practices in business-

⁹⁵ E.g. a lot of popular games have come in the crossfire of gambling authorities, mainly for the practice of so-called 'loot boxes'. Since January 2019, Epic Games in particular has adjusted its practice in Fortnite so that the content of its 'loot llamas' can be seen before they are purchased. Daniel Cermak, 'Micro-Transactions, Massive Headaches: International Regulation of Video Game Loot Boxes', *Michigan State International Law Review*, 28.273–322 (2020), 50 (p. 319).

⁹⁶ E.g. do players have a right to sell their account and/or can a game's terms of service legally prohibit this? Fortnite accounts are being sold on eBay for amounts over \$2.000. See: Daniel Cermak, 'Micro-Transactions, Massive Headaches: International Regulation of Video Game Loot Boxes', *Michigan State International Law Review*, 28.273–322 (2020), 50 (p. 312).

⁹⁷ E.g. a lot of scholarly debate has emerged around the copyrightability of emotes (or dance moves) that players can pay to use within Fortnite (similar questions arise in other games as well). See notably: Anupam Chander and Madhavi Sunder, 'Dancing on the Grave of Copyright?', *Duke Law & Technology Review*, 18.1 (2019), 19.

⁹⁸ E.g. when creating digital avatars of real-life persons. See, e.g.: Kian Hsia and Thijs van den Heuvel, 'Levelling the Playing Field in ESports – Dutch Portrait Rights in Games', *Interactive Entertainment Law Review*, 1.1 (2018), 67–70 <<https://doi.org/10.4337/ielr.2018.01.07>>.

⁹⁹ For an extensive analysis of the fairness concept in data protection law, see: D Clifford and J Ausloos 2018, 'Data Protection and the Role of Fairness' (2018) 37 *Yearbook of European Law* 130.

to-consumer relationships.¹⁰⁰ Both frameworks comprise a general clause (i.e. Article 5(1)a GDPR and Article 5(1) UCPD) requiring data processing and commercial practices to be *fair*. Whereas the GDPR remains rather vague on the scope and content of ‘fairness’, the UCPD is more specific on how to interpret the concept, delineating three levels of unfairness in order of specificity. Apart from the general clause in Article 5 (first level), several commercial practices are listed that are particularly unfair (second level),¹⁰¹ or unfair per se (third level).¹⁰² This renders it more straightforward to demonstrate unfairness under the UCPD than under the GDPR. Indeed, fairness is less delineated in the GDPR, where it primarily refers to the framework's overall aim of ensuring fair balances between all rights, freedoms and interests at stake in data processing operations. With that in mind, GDPR ‘fairness’ is implied throughout the framework and informs the application of rights (e.g. access, object, erasure and not to be subject to automated decision-making) and obligations (e.g. transparency, DPIAs and data protection by design/default). A more systematic analysis of GDPR fairness reveals that it is composed of two main components: fair balancing (including a proportionality and necessity test) and procedural fairness (composed of timeliness, transparency and burden of care requirements).¹⁰³

Considering the above, it appears that the UCPD’s fairness test will be of most practical relevance to challenge Fortnite’s potential manipulative practices. This is not simply the result of the much more delineated nature of fairness in the UCPD, but also of the material scope of application of both frameworks. Indeed, Fortnite’s potential manipulative practices as described above plainly qualify as ‘commercial practices’, defined in Article 2(d) of the UCPD.¹⁰⁴ The same cannot be said regarding the GDPR, which only regulates operations that qualify as the ‘processing of personal data’. In other words, Fortnite’s potential manipulative practices are only subject to

¹⁰⁰ For an extensive analysis of the fairness concept in consumer law, see: G Howells, H Micklitz and T Wilhelmsson (eds), *European Fair Trading Law: The Unfair Commercial Practices Directive* (Ashgate, 2006).

¹⁰¹ Notably commercial practices that are misleading in terms of Article 6 (misleading actions) and Article 7 (misleading omissions) or aggressive in terms of Article 8 (aggressive commercial practices) and Article 9 (harassment, coercion and undue influence).

¹⁰² The UCPD’s Annex 1 comprises a list of blacklisted practices, that do not need to be individually assessed and are illegal as such.

¹⁰³ D Clifford and J Ausloos 2018, ‘Data Protection and the Role of Fairness’ (2018) 37 Yearbook of European Law 130.

¹⁰⁴ “any act, omission, course of conduct or representation, commercial communication including advertising and marketing, by a trader, directly connected with the promotion, sale or supply of a product to consumers”

GDPR requirements to the extent they make use of *personal data*. Epic Games' privacy policy¹⁰⁵ uses vague language (using examples rather than clearly delineated definitions, and often using the word 'generally' when explaining their data practices, leaving large grey zones) and often uses hypotheticals (such as 'we *may* receive...'), making it hard to grasp the actual extent to which they process personal data specifically for the purposes as outlined in section 4 of this paper. Indeed, we did not find evidence that a user's personal data is processed to personalise how progression trees are visualised at the individual level (e.g. in order to increase chance of that player buying a battle pass). Nor could we establish that personal data is processed specifically for the purpose of altering the reward mechanism, game updates and/or rotation of items in the in-game shop, at the individual user level.

As an interactive medium, online games require the processing of personal data by their very nature. After all, every player will have a unique experience that is based on their decisions and actions within the game environment. Fortnite in particular can only be played online, i.e. with a permanent connection to Fortnite servers. This means that (contrary to traditional 'offline' games) any part of, or even the entire game-play of every individual can be – and according to Epic Games' privacy policy generally *is*¹⁰⁶ – collected and stored continuously. This includes, for example, individual level game play strategies as well as all potential audio(visual) interactions between gamers through different sorts of communication channels (which may include personal data of third parties featuring in the background of the gamers). According to Epic Games, that data *may* be used "to better understand our users, their interests, and their preferences; to personalize your experience, save your preferences, authenticate our users, and provide similar user-experience features; to develop, deliver, and improve our products, services, and other offerings, some of

¹⁰⁵ At the time of writing, there is no privacy policy specific to the Fortnite game itself. Instead, Epic Games appears to use one general privacy policy to cover most of its products and services.

¹⁰⁶ Section 2 of Epic Games' privacy policy (emphasis added): "...our back-end servers collect **usage data transmitted from our games** and other software. We use the information for purposes such as modifying or improving features, managing advertising, addressing technical issues, preventing fraud or misuse of our services, and conducting data analytics. The type of information that we automatically collect may vary, but generally includes:

- Technical information [...];
- Usage information and statistics about your interaction with the Epic services [...]
- **Information that facilitates a safer and more personalized experience**, such as your display name or other user identification provided in connection with your **application use or game play**, saved preferences, game progress, and device identifiers or usage information for authentication and fraud prevention purposes;
- The location of your device, [...].

which may be offered in partnership with other parties; to manage and customize advertisements or promotional offers”. In other words, while we found no explicit evidence that Epic Games effectively processes personal data for the purposes of personalising Fortnite’s (manipulative) commercial practices, they do entitle themselves to do so following their privacy policy. Indeed, it can safely be assumed that personal data processing does play a considerable role in developing and finetuning the practices constitutive of Fortnite’s manipulative potential (cf. section 5), but (currently) not in personalising manipulation in the ‘last mile.’ Even if it is fair to assume that most of the processing of game-play personal data will be done at aggregated level (e.g. determining (un)popular features), one could easily imagine how progression trees, reward schemes, or the rotation of items in the in-game shop, might be finetuned based on players’ personal characteristics. A clear example, albeit relating to another game developer, would be the aforementioned Activision patent, specifically covering “a system and method that drives microtransactions in multiplayer video games”.¹⁰⁷ Finally, it should be emphasised that determining the GDPR’s scope of application in any given case also requires clearly distinguishing between all the different processing purposes at hand. As exemplified by Epic Games’ privacy policy, the same personal data is often processed for many different purposes simultaneously that each need to be assessed in their own right. Concretely, this means that the legality of processing gamers’ location data for security purposes, does not imply the legality of processing that same for direct marketing or indeed ‘manipulative’ purposes. Missing this crucial level of detail in its privacy policy, it is impossible to properly assess the fairness of Fortnite’s data processing practices.¹⁰⁸

From a GDPR fairness perspective, personalising the manipulative practices based on personal data (obtained through gameplay), would raise significant concerns.¹⁰⁹ As already mentioned before, two main strands of *fairness* requirements can be identified in the GDPR: fair

¹⁰⁷ “The system may include a microtransaction arrange matches to influence game-related purchases. For instance, the system may match a more expert/marquee player with a junior player to encourage the junior player to make game-related purchases of items possessed/used by the marquee player. A junior player may wish to emulate the marquee player by obtaining weapons or other items used by the marquee player.”

¹⁰⁸ This, in itself, violates the GDPR’s transparency principle. See: Article 29 Working Party, Guidelines on Transparency under Regulation 2016/679 (Brussels, 11 April 2018) <<https://edpb.europa.eu/>>.

¹⁰⁹ Not in the least because a significant portion of Fortnite players are minors or children, benefitting from extra protection in the GDPR. Interestingly, Epic Games’ privacy policy claims that its services “are not directed to children” and “Epic does not intentionally collect personal information from children”.

balancing (processing operations need to be necessary and proportionate) and procedural fairness (timeliness, transparency and burden of care requirements in the operation of the GDPR). More investigative research into Epic Games' actual data operations is required in order to properly assess whether the manipulative practices described above have the required *lawful ground* (Art.6(1) GDPR).¹¹⁰ While we have considerable doubts on the proportionality of using personal data in order to 'manipulate' gamers for commercial gain – i.e. to intentionally influence the players decision-making powers to increase Fortnite's revenue, by targeting players' cognitive or affective weaknesses and vulnerabilities in a conspicuous or opaque way – it may not even be necessary to conduct an open-ended proportionality assessment in order to determine their (non-)compliance with the GDPR. Before the GDPR-fairness requirements even kick in, it is important for any data processing operation to pursue a *legitimate* purpose (Art.5(1)b).¹¹¹ Indeed, this is the first substantive test to evaluate whether any data processing operation is in conformity with the GDPR. Ironically, determining the legitimacy of a specified purpose reaches beyond an 'intra-GDPR' analysis¹¹² and requires compliance with "the law in the broadest sense" including, but not limited to "other applicable laws such as employment law, contract law, consumer protection law, and so on."¹¹³ In other words, determining GDPR-compliance of Fortnite's data processing operations for manipulative practices will hinge (*inter alia*) on UCPD-compliance as well.

Determining whether a certain commercial practice is unfair under the UCPD, is best done in reverse order of the Directive's three levels of unfairness as mentioned before. As a reminder, these are the (c) blacklisted practices; (b) specifically circumscribed unfair practices; and (a) general unfairness clause. The commercial practice at stake here is Fortnite's manipulation, i.e. the intentional influencing of gamers' decision-making powers to increase revenue; by targeting their

¹¹⁰ Interestingly, Epic games does not appear to rely on consent as a lawful ground for most of its processing operations. Instead it mainly relies on the open-ended 'legitimate interests' ground (Art.6(1)f), prescribing a balancing test. As a result, data subjects cannot stop certain processing operations by simply *withdrawing* their consent. The main tool to contest specific processing operations will therefore be the right to object (Art.21), which also requires a balancing test, easily hijacked by controllers arguing stopping specific processing operations is disproportionate.

¹¹¹ D Clifford and J Ausloos 2018, 'Data Protection and the Role of Fairness' (2018) 37 Yearbook of European Law 130, 136–137.

¹¹² E.g. the GDPR considers processing for scientific research or statistical purposes to be legitimate by default.

¹¹³ Article 29 Working Party, *Opinion 03/2013 on Purpose Limitation* (Brussels, 2 April 2013), 19–20 < https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2013/wp203_en.pdf > Accessed 5 March 2020. WP29 also lists several other examples, including all forms of written and common law, constitutional principles, jurisprudence, customs, codes of conduct/ethics, and so on.

cognitive and/or affective weaknesses and vulnerabilities in a conspicuous or opaque way. From all blacklisted practices in Annex 1 of the UCPD, only nr. 28 – prohibiting advertisement including “a direct exhortation to children to buy advertised products or persuade their parents or other adults to buy advertised products for them” – might qualify.¹¹⁴ For example, expressions like "buy now!" or "up-grade now!" have been deemed to be in breach in national enforcement cases.¹¹⁵ In 2013 already, the European network of consumer protection authorities (CPC) had specified that such direct exhortations cannot feature in games “targeted at children or which traders can reasonably foresee may be likely to appeal to children.”¹¹⁶ As we have described before, this would clearly capture games such as Fortnite, which is likely to appeal to children, even if not solely or specifically targeted at children. In June 2019, Epic games testified before the UK’s House of Commons DCMS Committee that they do not know whether any of the people playing Fortnite are actually children.¹¹⁷ This seems hard to align with their EULA, in which they claim to abide by children-specific rules. Put briefly, if the company does not want to violate the UCPD’s blacklist, while maintaining their position not to know which players are children, it cannot make any direct exhortations whatsoever within the game (as it cannot exclude that those exhortations will reach a considerable number of children as well). Alternatively, it would have to install a more rigorous age verification mechanism in order to avoid including direct exhortations to children-players specifically.

¹¹⁴ Importantly, such exhortation needs to be *direct*, meaning there can be no intermediate steps between the advertisement and the decision to buy. While there is considerable debate on the actual scope of ‘children’ in this context, due to lack of time we will not further expand on this. Suffice to say that at least a portion of Fortnite’s userbase will qualify as children. For a critical analysis, see: V Verdoodt, *Children’s Rights and Advertising Literacy in the Digital Era - Towards an Empowering Regulatory Framework for Commercial Communication* (unpublished PhD Thesis, KU Leuven - Faculty of Law, 2018), 10-13; E Lievens, S Livingstone, S McLaughlin, B O’Neill, and V Verdoodt “Children’s Rights and Digital Technologies.” In U Kilkelly and T Liefwaard (eds) *International Human Rights of Children*, (International Human Rights. Singapore: Springer Singapore 2019), 487-513.

¹¹⁵ Consumer Protection Cooperation network, ‘Common Legal Position on Practices Related to Online Games’, 2013, 2 <https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/coordinated-actions_en#in-app-purchases> Accessed 5 March 2020.

¹¹⁶ Consumer Protection Cooperation network, ‘Common Legal Position on Practices Related to Online Games’, 2013, 2 <https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/coordinated-actions_en#in-app-purchases> Accessed 5 March 2020.

¹¹⁷ House of Commons, DCMS Committee, Oral evidence: Immersive and addictive technologies, HC 1846. See specifically <https://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/immersive-and-addictive-technologies/oral/103191.pdf> Q1083-Q1105 <<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/immersive-and-addictive-technologies/oral/103191.pdf>> Accessed 5 March 2020.

Secondly, one could qualify Fortnite's manipulative practices as aggressive under Article 8 UCPD, to the extent that they factually constitute (a) undue influence,¹¹⁸ (b) (likely) significantly impairing the average player's choice or conduct, *and* (c) (likely) resulting in a transactional decision that the player would otherwise not have taken. Article 9 UCPD further specifies factors to make this functional evaluation, notably including timing, location, nature or persistence and the exploitation of any specific misfortune or circumstance of such gravity as to impair the consumer's judgement. According to the Dutch consumer protection authority, algorithmically determining the price, offer or time of the offer "based on data concerning the specific psychological vulnerabilities of certain groups of players" constitutes an aggressive commercial practice, prohibited by law.¹¹⁹ In light of this, Fortnite's fine-grained practices that actively seek to exploit known flaws in human decision-making seem to be covered by the prohibition of unfair commercial practices under the UCPD's Art.8-9.¹²⁰ Importantly however, the respective practices need to be likely¹²¹ to cause a transactional decision, e.g. the player purchasing items in/outside the game. To the extent this is the case, we would place a strong presumption on any practice that qualifies as manipulation as defined in section 3 of this paper, to be considered an unfair aggressive commercial practice.

What complicates the legal qualification in the specific context of games such as Fortnite, is that it might be hard(er) to qualify any one particular practice problematic *in isolation*. We believe that for consumer protection rules to achieve their regulatory aim, it is crucial to take a holistic approach, considering all practices described in Sections 4.2-4.5 together. The most appropriate legal basis for determining Fortnite's (un)fair commercial behaviour overall, might therefore be the UCPD's general clause in Article 5. That provision also makes an explicit reference to the *age*

¹¹⁸ Defined in Art.2(j) as "exploiting a position of power in relation to the 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"

¹¹⁹ Autoriteit Consument & Markt (ACM), *Protection of the Online Consumer. Boundaries of Online Persuasion* (The Hague, February 2020) <<https://www.acm.nl/sites/default/files/documents/2020-02/acm-guidelines-on-the-protection-of-the-online-consumer.pdf>> Accessed 5 March 2020.

¹²⁰ J Trsaskowski, 'Behavioural Innovations in Marketing Law' in H-W Micklitz, A-L Sibony and F Esposito (eds), *Research Methods on Consumer Law: A Handbook* (Edward Elgar Publishing 2018), 317; D Clifford, *The Legal Limits to the Monetisation of Online Emotions* (unpublished PhD Thesis, KU Leuven - Faculty of Law, 2019), 241-242.

¹²¹ In other words, a practice can still be considered unfair in the absence of an actual transactional decision *in casu*.

of the respective consumers as an important factor to consider in assessing the fairness of commercial practices. An important consideration in light of the fact that Fortnite (Epic Games) can ‘reasonably be expected to foresee’ that a sizeable group of its users are children.¹²²

6.2 (*Lack of*) *Transparency*

One of the determinative factors in qualifying manipulation is the intentional ‘hidden nature’ (at least in part) vis-à-vis its targets (see section 3). In other words, the manipulator takes steps to either hide manipulation or fails to inform individuals about it. As mentioned before, this ‘hiddenness’ is to be qualified broadly, and can refer to the *presence, strategy, or mechanism* of influence. In other words, individuals do not need to be completely ignorant in order for practices to be qualified as manipulation. Both consumer and data protection frameworks put strong emphasis on transparency. Contrary to the fairness provisions, however, the GDPR is much more elaborate on its transparency requirements than the UCPD.

The UCPD aims to safeguard consumers’ ability to make informed decisions. It is thus important to evaluate whether Epic Games misleads Fortnite players, either through misinforming (Art.6) or by omission (Art.7). Epic Games’ lack of transparency in relation to (the presence, mechanism and strategy of) manipulative practices in Fortnite is more of a macro-level issue, making it hard(er) to establish one particular operation is violating Articles 6 or 7 UCPD in isolation. Indeed, in light of their business model, most so-called ‘freemium games’ have strong incentives to nudge players into microtransactions, obfuscate the total amount of actual money invested and find alternative valorisation mechanisms (often through data collection/processing¹²³). Related to this, it is worth referring to recent guidance by the Dutch consumer protection authority emphasising that “games can only be called ‘free’ if they are

¹²² As mentioned before, while there are no official numbers on the amount of children playing Fortnite, there are clear indicators that a considerable portion of its user base are in fact children.

¹²³ Cf. European Commission, ‘Commission Staff Working Document Guidance On The Implementation/Application Of Directive 2005/29/EC On Unfair Commercial Practices’, 129–130 <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0163&from=EN>> Accessed 5 March 2020.

actually entirely free [...] The provider must make clear what parts of the game are free, and what elements can be purchased.”¹²⁴

The use of in-game virtual currencies is a common practice that can be used to obfuscate actual monetary expenses. Fortnite’s virtual currency, ‘V-bucks’, appears to be deliberately obfuscating the ‘real’ monetary value behind it (with variable conversion rates depending on how much V-bucks you buy in one go and the possibility of ‘winning’ V-bucks in-game). Even if Epic’s EULA explicitly acknowledges the complete arbitrariness of its game currency (and other items of perceived value),¹²⁵ it is questionable whether the company makes any effort to ensure gamers – minors in particular – are properly informed about the *real* value of their transactions. Indeed, one could even argue that by arbitrarily making decisions on (perceived) value of purchases, Epic recognises it can actively deceive its users, in violation of Articles 6-7 UCPD. Following the recent guidelines from the Dutch consumer protection authority, this could be remedied by also showing the actual costs in euros with each offer.¹²⁶

Data protection law installs different levels of transparency. Most notably, controllers (entities responsible for data processing operations) should be able to demonstrate compliance with data protection principles (Art.5(2)); keep detailed records of all their processing operations (Art.30); ensure any consent by a data subject is sufficiently informed (Art.4(11); 7(2)); inform data subjects about data breaches (Art.34); provide information to data protection authorities upon request (Art.58); and a number of other fine-grained disclosure-obligations (notably in Articles 12-15 GDPR). The central transparency obligations in the GDPR – i.e. information obligations (Art. 13-14) and the right of access (Art.15) – provide a list of minimum information to be disclosed and are typically accommodated through data/privacy policies and ‘data download’ functionalities. Investigations into these policies and/or data access tools systematically

¹²⁴ Autoriteit Consument & Markt (ACM), *Protection of the Online Consumer. Boundaries of Online Persuasion* (The Hague, February 2020), 28. <<https://www.acm.nl/sites/default/files/documents/2020-02/acm-guidelines-on-the-protection-of-the-online-consumer.pdf>> Accessed 5 March 2020.

¹²⁵ ‘You ‘agree that Epic may engage in actions that may impact the perceived value or purchase price, if applicable, of Game Currency and Content at any time [...] Epic, in its sole discretion, may impose limits on the amount of Game Currency or Content that may be purchased, earned, accumulated, redeemed or otherwise used.’ <<https://www.epicgames.com/fortnite/en-US/eula>>, Accessed 17 January 2020.

¹²⁶ Autoriteit Consument & Markt (ACM), *Protection of the Online Consumer. Boundaries of Online Persuasion* (The Hague, February 2020), 29. <<https://www.acm.nl/sites/default/files/documents/2020-02/acm-guidelines-on-the-protection-of-the-online-consumer.pdf>> Accessed 5 March 2020

demonstrate issues across the board.¹²⁷ This is no different with regard to Fortnite (Epic Games), which does not even have its own dedicated privacy policy (the generic Epic Games policy applies), nor a data-download functionality (though contact details are provided to request access to one's data via email). Yet, given Fortnite's complex and potentially impactful data processing operations, the company arguably has a more substantial duty of care in fulfilling its transparency requirements (Artt.12; 24-25). As mentioned before, Epic Games' privacy/data policy is relatively vague and contains a lot of hypotheticals. Even highly motivated individuals wishing to know more about *what* actual personal data is collected and *how* it is used exactly (e.g. to influence the ways in which they enjoy the services and/or in which the game overall is being altered) are largely left in the dark. Indeed, Epic Games only goes as far as saying that they *may* use personal data (including amongst others all information generated as one plays the game) "for purposes such as modifying or improving features, managing advertising [...] to better understand our users, their interests, and their preferences; to personalize your experience, save your preferences, authenticate our users, and provide similar user-experience features; to develop, deliver, and improve our products, services, and other offerings, some of which may be offered in partnership with other parties; to manage and customize advertisements or promotional offers". Failing to provide sufficient level of detail, the policy creates the impression that *all* personal data it lists is – or at least can be – processed for *all* specified purposes (including manipulative practices identified above).¹²⁸ As a result, Epic Games' transparency fail also results in non-compliance with the lawfulness requirement¹²⁹ in Art 6(1) and 7 as well as the purpose limitation and data minimisation principles in Art.5(1).

¹²⁷ See, e.g.: J Venturini and others, *Terms of Service and Human Rights: An Analysis of Online Platform Contracts* (Rio de Janeiro: Revan, 2016), 61. <http://internet-governance.fgv.br/sites/internet-governance.fgv.br/files/publicacoes/terms_of_services_06_12_2016.pdf> Accessed 4 March 2020; J Ausloos and P Dewitte, 'Shattering One-Way Mirrors – Data Subject Access Rights in Practice' (2018) 8 *International Data Privacy Law* 4; Article 29 Working Party, *Guidelines on Transparency under Regulation 2016/679* (Brussels, 11 April 2018).

¹²⁸ Without Epic Games indicating the exact and sole purposes that each personal data (category) is processed for, readers cannot assess whether the personal data is 'adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed' (Art.5(1)c), nor whether they are 'kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which' they are processed (Art.5(1)e).

¹²⁹ Requiring a lawful ground such as 'consent' or 'legitimate interests' to process personal data. If consent is relied on, it has to be 'freely given, specific, informed and unambiguous' (Art.4(1) GDPR). Our claim here is that (where it relies on consent), Epic Games it cannot claim Fortnite gamers' consent is adequately informed or specific.

Finally, collaborations between games and other brands for in-game events (e.g. Avengers Endgame) also raise significant questions as to advertisement rules in the EU. Indeed, the so-called identification principle constitutes a red thread throughout advertising rules (UCPD, AVMS Directive 2018/1808, eCommerce Directive 2000/31, etc), requiring commercial communications to be identifiable as such. Fortnite’s content-delivery platform features actively push other brands to gamers often even *during* actual gameplay (cf. Star Wars event, referenced above)¹³⁰ without clearly highlighting their advertisement-nature or even the ability to ignore them and continue game play. There is still a lot of uncertainty as to how the identification principle ought to apply in newer forms of media (e.g. vloggers¹³¹ or advergaming¹³²).¹³³ It can safely be assumed that Epic Games’ current stance, in being completely non-transparent about certain forms of advertisements that are entirely integrated in Fortnite and cannot be avoided, constitutes a clear violation of the identification principle.

6.3 (*Lack/erosion of*) *Autonomy*

The idea of the rational and autonomous individual – central to both EU data protection and consumer protection law – is severely challenged in hyper-engaging and interactive environments such as games.¹³⁴ Indeed, the interactive nature of video games gives the appearance of user-control or autonomy. In order to enjoy this type of entertainment, you need to be actively engaged. Such autonomy only takes shape within strict parameters. More importantly even, and at the heart of this paper, games like Fortnite actively seek to straitjacket individual autonomy, by capitalising on the rich dataflows they have access to in order to devise fine-grained manipulative practices.

¹³⁰ <<https://www.theverge.com/2019/12/14/21020296/star-wars-the-rise-of-skywalker-fortnite-jj-abrams-lightsabers>> Accessed 17 January 2020.

¹³¹ V Verdoodt and N Feci, ‘Digital Influencers and Vlogging Advertising: Calling for Awareness, Guidance and Enforcement’ (2019/1) *Auteurs En Media*, 11.

¹³² V Verdoodt, D Clifford and E Lievers, ‘Toying with Children’s Emotions, the New Game in Town? The Legality of Advergaming in the EU’ 32 *Computer Law & Security Review* 599.

¹³³ D Clifford and V Verdoodt, ‘Integrative Advertising: The Marketing “Dark Side” or Merely the Emperor’s New Clothes?’ [2017] 8 *European Journal of Law and Technology* <<http://ejlt.org/article/view/547>> Accessed 5 March 2020; V Verdoodt, *Children’s Rights and Advertising Literacy in the Digital Era - Towards an Empowering Regulatory Framework for Commercial Communication* (unpublished PhD Thesis, KU Leuven - Faculty of Law, 2018).

¹³⁴ See generally, sections 2 and 4. See also: D Clifford, *The Legal Limits to the Monetisation of Online Emotions* (unpublished PhD Thesis, KU Leuven - Faculty of Law, 2019), 103; T Sampson, ‘Various Joyful Encounters with the Dystopias of Affective Capitalism’ (2016), 16 *Ephemera Theory & Politics in Organization* 51.

Put briefly, the continuous user-surveillance combined with real-time testing and adjusting of the game-environment for commercial purposes, undermines legal protections predicated on individuals' autonomous decision-making capacity.¹³⁵

From a GDPR perspective, gamers' autonomy is thwarted in several ways. Perhaps most importantly in relation to the lawfulness of processing and the (in)ability to exercise data subject rights. With regards to the data processing activities that are most important in the context of this article, Epic Games appears to rely on 'legitimate interests' (Article 6(1)f) as a so-called 'lawful ground'.¹³⁶ This lawful ground requires a balancing act to be performed by the controller (i.e. Epic games), weighing the interests in processing personal data against the rights, freedoms and interests of data subjects (i.e. players). While it is evident to see how the collection (and further processing as described above) of all game-play data may benefit commercial interests, the privacy policy is unclear as to how it may affect the rights, freedoms and interests of data subjects, either positively¹³⁷ or negatively (cf. above).¹³⁸ Even less so does Epic Games appear to actively take measures to mitigate such impact (e.g. by committing to the data minimisation and storage limitation principles, better informing users about the commercial intent behind very specific manipulative practices, and/or by guaranteeing *not* to engage in certain manipulative practices).¹³⁹

¹³⁵ D Clifford, *The Legal Limits to the Monetisation of Online Emotions* (unpublished PhD Thesis, KU Leuven - Faculty of Law, 2019), 103.

¹³⁶ "For our legitimate interests, consistent with your rights and preferences, we use personal data: [...] To better understand our users, their interests, and their preferences;

To personalize your experience, save your preferences, authenticate our users, and provide similar user-experience features;

To develop, deliver, and improve our products, services, and other offerings, some of which may be offered in partnership with other parties;

To manage and customize advertisements or promotional offers;"

¹³⁷ To what extent does the extensive data processing potentially lead to a more enjoyable game for users? Epic Games remains very vague about this, so it is impossible to draw a clear causal relationship between vast data processing permissions and users enjoying the game more.

¹³⁸ Such impact is to be interpreted broadly, including for instance "situations where there is a risk of damaging the reputation, negotiating power, or autonomy of the data subject. In addition to adverse outcomes that can be specifically foreseen, broader emotional impacts also need to be taken into account, such as the irritation, fear and distress that may result from a data subject losing control over personal information, or realising that it has been or may be misused or compromised". Article 29 Working Party, *Opinion 06/2014 on the Notion of Legitimate Interests of the Data Controller under Article 7 of Directive 95/46/EC* (Brussels, 9 April 2014), 37 < https://ec.europa.eu/justice/article-29/documentation/opinion-recommendation/files/2014/wp217_en.pdf> Accessed 5 March 2020.

¹³⁹ See generally: Article 29 Working Party, *Opinion 06/2014 on the Notion of Legitimate Interests of the Data Controller under Article 7 of Directive 95/46/EC*.

With this in mind, it is questionable to what extent the legitimate interests ground can be relied on as a lawful ground for the processing operations underlying the practices described above.

Individual autonomy further takes shape in the GDPR through data subject rights. For example, it is questionable whether Fortnite’s processing practices comply with Article 22’s right not to be subject to automated decision-making, especially when designed to affect their economic behaviour.¹⁴⁰ Autonomy is also challenged by the apparent difficulty in meaningfully exercising the right to object (Article 21 GDPR). Theoretically, the threshold for motivating a right to object is relatively low, and the burden of proof will be on the controller – i.e. Epic Games – to demonstrate ‘compelling legitimate grounds’ for denying the right to object ‘which override the interests, rights and freedoms of the data subject’.¹⁴¹ Put differently, Fortnite players have an *a priori* right to request that their gameplay is *not* monitored, and the data subsequently being used to adjust the game (certainly when used to inform manipulative practices). Seemingly anticipating such kind of requests, Epic Games’ privacy policy states “We will decline your request [to object] if our interest in continuing to process your information is sufficiently compelling to legally override your interest in the request, or our processing is necessary to establish, exercise, or defend a legal claim.” This effectively results in a balancing act – i.e. assessing the necessity and proportionality of Fortnite’s data processing operations – that is *a priori* entirely and unilaterally performed by Epic Games. Moreover, because the policy sets little to no limits as to the scale of data collection and is unclear about the specific processing operations performed, it is virtually impossible to exercise one’s right to object in a meaningful manner against the practices described in sections 4-5. Indeed, the privacy policy does not acknowledge that personal data is (amongst others) processed specifically to test practices that meet the requirements to be qualified as ‘manipulation’. Grouping them together with other vague purposes such as ‘developing and

¹⁴⁰ Interpretational guidance on Article 22 can be found (in the many references) in: Article 29 Working Party, *Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679* (Brussels, 6 February 2018) <https://ec.europa.eu/newsroom/article29/document.cfm?action=display&doc_id=49826> Accessed 5 March 2020; M Veale and L Edwards, ‘Clarity, Surprises, and Further Questions in the Article 29 Working Party Draft Guidance on Automated Decision-Making and Profiling’ (2018) 34 *Computer Law & Security Review* 398.

¹⁴¹ For more on the right to object, see: J Ausloos, ‘Balancing in the GDPR: Legitimate Interests v. Right to Object’ [2017] *CITIP Blog* <<https://www.law.kuleuven.be/citip/blog/balancing-in-the-gdpr-legitimate-interests-v-right-to-object/>> Accessed 4 March 2020; D Clifford and J Ausloos 2018, ‘Data Protection and the Role of Fairness’ (2018) 37 *Yearbook of European Law* 130, 136 et seq; J Ausloos, *The Right to Erasure in EU Data Protection Law. From Individual Right to Effective Protection* (Oxford: Oxford University Press, 2020).

improving services’, renders it impossible to granularly object to problematic processing operations, without losing access to the game altogether. As such, individual autonomy, as safeguarded by the GDPR, is further thwarted.

Autonomy plays a pivotal role within the UCPD as well, in that the framework actively seeks to safeguard consumers’ freedom of decision-making.¹⁴² Indeed, in order to qualify as an unfair commercial practice under Article 5, it shall (be likely to) distort the economic behaviour of the average consumer to whom it is addressed. In order to qualify as a misleading or aggressive commercial practice under Articles 6-9, it should likely cause consumers to take a transactional decision that they would not have taken otherwise.¹⁴³ Rather than assessing whether these criteria are met by focusing on one specific instant (e.g. of purchase), we firmly believe that Article 8 on aggressive commercial practices dictates taking a holistic perspective, looking at the entire web of practices building up to the (potential) transaction or economic behaviour. Indeed, the engineered (social) ubiquity and fine-grained, versatile choice-architecture of the game as a whole, actively seeks to push players into (micro-)transactions in opaque ways. Moreover, all of the manipulative practices described in sections 4-5 combined, install a strong presumption of ‘undue influence’,¹⁴⁴ actively seeking to exploit known vulnerabilities and circumstances for commercial gain from a position of power.¹⁴⁵ In other words, it would be a mistake to rely on a micro-level analysis of specific commercial transactions in isolation. This article claims that establishing manipulation in online environments such as Fortnite is a question of death by a thousand cuts. There is a strong

¹⁴² H.-W. Micklitz, ‘Unfair Commercial Practices and Misleading Advertising’ in N Reich and others (eds) *European Consumer Law* (Cambridge: Intersentia, 2014), 77 et seq.

¹⁴³ ‘Transactions’, in this context, should be interpreted very broadly. “covering any of the vast range of transactions that consumers might enter into, so long as there is some commercial flavour.” See: C Willett, ‘Fairness and Consumer Decision Making under the Unfair Commercial Practices Directive’ (2010) 33 *Journal of Consumer Policy* 247, 249-250.

¹⁴⁴ Defined in Article 2(j) UCPD as “exploiting a position of power in relation to the 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 ”.

“The undue influence concept may also extend to pre-contractual situations. Here, the requisite “position of power” could be said to derive from the greater market understanding and “negotiation” skill possessed by traders”. C Willett, ‘Fairness and Consumer Decision Making under the Unfair Commercial Practices Directive’ (2010) 33 *Journal of Consumer Policy* 247, 260.

¹⁴⁵ See similarly: M Sax, N Helberger and N Bol, ‘Health as a Means Towards Profitable Ends: mHealth Apps, User Autonomy, and Unfair Commercial Practices’ (2018) 41 *Journal of Consumer Policy* 103, 127.

argument to be made that Fortnite's current *modus operandi* qualifies as an aggressive commercial practice as prohibited by Article 8-9 UCPD.

7 A Fortright Fortnite? Concluding Remarks and Recommendations

As we have argued throughout this article, Fortnite is emblematic of a trend in online video games that raises substantial ethical and legal questions. In this final section, we want to 1) briefly sketch what we take to be the key issues that policymakers and regulators should pay attention to, and 2) offer some recommendations on how to move the discussion forward.

As illustrated above, Fortnite is incredibly popular among children, not just as a game per se, but also as a quasi-social network and an important cultural reference point in their lifeworld. It is generally recognised that children are entitled to stronger legal protections.¹⁴⁶ Indeed, both EU consumer protection and data protection law frameworks explicitly include special protections for children. The GDPR recognises that children “merit specific protection with regard to their personal data, as they may be less aware of the risks, consequences and safeguards concerned and their rights in relation to the processing of personal data”.¹⁴⁷ The UCPD explicitly safeguards children from direct exhortations (#28 in the blacklist, Annex 1) and recognises their vulnerability in relation to commercial practices more broadly in Article 5.¹⁴⁸ While most of our analysis in the previous pages demonstrated the legal/ethical issues related to Fortnite's manipulative practices in general, these are further amplified when looking at children in particular. It is thus as striking as it is unacceptable that Epic Games argues that it does not and cannot know whether any children play Fortnite.¹⁴⁹ As astutely observed by Verdoodt: “*gaming and play can play an important role*

¹⁴⁶ V Verdoodt, ‘Children’s Rights and Advertising Literacy in the Digital Era - Towards an Empowering Regulatory Framework for Commercial Communication’ (PhD Thesis, KU Leuven - Faculty of Law 2018).

¹⁴⁷ Recital 38. It does so *inter alia* by imposing additional burdens when communicating with children (recital 58, Article 12); stressing the importance of the so-called ‘right to be forgotten’ in relation to children’s data (Recital 65); protecting against automated decision-making (Recital 71); and emphasising the higher risks involved with processing children’s data more generally (Recital 75, Articles 6(1)f, 8).

¹⁴⁸ See also: D M Sithigh, ‘Multiplayer Games: Tax, Copyright, Consumers and the Video Game Industries’ [2014] 5 European Journal of Law and Technology <<http://ejlt.org/article/view/324>> Accessed 16 January 2020.

¹⁴⁹ House of Commons, DCMS Committee, Oral evidence: Immersive and addictive technologies, HC 1846. See specifically <https://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/immersive-and-addictive-technologies/oral/103191.pdf>> Accessed 5 March 2020. Interestingly,

in the development process of children [protected by article 31 UNCRC¹⁵⁰]. In this regard, new media technologies like mobile apps and online games can facilitate access to a variety of playful and social activities. However, we have seen that embedding commercial messages straight into children's gaming experience could lead children to normalise the commercialisation of play".¹⁵¹ Given children's inherent vulnerability to sophisticated digital environments aimed to monetising users as effectively and efficiently as possible, the special protections afforded to children warrant more serious attention and enforcement.¹⁵²

A related key issue is the proper understanding of the concept of vulnerability, featuring both in data protection and consumer protection law. As the example of Fortnite shows, the overly static and formalistic distinction between, on the one hand, the average data subject or consumer, and, on the other hand, the vulnerable one (as either a very old or young or mentally impaired person) is no longer suitable.¹⁵³ Highly sophisticated, immersive, and persuasive digital environments such as Fortnite are built based on research into how various cognitive and affective biases can be leveraged to serve (in this case Epic Games') commercial ends. *Every person is potentially vulnerable to having their behaviour manipulated when cognitive and affective biases are cleverly targeted, as is the case in highly immersive and dynamic environments such as Fortnite. It makes more sense to reconsider the concept of vulnerability and how it is applied in law as a gliding scale.*

Epic Games' privacy policy claims that "The Epic services are intended to be appropriate for general audiences and are not directed to children [...] Epic does not intentionally collect personal information from children." At the same time, they also recognise processing children's data, stating that "We may ask you to provide age-related information in order to help us comply with laws" and "Authorized child accounts are otherwise treated much like other Epic accounts."

¹⁵⁰ UN Convention on the Rights of the Child, 20 November 1989.

¹⁵¹ V Verdoedt, 'Children's Rights and Advertising Literacy in the Digital Era - Towards an Empowering Regulatory Framework for Commercial Communication' (PhD Thesis, KU Leuven - Faculty of Law 2018), 217–218.

¹⁵² In this regard it is worth referring to the 2013 CPC EU-wide coordinated action requesting Apple, Google and the association of online game developers, ISFE, to propose solutions to identified problems regarding in-app purchases in online games such as direct exhortations to children. <<https://ec.europa.eu/info/live-work-travel-eu/consumers/enforcement-consumer-protection/coordinated-actions#in-app-purchases>> Accessed 5 March 2020.

More recently, see: Autoriteit Consument & Markt (ACM), *Protection of the Online Consumer. Boundaries of Online Persuasion* (The Hague, February 2020), 30. <<https://www.acm.nl/sites/default/files/documents/2020-02/acm-guidelines-on-the-protection-of-the-online-consumer.pdf>> Accessed 5 March 2020.

¹⁵³ M Sax, N Helberger and N Bol, 'Health as a Means Towards Profitable Ends: mHealth Apps, User Autonomy, and Unfair Commercial Practices' (2018) 41 *Journal of Consumer Policy* 103, 127.

It follows that the concept of aggressive commercial practices in the UCPD seems more suitable to address the manipulative potential raised by Fortnite than the concept of misleading commercial practices. For most misleading practices, the intuitive remedy is an insistence on more transparency in the form of more (elaborate) or better information disclosures for consumers. However, taking manipulation in video games such as Fortnite (and the digital society at large) seriously, means admitting that information disclosures for consumers are not going to cut it. The nature of cognitive and affective biases is such that when they are cleverly targeted – and companies like Epic Games spend vast resources on finding out how to do so – they are incredibly hard to notice, let alone resist even when made aware of them. We need more than a label here and a warning there to address these practices. The concept of aggressive commercial practices, and more specifically the concept of undue influence which comes with a focus on (informational) power asymmetries and the targeting of vulnerabilities, should be looked at more closely in order to really address the challenges manipulative digital environments present us with. The GDPR can play a significant role here too, prohibiting personal data being processed for illegitimate purposes. Indeed, we would claim that using personal data to design, develop or finetune manipulative practices as defined in sections 3-5, would not be allowed under the GDPR.

In line with our call to focus on aggressive commercial practices, it is equally important to pay closer attention to the inner workings and logic of the digital freemium economy more broadly. Freemium services like Fortnite try to build ongoing commercial relationships with users, with a focus not on (immediate) conversion, but rather on retention and engagement. In effect, we should understand Fortnite as a kind of digital ecosystem where all the separate parts – e.g. UX design choices, pricing schemes, promotional material, game mechanics, cross platform integrations, influencer relation efforts, and so on – are engineered and operated as one holistic whole. The *entire digital ecosystem* is designed to optimise for specific metrics (usually retention, engagement, and conversion) and all the separate elements of the ecosystem should be understood from the perspective of the (purpose of the) entire ecosystem. It would therefore be a mistake to just focus legal assessments on separate elements of the digital environment *in isolation*, without considering their role in the entire ecosystem. In practice, this means that concepts like a consumer's 'transactional decision' should be interpreted liberally if we want them to have any relevance in these digital environments. When, for instance, a Fortnite player is drawn back into Fortnite because of a daily challenge (which evokes a fear of missing out), we would argue that

the player has made a transactional decision because such daily challenges are an integral, deliberately designed, part of Fortnite’s freemium monetisation strategy. If one fails to take into account this more *structural* perspective, one will end up in a situation where one cannot see the forest for the trees.

Even if this article raised more questions than it managed to answer, we wish to end with some concrete recommendations in pushing the debate forward. Firstly, we call on both consumer and data protection authorities to be more proactive, notably by capitalising on their investigatory powers in order to dissect and scrutinise the actual practices of online games such as Fortnite. While we are sceptical about consumer/data subject-facing transparency measures, we believe authority-facing transparency measures play a crucial role in resolving the issues raised. Indeed, authorities not only have more capacity to untangle and comprehend these complicated issues, they also have the competencies to investigate and enforce. Importantly however, we want to push the discussion beyond merely trying to break open the black box and focus attention on the Skinner box aspects of these highly manipulative, commercialised digital environments.

Secondly, and building on the previous point, we see strong potential for the development of comprehensive codes of conduct to give shape to legal provisions such as professional diligence and responsibility in the context of online games such as Fortnite. In our view, it is simply unacceptable that Fortnite which *clearly* caters to millions of children across Europe, appears to currently avoid much of its responsibilities by claiming ‘we do not register the age of our players.’¹⁵⁴ Codes of conduct would not only create a more workable toolset for enforcement to authorities and individuals, but also provide legal certainty to industry and level the playing field. The concept of ‘cooperative responsibility’ might offer a useful frame to develop such codes of conduct in a constructive and valuable manner.¹⁵⁵

¹⁵⁴ House of Commons, DCMS Committee, Oral evidence: Immersive and addictive technologies, HC 1846. See specifically <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/digital-culture-media-and-sport-committee/immersive-and-addictive-technologies/oral/103191.pdf> < Q1083-Q1105 > Accessed 5 March 2020.

¹⁵⁵ N Helberger, J Pierson and T Poell, ‘Governing Online Platforms: From Contested to Cooperative Responsibility’ (2018) 34 *The Information Society* 1. The authors identify four main steps: (a) collectively defining the essential public values at play; (b) recognition by each stakeholder of what role they play in the realisation of these values; (c) develop a multi-stakeholder process of public deliberation and exchange, with space to experiment and operationalise workable solutions; and (d) translate the outcome of public deliberation and agreements into regulations, codes of conduct, terms of use and technology.

Thirdly, a useful way to counter the massive (information) power asymmetry between on the one hand Fortnite and other operators of digital environments, and on the other hand regulators and individuals, is by reversing the burden of proof regarding manipulative practices. Specifically, one could imagine that when a clear set of criteria are met (e.g. laid down in a code of conduct or sector-specific rules), the burden of proof ought to be on the industry actor to proactively demonstrate why the respective practice should *not* be considered manipulative. We believe that at least any practice meeting the four criteria of manipulation, developed in section 3, should result in such an obligation.

In sum, game environments produce hyper captive audiences. We see Fortnite as emblematic of two mutually reinforcing trends within the industry: (a) actively stimulating hyper-engagement in depth (in-game) and width (beyond the game itself) through increasingly fine-grained social/psychological engineering; and (b) exploiting hyper-engagement for commercial gain in a variety of ways. Economic interests are too great to rely on self-restraint from industry, so targeted regulation and enforcement become vital if we are to safeguard important EU values in the long run.