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# The gamblification of digital games

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## Keywords

Gaming, gambling, digital games, digital consumption, microtransactions, loot boxes

## Introduction

The consumption of digital games has become increasingly ‘gamblified’ (Gainsbury et al., 2015; Zanesco et al., 2020) in recent years. Due to the changes in media landscape such as the development of new forms of gambling via the Internet and mobile phones, consumers can now play games and gamble in real time and from almost any location (King et al., 2020). The growing intersections between digital games, gambling and consumption practices afforded by these technological changes take many forms (Albarrán-Torres, 2018). Some players pursue what has become known as ‘skin betting’, which involves wagering digital ‘skins’ (virtual appearances) of characters either within games or on third-party websites and platforms (Greer et al., 2019); others bet on esports (competitive digital gaming) competitions in a manner comparable to traditional sports betting (Gainsbury et al., 2017); others utilise ‘gamblified’ monetisation methods when watching and engaging with live-streamed digital game content on platforms such as Twitch.tv (Johnson and Brock, 2020), while others still purchase loot boxes, the focus of many of the studies in this particular issue, which involve paying real-world money for an unpredictable set of in-game virtual items (Macey and Hamari, 2019; Nielsen and Grabarczyk, 2019). This list is, however, difficult to make comprehensive or exhaustive due to the rapid speed with which innovations and techniques in this domain are developing (Johnson and Brock, 2020). Nevertheless, the very speed of these developments shows us what a dynamic and rapidly evolving field of consumption the gaming-gambling intersection represents, and that a wide range of platforms, users and practices are becoming entangled in new extraordinary ways.

Our goal in this special issue is to begin to elucidate some of the changes in consumption patterns, both within ‘gaming’ and ‘gambling’, that we see heralded by these developments. Historical work into understanding the political economic antecedents and discursive processes by which many digital games became increasingly gamblified is ongoing (Johnson and Brock, 2020), but here we wish to focus on the cutting edge of developments in this field and how these might be theorised as practices of consumption. Video games are increasingly using gambling systems in various ways intending to appeal

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to a range of demographics (Johnson and Brock, 2020) including children and adolescents, resulting in the relationship between video gaming and gambling receiving a significant amount of attention in recent years (Macey and Hamari, 2019). Young people are particularly familiar and competent with digital technologies, which makes them likely to be exposed to various types of new gambling services (King et al., 2020) including loot boxes, skin betting and esports betting. Characterisations of in-game purchasing systems as ‘unfair or exploitative’ have ignited concern as they have limited or no consumer protection even for vulnerable populations such as children, adolescents and so-called problem gamers (King et al., 2020). Organisations such as the UK’s Gambling Commission (UK Gambling Commission, 2018) are increasingly concerned with the risks to children that the blurring of gambling and video games (through loot boxes and skin betting) poses. In recent years (2017–2020), academic researchers (e.g. Brooks and Clark, 2019; Delfabbro and King, 2020; Li et al., 2019) and policymakers increasingly question whether loot boxes and skin betting are a form of gambling or what impact, if any, these new technologies have on vulnerable audiences (Parliament House of Lords, 2020). As such, this is a critical moment to consider more closely contemporary patterns of digital consumption and where elements of ‘gambling’ and ‘gaming’ elide (Cassidy et al., 2013a, 2013b; Reith, 2018).

Our goal in this special issue is to examine the growing role of gambling systems within gaming and more broadly how ‘real-money gameplay’ cuts across these boundaries to reconstitute and transform the production and consumption of ludic experiences (cf. Beer and Burrows, 2010; Ritzer and Jurgenson, 2010). This introductory study for this issue consists of three parts. Firstly, we will offer a literature review of digital game consumption practices in order to ground the subsequent consideration of gaming and gambling; the ‘voice’ of consumer-focused research has been missing from these debates thus far, and it is through bringing together these kinds of literature that we aim to address this gap in research. This section also outlines some of the significant elements of the gaming–gambling convergence we are currently seeing and summarises the prior research in this area as well as its omissions. We then discuss each of the studies in this special issue and what they bring to these debates, especially when considering gaming and gambling consumers within the context of consumer research. Our authors address a wide range of issues, from the consumer experience of video game gambling to the design, monetisation and regulation of such experiences. These studies allow us to take an urgent and vital assessment of the ‘state of the art’ in this area, and what it means for understanding contemporary digital consumption practices. In an era where digital play is more popular than ever boosted most recently by lockdown orders during the early phases of the COVID-19 pandemic (e.g. Goslin, 2020), such questions are ever more critical for the conceptualising of a significant segment of online consumption practices.

## **Existing research**

The consumption practices surrounding games (or gambling) are an emergent field of research. Game studies research of this sort has included examinations of gaming

marketing (Kline et al., 2003), the broader relationship between global capitalism and game production and consumption (Dyer-Witheford and De Peuter, 2009), the importance of framing coherent research directions into ‘marketing and consumer behaviour issues associated with computer game consumption’ (Seo et al., 2015: 353), how players develop identities through consuming and acquiring in-game goods (Watkins and Molesworth, 2012), purchasing behaviours and motivations for in-game content (Hamari et al., 2017), connections between the subjective experience of gaming and its impact on understanding game consumption (Kuo et al., 2017) and the justifications players use for purchasing games, including those they might likely never even play (Johnson and Brock, 2020). Some gambling studies research has also considered consumptive practices, such as the roles of gambling practices within everyday spaces of both work and leisure (Nicoll, 2019), the ‘production and consumption of risk’ through gambling practices (Cassidy et al., 2013a, 2013b) and how contemporary, playful forms of digital gambling are associated with ‘new forms of neoliberal consumption’ (Albarrán-Torres, 2018: 48). However, despite the central role of gaming and, to a lesser extent, gambling, to the consumption lives of many, neither game nor gambling studies has engaged with consumer studies to any great extent – a situation this special issue looks to resolve.

Following on from these initial engagements in gaming and gambling consumption, we have seen a recent explosion in research addressing the gamblification of consumption in digital games. Gamblification becomes a primary area of study when we consider the ongoing concerns around ‘loot boxes’. These are digital containers housing many unknown items that might or might not be of instrumental use to the player (or might be aesthetic) and which cost real-world money to purchase (or in some cases an in-game currency purchased with real-world money). These gamblified systems and the potential for their play by children have elicited significant controversy in many countries including the United Kingdom, Australia, Canada and the United States (Batchelor, 2020; Kent, 2020; Matney, 2019; Miral, 2020), as well as within the European Union (Carvalho, 2020), South Korea (Crecente, 2018) and mainland China (Gartenberg, 2017). Recent studies in this area have included examinations of the psychology of loot box consumption and its commonalities with other forms of gambling (Drummond and Sauer, 2018), the extent to which loot box purchasers might be at risk of gambling problems (von Meduna et al., 2020), the techniques that regulators might use to limit the volume of loot box purchasing (Gong and Rodda, 2020), regulatory frameworks that might be relevant to loot boxes (Cerulli-Harms et al., 2020), the potential for regulating loot boxes and similar forms of play within both the game industry as a whole and in the context of specific companies (McCaffrey, 2019) and the legality of loot boxes and whether such monetised ‘random reward mechanisms’ should be understood as gambling (Xiao, 2020). In the broader context surrounding loot boxes, we have also seen studies of shared risk factors and experiences between gambling and ‘problem’ gaming (King et al., 2020), the relationships between the purchasing of random items and gambling behaviours (Lee et al., 2020), yet a rejection of the possibility that gaming might be a ‘gateway’ into gambling, especially in an era of gamblified gameplay systems (Delfabbro and King, 2020).

The other main area of gaming–gambling research to date that merits particular attention is studies of esports betting. This area takes two primary forms: more ‘traditional’ betting on esports competitions in the way one might bet on another kind of sporting competition (or a political event or anything else offered by a bookmaker) and the wagering of digital items with real-money monetary value, primarily known as ‘skins’. In the first case, [Gainsbury et al. \(2017: 610\)](#) note that individuals are now able to place ‘bets on the outcome of esports tournaments’, and this can take place in a manner comparable to traditional sports betting. This activity involves ‘traditional bookmakers’ ([Macey et al., 2020](#)) both online and offline who are increasingly offering wagers on esports events; these might be wagers on specific teams or specific players, or in some more sophisticated cases, the outcomes of specific rounds within a tournament, the number of kills or victories secured by a team. This kind of esports betting is significantly complicated by the varied regulations that in most jurisdictions define practices such as ‘games’ or ‘sports’ or ‘gambling’ ([Owens, 2016](#)), with legislators in many countries scrambling to keep up with the extremely rapid developments in this space. In the second case, esports betting also takes place through the wagering of ‘skins’, which are virtual aesthetic items with real-world monetary value ([Greer et al., 2019](#)). Skins most often provide the aesthetic difference for a player’s avatar or the items the avatar wields (a gun, a sword, etc.). They are of significant importance to notions of ranking and status in many competitive game communities (cf. [Wark, 2009](#)). Players wager these skins through third-party websites, either as direct wagers where they serve the equivalent purpose to money or in some cases within games themselves.

We, therefore, see a growing interest in assessing the overlaps between digital gaming and digital gambling, which are rapidly developing and not limited to loot boxes and esports betting ([Johnson and Brock, 2020](#)). However, it is essential at this point to note that ‘game studies’ and ‘gambling studies’ address games from very different landscapes of epistemology. In the first case, game studies has tended to emphasise the narrative, design, philosophy or phenomenology of ‘play’. In contrast, gambling studies inevitably sees any real-money play as being indicative of pathology, or the risk thereof. These are general, but we believe accurate statements about the shapes of both domains – game studies has emerged primarily out of humanities and social science departments and from the work of scholars in those disciplinary and consequently epistemic traditions.

In contrast, gambling studies has emerged primarily out of psychology and the health sciences, with an inevitably different set of framings. In this issue, we are excited to see these disciplines coming together more explicitly and with a greater variety of topics than has before been the case. However, there is still much work to be done in bringing the insights of both fields into the other. In the second case, we must also note a difference in funding regimes which profoundly shapes scholarly research. Gambling studies researchers affiliated with universities are often deeply entwined with public or (more problematically) private interests ([Cassidy et al., 2013a, 2013b](#)) up to and including gambling providers themselves. It is hard to see the conduct of impartial research in this model, and it is well documented that this remains a critical issue with the discipline’s scholarly output ([Cowlshaw and Thomas, 2018; Livingstone and Adams, 2016](#)). While we have yet to see game developers and publishers fund academic research on video game

gamblification, it does not seem unreasonable to anticipate such a future funding landscape. We should therefore keep this in mind when noting that gambling studies has been a significant contributor to the research on gaming and gambling and hence must be addressed in any comprehensive overview of the field as it currently stands.

Thus, taking a step back, we can see how these gamblified consumer practices are of clear interest to each of these three disciplines – the sociology of consumption, game studies and gambling studies. The latter two have been interacting actively in recent years, but existing connections between consumption research and ludic studies are rare. Nevertheless, this connection is more complex, more critical and more varied, given the variety of gamblified gaming practices now emerging and the speed with which this domain is changing. It is such a connection between the sociology of consumption and the study of digital play that we wish to forge within this particular issue.

## Article overviews

In *Productive Play: The Shift from Responsible Consumption to Responsible Production*, Whitson and French argue that we need to reconfigure our regulatory approach towards games and gambling because of changes in digital game consumption and production. To do this, they revisit the classic conceptual boundaries used to organise games/gambling regulation (game/not-game, game/gambling game, skilled/unskilled play and consumption/production) and question their relevance in a consumer society perforated and reconfigured by new modes of digital mediation. As examples, Whitson and French use daily fantasy sports and Pokémon Go to show that new relations of production and consumption are deterritorialising games, creating significant challenges for gambling regulators. The authors are critical of the role of game designers and publishers within this context and provide a rationale for the need to responsabilise video game production at an industry level, rather than more consumer-focused gambling regulation.

Zanescu et al. are also interested in how digital games are ‘gamblified’ but consider the role of platform architecture and digital distribution in shaping consumer attitudes. In particular, they address the question of how gambling is built into video game consumer experiences by examining how loot boxes operate through Valve Corporation’s digital distribution platform *Steam*. The authors contend that *Steam* creates a space for gamblified consumption by encouraging users to adopt ‘the entrepreneurial spirit of the prosumer’. This space is evidenced in the ways that consumers earn, trade and gamble away loot box skins, such that Zanescu et al. argue that *Steam* has users speculating about the risks and rewards of playing the platform’s market. The authors suggest that this new consumer attitude raises important questions as to whether users are consumers or workers, particularly as *Valve* finds ever more innovative ways to encapsulate and extract value from consumer activities.

Thorhaug et al. then examine how in-game skins travel beyond games to become tokens in online gambling systems. They present a comparative case of *Counter-Strike: Global Offensive* and *Fortnite: Battle Royale* to examine how game and platform

architecture shape the behaviours and attitudes of consumers. In particular, they compare the acquisition of skins and the degree to which they are allowed to move beyond the boundaries of the platform. Thorhauge et al. suggest that *Epic*, the publisher of *Fortnite*, retains a monopoly over in-game skins: a process which encourages acts of presumption and micro-entrepreneurialism. Alternatively, *Steam*, the publisher of *Counter-Strike*, runs a free market of in-game skins which transgress the platform through third-party betting; this process turns the consumer into market speculators and stockbrokers. As such, Thorhauge et al. argue that these platform economies represent distinct modes of socio-technical intermediation, some of which raise immediate concerns around the control and regulation of skin betting.

In Battle Pass Capitalism, Joseph examines the infrastructure of the game *Apex Legends* to explore what makes ‘battle passes’ a new commodity. Deploying an innovative method, known as ‘app walk-through’, Joseph reveals the many stages through which this commodity is governed and experienced, arguing that battle passes give us a window into the deep contradictions that exist within consumer society. In particular, Joseph argues that battle passes are an example of how digital game companies further alienate the consumer from video game content. The study suggests that it is difficult today to imagine any meaningful relationship with the purchase of in-game digital items. Companies increasingly frame digital commodities as subsets of existing bundles of content to be delivered as a service. Joseph argues that this is akin to a brief visit to an amusement park, which frames consumers as visitors of content, instead of owners. Joseph concludes that this arrangement, facilitated by the game’s user interface, encourages consumers to stay always engaged with the company’s monetisation strategy.

Also deploying the ‘app walk-through’ method, Ross and Nieborg examine social casino apps to consider how gambling is integrated into the culture of digital game consumption. Their study begins by giving a brief overview of what social casino apps are, suggesting that their design allows them to avoid the strict regulation that typically accompanies online betting and electronic slot machines. From this perspective, they argue that social casino apps have emerged as a mediator for a more casualised, playful experience of risk. Scrutinising three apps in particular – *Slotomania*, *Zynga Poker* and *DoubleDown Casino* – the authors determine that the experience of playing slots, poker, blackjack and roulette is becoming a mobile experience; one which draws on existing games design monetisation strategies, such as engagement, retention, informality and the push/pull of casual gaming sessions. Ross and Nieborg argue that this shift takes place against a background of continuous modification, whereby digital commodities are increasingly aligned to meet audience needs and methods of monetisation through social network promotion.

Finally, bringing together theoretical perspectives from consumer, fan and media studies, Jarrett examines the skins economy in the popular online video game *League of Legends*. In particular, Jarrett challenges the assumption that in-game commodities are sites of exploitation by considering the affective role that buying and wearing skins presents to players. Instead, Jarrett contends that the social experience of playing, watching and discussing *League of Legends* creates shared meanings and emotional attachments that carry levels of autonomy and co-creativity within a broader web of

economic value. Drawing on discussion board research, the study examines how players decommodify skins as they participate in reciprocal gift exchange relationships with developers. In particular, Jarrett shows that it is a social performance, on behalf of the players, to participate in the game's skin economy, as a means of recognition by giving something back to the producer of a free-to-play game. From this perspective, the author concludes that the game bases its success on a lucrative hybrid economy where fans' love of the game exerts a productive role on the continuation of the franchise.

## Discussion

In this special issue, our goal is to address the intersections of three areas of study: consumption, gaming and gambling. While all three naturally relate to one another to some degree, they have tended to structure themselves as quite different forms of enquiry: consumption scholars address economic, sociological and psychological phenomena, game studies scholars foreground humanities approaches and close textual readings, while gambling studies scholars pursue models of pathology and deviance. Nevertheless, more people than before are consuming digital goods; more people than before are consuming digital gaming products and, as such, gamblified systems are becoming ever more central to each of these domains. These connected shifts all point to the importance of bringing these three domains of study together. It is consequently our hope that this special issue will raise the visibility of gaming–gambling phenomena within consumption studies, not just potentially encouraging more research in this area but also highlighting gaming and gambling phenomena as valuable counterparts for comparisons for a range of consumption studies enquiries.

Within game studies, meanwhile, we propose that a thorough engagement with gamblification is increasingly essential for the discipline's vitality and relevance, especially in matters of political economy, game production, game consumption and user experience. Significant shifts in the monetisation of both blockbuster and mobile digital games are underway which need to be understood. These are not just questions of marketing or business which perhaps arguably intersect only marginally with game studies but rather – as the studies in this issue show – are questions fundamentally reshaping the production and consumption of video games. These studies all demonstrate the importance of thoroughly interrogating the financial dimension of game consumption, something which game studies has only rarely engaged with until now. Game consumption is not a trivial, passing or unproblematic instrumental exchange between producer or consumer – which traditional reckonings frame as easily understandable and rational actors (cf. [Johnson and Brock, 2020](#)) – but rather as a complex interplay between digital technology, political economy, online culture and diverse mobilisations of epistemic concepts such as 'value' and 'ethics'. Analysing consumption is more important than ever in the context of an increasingly corporate and controversial games sector, promoting nuance and understanding while simultaneously avoiding broad brush and counterproductive criticisms of digital gaming as a passive medium or practice.

Within gambling studies, we hope these studies will lead to a greater appreciation of the complexity of digital games and their (sometimes gamblified) monetisation methods.

The authors and we offer these studies as a step towards developing gambling studies' engagement with gamblified digital gameplay into a more nuanced appraisal of the distinctive entanglements and complexities of this space, as opposed to more 'traditional' gambling practices, communities or locations. Even the simplest digital games tend to be orders of magnitude more complex in design than predigital gambling forms, this observation shows the need for a more critical and interdisciplinary approach if gaming–gambling phenomena are to be usefully understood. The work presented in this issue highlights a range of concerns that factor often heavily into gamblified digital gameplay, and the nuances and ambiguities often present at the rapidly moving intersection of gaming and gambling. By moving beyond a narrowly pathologised model of real-money gameplay, we are confident that gambling scholars will be able to address the complexity and nuance of these phenomena in greater detail and, in turn, develop metrics and methods of study more appropriate to the complex worlds of digital gaming.

To conclude, although numerous scholars from both gambling studies and game studies have addressed these ongoing shifts, we believe this to be the first special issue focused on examining these changes from the point of view of consumption. We hope to bring scholars working in diverse traditions together in this issue to address the importance of producing both innovative theory and leading edge empirical work on the consumption of digital gaming–gambling phenomena. We have presented six such analyses here – Whitson and French's examination of regulatory approaches to games and gambling and the challenges these face, Zanescu et al. study of content distribution platforms and their roles in gamblified game consumption, Thorhauge et al.'s study of platform economies and online gambling systems, Joseph's interrogation of the 'battle pass' and its attendant alienation of the player from a game, Ross and Nieborg's examination of mobile social casino apps and the experience of risk they offer players and Jarrett's analysis of the affective value of skin purchasing and performance within a game's economy. Each of these analyses highlights the pressing concerns in this area while doing so via a critical perspective that seeks to understand and conceptualise, rather than immediately simplify or condemn. In turn, given the newness of this area and the rapid speed with which changes and innovations occur ([Johnson and Brock, 2020](#)), there is a potential wealth of future research directions with value to the three domains outlined here (game, gambling and consumption studies). Despite public and player outcry, it seems likely that such gaming–gambling convergences will continue to both evolve and multiply and thus represents an essential area of study for scholars from all three of these disciplines.

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