

The Gam(bl)ification Matrix: How Social and Mechanical Infrastructure Normalises Gambling in Video Games

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INTRODUCTION

Video game gambling has been a subject of rising international concern across the last decade. It remains especially live in the UK, with the government debating the inclusion of loot boxes and random-chance purchases in children's games, particularly as they relate to "addictive-by-design" philosophies (Gambling Commission, 2021; Woodhouse, 2024). It is also of interest in academia, with researchers studying typologies of gambification (King et al., 2012; Zendle, 2020), motivations (King et al., 2009), and impacts on mental health and childhood development (Griffiths, 2017; Király et al., 2022).

This work facilitates understandings of the root causes of video game gambling and its consequences. It also permits the development of policy proposals designed to better protect players' health and regulate against harmful practices in games likely to be accessed by children. However, attention towards the ontological qualities of gambling mechanics themselves remain lacking. Without critically examining how these mechanics function, socially spread, and become normalised, we cannot understand their ever-increasing popularity despite a similarly rising knowledge of the tactics used and risks associated with engagement. Likewise, we remain in the dark about how gambling mechanics leverage unrelated socio-mechanical systems to embed themselves not only as necessary features in a gamer's mind, but as mechanics central to the game.

I seek to initiate this conversation through the development of a matrix of harms. The matrix is a taxonomy containing three axes, developed to account for prior works' analyses of players' reasons for gambling (Culbong et al., 2026; Greer et al., 2022) and making in-app purchases (Cai et al., 2022: 11-21; Hamari et al., 2016: 539-544), which often overlap in motivations. The first axis, public-private, asks how players engage with mechanics: is it executed or rewarded among others, such as global announcements for rare loot box drops? This category encompasses motivations like keeping up with friends, accumulating social capital, and self-expression through cosmetics. The second axis, internal-external, asks whether the mechanic's efficacy is intrinsic or relies on social networks. For example, blind bags may be opened solo, but their hype depends on word-of-mouth and perceived value. This axis considers how mechanics come to be desirable: is it personal, like fear of missing out, or purely mechanical, such as gaining a competitive advantage? Finally, the third axis, tangible-

intangible, examines how gambling is rewarded. Do players receive cash (or items tradable for cash), as in esports betting? Can winnings make a material difference to the player-character, such as granting power-ups? Or is the reward more abstract, if existent? This category asks what players hope to gain from gambling: whether they seek profit, real-world skill enhancement, just a new look, or something else entirely.

Figure 1: Matrix of harms, public-private and tangible-intangible axes.

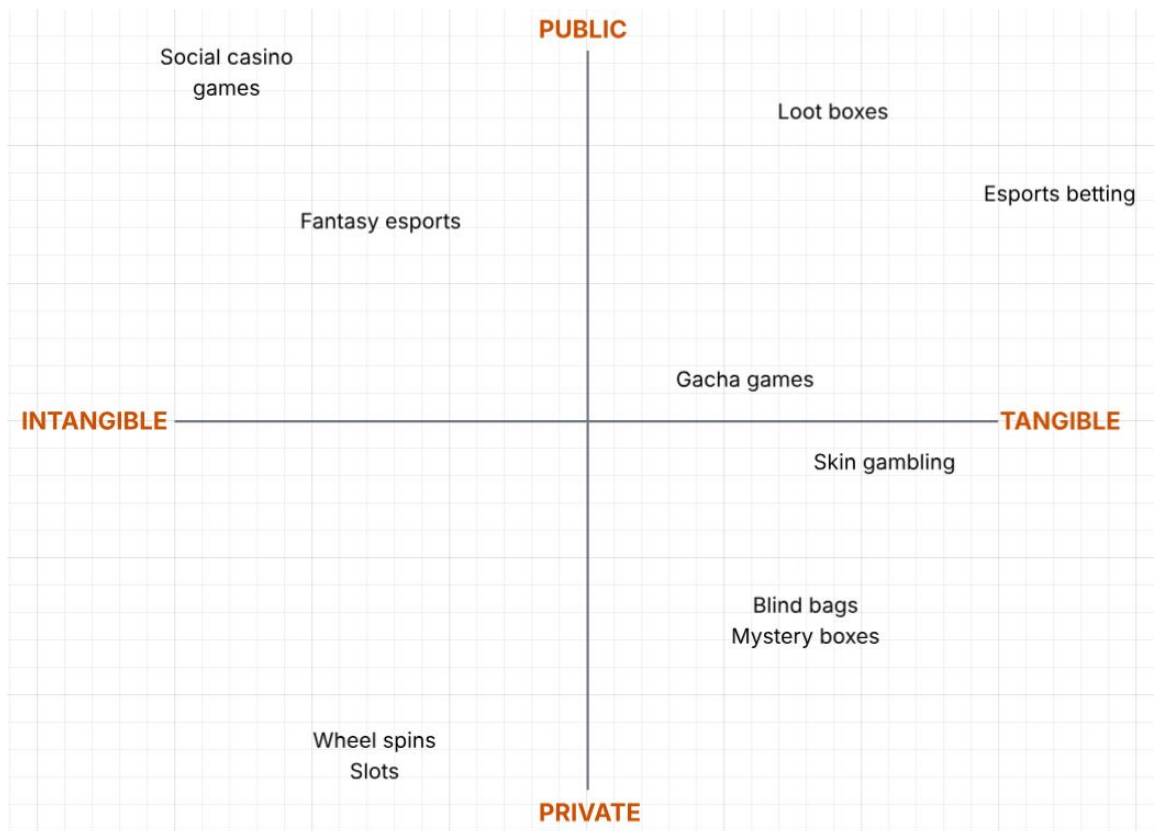
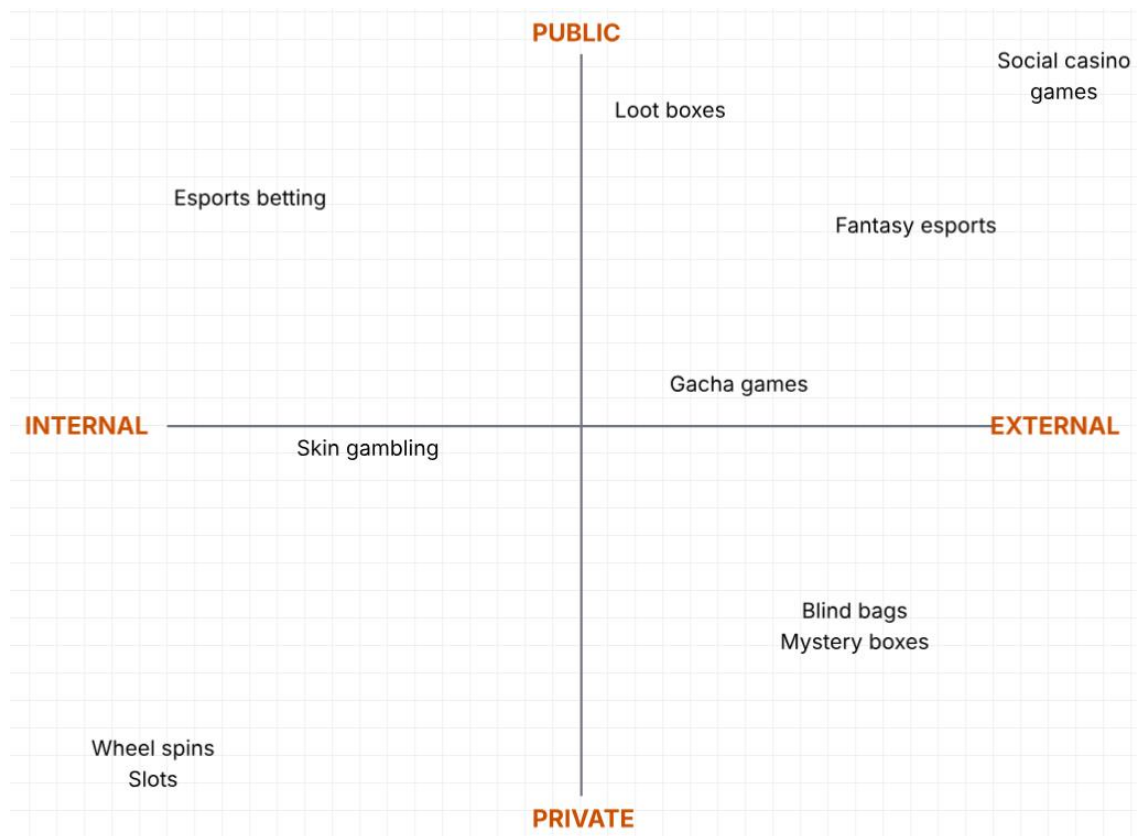


Figure 2: Matrix of harms, public-private and internal-external axes.



Take, for example, loot boxes. Generally, the rarer a drop, the more intricate and/or powerful it is (e.g. legendary skins in *Overwatch* (Blizzard, 2016) or mythic heroes in *Kingshot* (Century Games, 2025)). Loot boxes sit between internal and external, with highly variable implementation. Their efficacy benefits from external spread, with players sharing rare drops on social media or players witnessing another wearing a skin or using a power-up, and some games announce when players pull the rarest drops (for these reasons, loot boxes are also highly public despite normally being opened solo). However, they can be internal, especially in single-player games or where players seek rewards purely for personal satisfaction. Loot boxes are also broadly tangible, with rewards tending to be persistent (not temporary) and material (making a physical difference), though not entirely so, as rewards are (usually) not exchanged for anything of real-world value, outside of skin gambling and account sales.

Taxonomising loot boxes like this reveals their highly social, transitory nature. It is not always simply one user spending money until they pull something rare. Rather, it is a *community* of users, facilitated by internal and external social infrastructure, sharing their successes, near-misses, and admiration of others' pulls in a constant cycle. This encourages others to seek the same low-probability success, perpetuating engagement with the mechanic and the normalisation of sunk cost.

While not particularly groundbreaking, this example demonstrates the matrix's ability to highlight socio-mechanical interconnections, linking developers, gameplay environments, problematic mechanics, players, and wider (off-platform) social ecosystems together. It spotlights the interdependent relationship between various

actors which, in certain assemblages, can produce the type of harm we call gambling. The matrix therefore has significant potential to reconfigure the way that we consider and talk about the underlying infrastructure that facilitates, creates, promotes, and perpetuates gambling in video games. However, this is simply one rudimentary example of many, constrained by space and time. Future research should more thoroughly explore the specific roles played by different actors, and their effects upon both one another and the functioning of individual gambling mechanics.

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BIO

I am a Master's student at UCL studying the application of digital anthropology to the field of game studies. My primary research interests are in online safety, where I have studied the social infrastructure ecosystem of sandbox games and their policy implications for the Online Safety Act. Other topics of interest include identity and representation, safeguarding in esports, the philosophy of play, political engagement through pedagogical game design, and Marxist approaches to playbour in pet simulator games (my dissertation project).

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CONFLICTS OF INTEREST

None to declare.

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ENDNOTES

¹ Current institution. Formerly at Brunel University London during the project's original development.