

## CHAPTER 16.

# ESPORTS AND PLATFORM STUDIES

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AN INTEGRATED PERSPECTIVE

WILLIAM CLYDE PARTIN III

### ABSTRACT

*This paper situates esports within the field of platform studies in general and the platformization of cultural production in particular. As an interdisciplinary approach to studying the complex relationship between computing technologies and cultural production, platform studies offers a valuable, antireductionist framework for placing esports within their broader sociotechnical and political economic contexts. Following an introduction to the basic tenets of platform studies, this paper details a number of ways in which esports are dependent upon major platforms, centralizing technical and economic control over esports ecosystems in the hands of publishers. In light of these relationships, I argue that esports convert traditional sports, a platform-independent commodity, into a platform-dependent one. This paper ends by considering several ways in which esports may themselves be considered platforms.*

### Introduction

The rising popularity of esports over the last decade has taken place alongside the increasing influence of platforms in culture industries. The wager of this paper is that this parallelism is not a coincidence and that esports may help us better understand

culture industries in the age of what many theorists now call “platform capitalism” (Srnicsek, 2016). “Platform”, in its broadest sense, refers to a digital infrastructure that connects different categories of users for economic and social interaction while also collecting data on those exchanges. While the influence of platforms has been recognized in a variety of industries, from transportation (Rosenblatt, 2018) to healthcare (van Dijck, Poell, & de Waal, 2018), platformization have been felt with particular acuity in culture industries. Thomas Poell and David Nieborg (2018) have referred to this shift as the “platformization of cultural production,” the processes by which media producers have been forced to adapt, with varying degrees of success, to digital platforms as a vital intermediary for the production, monetization, and distribution of cultural content today.

Studies examining the platformization of cultural production have considered changes in how cultural content is made, monetized, and distributed across a variety of media types, including news (Bell & Owen, 2016), music (Hesmondhalgh, Jones, & Rauh, 2019), and game production (Foxman, 2019). Even so, scholars of platform studies have not paid close attention to the emerging professional gaming industry. Likewise, scholars of esports have largely failed to address the literature of platformization of cultural production. While the best studies of esports have always adopted interdisciplinary perspectives, the majority of extant work on esports is situated within clear disciplinary bounds (Reitman, Anderson-Coto, Wu, Lee, & Steinkuehler, 2019), especially those of human computer interaction and media psychology. Without discounting the value of these studies, this author contends that they must be contextualized within the complex assemblages of sociotechnical infrastructures and political economies that have determined the shape of the esports industry and the opportunities for action afforded to those in it.

Against this background, I propose platform studies as a more

comprehensive theoretical framework for studying esports, one that is sensitive to the interrelations between technology, capital, and culture. The point is not to suggest that esports may be reduced to platforms, nor that the relationship between the two is causal. Rather, it is that platforms are indisputably a part of esports. For this reason, platforms deserve closer attention from scholars of esports. As this paper argues, the platformization of cultural production offers a powerful anti-reductionist framework to consider the interrelations amongst infrastructure, software, and political economy that, together, form the conditions of possibility for professional gaming. By examining these forces in concert, it becomes possible to better understand the actions undertaken by all users in a given esports ecosystem.

In the first section, I define “platform” and introduce scholars of esports to key aspects of platform studies in general and the so-called “platformization of cultural production” in particular. Here, I argue that esports transform traditional sports from platform independent commodities into platform dependent ones, with significant consequences for issues of governance, centralization, and accessibility. In the second section, I consider how esports are reliant on various types of platforms, from the cloud computing platforms (Amazon Web Services) that power many games, to broadcasting platforms (Twitch, YouTube, etc.), and video game distribution platforms (Steam, Battle.Net). Finally, in the third section, I consider three ways in which esports may themselves be conceptualized as platforms: as multisided markets, as programmable software suites, and surveillant assemblages.

### **Why Platform Studies?**

Despite the popular opposition of the sporting body to technology, many scholars in esports have long pointed out that *all* sports are sociotechnical insofar as they are constituted by

complex compositions of human bodies, technological artifacts, and social processes (N. Taylor, 2009; T. L. Taylor, 2009, 2012; Witkowski, 2012). Rather than create a false dichotomy between “technological” and “non-technological” sports, it is important for scholars to investigate the affordances and practical use of the technologies, no matter how humble, that facilitate individual sports. Inquiry undertaken in this spirit is intended to reveal not only how technologies shape the possibilities for participation for players, fans, and complementors, but also how power relations are embedded into these technologies.

In the case of esports, this paper assumes that the most important technological arrangement for scholars to consider is the platform. In for their long-running series *Platform Studies*, Ian Bogost and Nick Montfort (2009: vii-viii) suggest that platform studies is defined by three features:

1. A focus on a single platform or closely related family of platforms
2. Technical rigor and in-depth investigation of how computing technologies work
3. An awareness of and discussion of how computing platforms exist in a context of culture and society

While Bogost and Montfort leave open the methods by which scholars ought to study platforms (Apperley & Parikka, 2018), they nevertheless emphasize programmability as a shibboleth for platforms. This view predominates in software studies (Helmond, 2015), but scholars in other disciplines have theorized “platform” differently. Scholars in economics are likely to regard platforms as “matchmakers” that facilitate multi-sided markets (Evans & Schmalensee, 2016), while those in labor studies see platforms primarily as labor intermediaries (van Doorn, 2017). And, of course, there is the popular sense of platform that emphasizes the capacity of social media services to

enable users to share content in an ostensibly open playing field (Gillespie, 2010, 2015, 2018). In attempting to situate esports within platform studies, I do not regard any of these definitions as fixed, final, or foundational. Rather, each aspect of platforms offers insight into the sociotechnical and political economic underpinnings of the contexts in which professional gaming takes place.

### **Esports and Platforms**

In adopting this flexible approach to platforms, I follow more recent work on the Thomas Poell and David Nieborg on the platformization of cultural production, which synthesizes insights into platforms from political economy, business studies, and software studies. To examine how different culture industries respond to the rise of platforms, Poell and Nieborg distinguish between platform dependent commodities and platform independent commodities. For example, whereas legacy news media firms were forced to adapt to the rise of platforms, the digital game industry was always already reliant on programmable software platforms. In this way, I suggest that, from the perspective of the history of sporting, the primary consequence of esports is to convert sports – a quintessential platform independent commodity – into a platform-dependent one. The effect of platform dependency, Poell and Nieborg argue, is to accelerate what Yochai Benkler (2006: 32) calls “the project of control” and its twin pillars of commercialization and corporate consolidation. Put bluntly, platforms afford game publishers more opportunities for control over esports ecosystems than has ever been possible in traditional sports ecosystems.

To illustrate this tendency, I consider the close relationship of esports to a wide variety of platforms. Here, I offer three examples. One, esports publishers have long relied on cloud platforms like Microsoft Azure as an infrastructure for

managing the vast server load required to support online multiplayer games; two, esports publishers rely on broadcasting platforms like Twitch in order to cost-efficiently reach global audiences; three, the video games on which esports are built are sold through and run on platform marketplaces like Steam, Battle.Net, and Origin. The affordances of these platforms shape the conditions under which users may participate in professional gaming ecosystems. For example, Activision-Blizzard has long used Amazon Web Services to manage servers for competitive *Overwatch*, meaning that access to *Overwatch* is limited to those regions in which AWS is active. This situation has no obvious analog in traditional sports, where the platform independent technologies (balls, bats, goals, etc.) that enable sporting practices are not entangled with the infrastructures and business models of large technology firms.

Though the sports industry has surely had to contend with the impacts of platformization, these effects have largely been limited to matters of distribution because traditional sports are not reliant upon platforms in the same way that esports are. What this reveals is that, in the context of esports, platforms do not simply alter (e)sporting practices, cultures, and institutions at the point of distribution, but also at the *point of production*. As a result, I argue that platforms offer publishers unprecedented control over professional (e)sport ecosystems in ways that have no comparison in the history of sports. In political economic terms (Mosco, 2009), this shift has massive implications for the commodification, spatialization, and structuration of esports, which are a vital piece of context for any study of professional gaming.

### **Esports As Platforms**

A more radical argument, however, is that esports are *themselves* platforms, at least in three senses of the term: (1) esports function as multisided markets, defined as markets in which two

or more intermediaries are “matched” by a technical intermediary (2) esports are surveillant assemblages that collect vast amounts of data on users in order to predict and control future behavior, and (3) esports serve as software suites that developers may access using an application programming interface (API). In each case, by examining esports as platforms, it becomes possible to better understand how esports are reconfiguring sporting practices, cultures, and institutions in ways that increasingly concentrate control in the hands of publishers and/or large technology firms.

In the first case, as legal scholar Max Miroff (2018) observes, “electronic sports ... [create] multisided markets that rely on the ability of numerous entities to access a publisher’s intellectual property.” If Facebook’s platform is a multi-sided market insofar, then game publishers use their intellectual property to connect otherwise distinct actors such as fans, players, team owners, and sponsors in a single market. Even so, game publishers are not neutral intermediaries; rather, they actively intervene in these multisided markets according to their organizational goals, be it maximizing player productivity, as in the case of Valve and Dota 2 (Boluk & LeMieux, 2017) or seeking massive capital investments in the form of franchise fees, as in the case of Activision-Blizzard and Overwatch League. Questions of platform governance (Gawer, 2014) thus lie at the heart of professional gaming and are critical to understanding the implications of so-called “open” and “closed” esports ecosystems (Scholz, 2019).

In the second, surveillance is a critical element of virtually every esports today because of their reliance upon platforms. As Torin Monahan and David Murakami Wood (2019: 1) argue in a recent editorial, “digital platforms fundamentally transform social practices and relations, recasting them as surveillant exchanges whose coordination must be technologically mediated and therefore made exploitable as data.” Along these

lines, esports reconfigure sports into a technologically mediated practice that is amenable to mass data collection. As Nicholas Taylor (forthcoming) puts it, “esports offers sports scholars a compelling glimpse of what athletic performance looks like when it unfolds in digital environments that are already instrumented for data collection.” The data-rich environments of esports have in turn proven irresistible for software developers working on artificial intelligence. Elon Musk’s OpenAI initiative, for example, has long relied on data collected in public Dota 2 matches to train the organization’s machine learning algorithms.

Finally, many esports enable third-party developers to develop applications for esports programs using a game’s API. Just as Facebook opened its API to developers in order to extend the platform’s utility, some game publishers give developers API access to their games in order to create tools that offer new features to competitive players. For example, aspiring and professional Dota 2 players have long relied on services such as Dotabuff, which uses API access to Dota 2 to generate sophisticated statistical readouts about player performance and behavior over time. While traditional sports have long relied on datafication to increase player performance, the ability to access this data through an API fundamentally changes the calculus of (e)sport analytics by making third parties technically dependent upon a developer’s API. (It goes without saying, of course, that baseball has no API).

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