The data assemblage of play: 
Analytics, surveillance, memory

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ABSTRACT
This paper examines the rise of machine learning based data analytics platforms in gaming, focusing on the recent example of DotaPlus. Drawing from Stiegler’s theory of mnemotechnics, this paper argues that analytics reconfigure how users experience and perceive gameplay in a major way. Beyond this, I argue that with features enabled by the collection of user data, DotaPlus as mnemotechnics represents a rich site for thinking about the economic logics of platforms and surveillance capitalism.

Keywords
videogames, postphenomenology, analytics, machine learning, data,

INTRODUCTION
This talk examines the kinds of human-data assemblages that emerge from the growing suite of commercially available analytics software for use within the context of multiplayer videogaming. Provided by both game developers and as third-party tools, these range from analytics software to track gameplay performance in competitive multiplayer games (such as DotaPlus or WarCraftLogs – which harvest, aggregate, visualise and rank one’s performance in Dota 2 and World of Warcraft respectively, according to various metrics), to hardware peripherals which monitor the more discreet bodily processes involved in play (such as Mionix’s Naos ‘Quantified Gaming’ mouse, which tracks heartrate, or the SteelSeries Sentry gaze tracker). Despite having different purposes and being used in different contexts, these technologies are united by the similar purpose of counting the amount of times a player has done or been affected by something in a game and presenting this back to them in some sort of numerical or statistical format, or a visualisation thereof – generally marketed as a way for players to reflect upon, and improve, their gameplay performance.

Distinct from the existing (albeit limited) work on the subject, I focus on recent analytics platforms reliant on dynamic, realtime, machine-learning techniques. Broadly construed, machine learning refers to systems of prediction, analytics, or pattern recognition, reliant on the capture of large amounts of user data, gathered using various kinds of digital sensors. In this talk, I look at the case of ‘DotaPlus’, an analytics platform for the game Dota 2 which uses forms of surveillance to collect large amounts player data (from the game’s playerbase) to create pay-for-use ‘guides’ for players (US$4 per month). I argue that this process of can be understood as an ‘exteriorisation’ of the practices involved in gameplay, with the potential to feed back into and direct player experience. In framing this, I find conceptual resource in Bernard Stiegler’s post-phenomenological account of
‘mnemotechnics’ and the mediated nature of human memory. For Stiegler, subjective memory is always-already technical, and shapes the way that humans perceive the present and anticipate their futures. Memory is conditioned by nonhuman objects like tools or technologies, which imply specific sorts of action – ultimately shaping how we negotiate our everyday lives. In many instances, as Stiegler argues, mnemotechnics exist as technologies or tools that explicitly support or condition memory, often in service of capitalism (e.g. commercialised mnemotechnics like films or videogames). Mobilising this concept, I argue that DotaPlus as mnemotechnics conditions particular forms of action or perception. This talk elaborates on some of the implications of the changing up of how Dota 2 is phenomenologically experienced, and how systems of surveillance complicate how we conceive of play. Beyond this and keeping with the political stakes of Stiegler’s writing (2011), I discuss how these platforms create new and economically desirable modes of play through the capture and exteriorization of user data – a perspective consistent with broader logics of platform economics (Srnicek, 2017) and surveillance capitalism (Zuboff, 2015).

**BIO**
Ben Egliston is a PhD candidate and sessional lecturer at the University of Sydney in the Department of Media and Communications. He researches and teaches in games and new media. His current research is focused on user experience in games, taking this as a post-phenomenological concern.

**BIBLIOGRAPHY**

