Observing from the fringes: Data logging platforms in multiplayer videogames as methodology

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EXTENDED ABSTRACT

In recent years, Big Data has radically altered the landscape of research in the social sciences. Through virtue of the scale and heterogeneity of large data sets, Big Data research has proffered an array of novel insights into digital life and culture. For videogame research, however, these kinds of approaches are relatively obscure practice, and are surprisingly absent from much of the academic discourse surrounding the uptake of data related research and methodologies (despite the emergence of myriad data tracking platforms and public availability of APIs in popular multiplayer videogames). Within computationally oriented strains of game studies, work has recently arisen using these kinds of approaches (see Drachen et al., 2015), yet games research situated in the humanities has lagged behind. In response to this paucity of data-driven, humanities game studies, the present work proposes the question: "How can humanities videogame research leverage and benefit from these emerging methodological assay?" This work reflects on existing, provisional methodologies and speculates on how data analytics could be productively applied in future humanities research; of use to scholars in fields of cultural or media studies, for instance.

As a point of focus, I explore how large scale research into multiplayer videogame spaces could draw on sets of player data. I provide a series of examples of present work, using Valve's Dota 2 (Valve 2013), a highly popular multiplayer game. Approaches include the use of game APIs and how resources at the game's periphery can be drawn in as a kind of ad-hoc research device. While the present methodology has been developed for the study of Dota 2, a by-product of a larger scale research project, the provocations raised are generalisable (within the field of multiplayer game research, at least).

DATA-DRIVEN GAME STUDIES

Analytics of player data are particularly prevalent in contemporary multiplayer videogames. Games such as Dota 2 (Valve 2013) and League of Legends (Riot 2010) feature means to track player statistics. Ingame actions performed by the player are parsed and recorded by the game. Beyond these built in features, third party services have begun to leverage the availability of data; harvesting and aggregating data so that it is both palatable and digestible for users. To use the example of Dota 2, platforms such as Dotabuff and Dotamax provide highly detailed and up to date logs of player interactions with the game. They use a web API to parse available game replays. These platforms function as a good surface level research tool, allowing scholars and players alike to

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identify broad trends and kinds of play (and have been used in prior work as research apparatus, see Egliston 2015. Others have also noted the potential of the platform, see Drachen et al., 2015). To add a further degree of granularity to findings, researchers could leverage API scraping tools (or, platforms that have drawn from the game's API. For example, datadrivendota). These approaches allow users to scour entire sets of data, and precisely pinpoint specific ways in which a playerbase, as a collective, are engaging with Dota 2. While not driven by a situated engagement with gameplay, such approaches allow the researcher to observe ingame action with a high degree of accuracy. In addition to parsing gameplay action, applications like Dotabuff provide the option of relaying ingame messages to the researcher, opening windows for kinds of content or lexical analysis. Clearly, the data yielded by such approaches has the potential to be both large in scale and varied in nature.

QUESTIONS RAISED

Both prior and speculated uses of nascent analytics-based methods raise a number of important questions; both theoretical and practical. For instance, how do popular ontological frameworks, used to conceptualise videogames, conflict with proposed approaches? How do dialectical tensions in game studies, situated around ideas of interactivity, manifest themselves in popular methodological frameworks, such as ethnomethodologies? Are these approaches privileged due to emphases on play and interactivity? A number of other questions are pressing, too. What are the ethical and legal issues emerging from the adoption of nascent data analytic technologies? What new research avenues are opened by big data, and what are its limitations in game studies? What are the affordances of the temporal orientations of harvesting and storing game data? Compared to ethnographic work, which is very much grounded in a sense of immediacy, and the observation of events *occurring* in situ, could such methods be useful in the construction of histories of play?

CONCLUSION

Player analytics in humanities based game research has the potential to generate new perspectives and questions not necessarily made visible through existing methodological rubrics. The benefits of big data have been amply ventilated through the efforts of scholars in the broader field of digital media research (boyd and Crawford 2012) as well as emerging work in computationally oriented game studies. It is expected that big data approaches to humanities game studies can prove just as generative, offering rich and novel insights into the ways in which players interact with videogames.

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