Location-based Augmented Reality Games and Its Community's Sustainability

Abstract

Mobile location-based augmented reality (AR) games are a relatively new genre of games that allow players to have informational overlays layered on top of their physical world. For the purpose of this essay, the research will be looking at the two main location-based AR: Ingress and Pokémon Go by Niantic. The research will be exploring this social phenomenon with millions of downloads. To say that these games do not have communities, actively and immensely engaging with the parameter of the game world, would be inaccurate; however, how diverse are these communities? How does it compare to other online games communities across genres? Finally, how sustainable is it beyond its original gameplay?

Introduction

AR has its use in a variety of fields, from its humble beginnings in the 1960s by Ivan Sunderland who first created a virtual reality (VR) headset that was so heavy it had to be suspended from the ceiling (Schmalstieg and Hollerer, 2016). To the present day, with a great range of AR games, notably from upcoming Legos recognition-based AR to past PlayStation 3 card game, Eye of Judgement in 2007 with its accompanying mounted camera among many others. However, none managed to get a firm grip on the market, like Eye of Judgement being completely overlooked by its AR capabilities. Many top players turn off the animation in order to escape them and save time. "It may even be considered to be bad manner to have them turned on in official tournaments in some communities" (Johansson, 2009, p.6), mainly due to not offering any new information to players.

However, no other game has managed to hit the dazzling height of Pokémon Go and to an extend Ingress. The latter is important as the research veers off the 'Shared Passion' of Pokémon GO for an analytical understanding, because "many have tied to the nostalgic connection for the franchise. A large percentage of the players may have grown up and/or watching Pokémon media" (Vella et al., 2017, p.3).

The research will be looking at what it takes to create game communities, the different identities such worlds will inhabit across genres. How online games are cemented with social play. In the words of one of the players as cited in Ducheneaut et al (2011, p.1) "it Is the people that are addictive not the game".

With the advance of multiplayer online games, game community has been somewhat of a buzzword, with all major and small games striving to create a self-sustainable gathering of players to compete, collaborate and communicate. Han and Moore (2006) describe game communities in three segments, and Pokemon Go found itself fascinatingly enough in two somewhat marginalized concepts. Most online games place themselves in virtual communities as suggested by Han and Moore (2006). According to Howard Rheingold (1994, p.171) their definition of virtual community is: "Virtual communities are social aggregation that emerge from the Net when enough people carry out those public discussion long enough, with sufficient human feeling, to form webs of personal relationship in cyberspace". Surprisingly, Pokemon Go virtual community is not much of a community, no personalized avatar, no direct or any other form of communication, even an imaginative one and no guild or player created groups. This contradicts Kim's (2000, p.ix) statement that "The web is becoming our collective town square". To having real-world town squares, where players gathered in real-time to take down gyms collectively for their chosen generic teams.

This has been helped by the fact that the other two segments, according to Han and Moore (2006), community concepts are marginal in general implementation in other games and genres but in this instance, very effective and strong. Firstly, community of presence, in these

events face-to-face meetings discussing gamers LAN parties, forming rules, norms or convention. Han and Moore (2006) argue these boundaries of memberships shape emergent social relations, a sense of community. Pokémon Go players regularly meet with each other; these meeting can be peripheral for raids or gym overtake, this gathering helps connect with others, communicate in Pokémon lingula, and exchange associate paraphernalia and knowledge. However, Pokémon Go long seeded this sense of community prior to the meeting, which in turn, reinforced this bond between players. However, in accordance with Han and Moore (2006) imagined communities, where members of such community never meet, aligned it with a sense of nationality; this community is reinforced by symbolic adaptation (devices) to construct and maintain their status as a community. Pokémon Go has a longlasting affair with its players, many have grown up and/or watching Pokémon media" (Vella et al., 2017, p.3). This nostalgic re-enactment of the adventure of Pokémon trainer, into the wider world has its proven appeal. The research has seen it with the popularity of Ingress in its location-based gameplay to much lesser affect, mainly due to this combination of imagined and present community concepts, which have produced a unique proposition, rivalling that of virtual community; not a small feat.

However, in both of these senses, the research has outlined that Pokémon Go rely on the existence of some boundaries, whether it is the physical world or the accumulated linear association of a fictional one. This in turn, does not diminish the sense of belonging as according to Vella et al (2017, p. 12) due to "geo-mapped features of the game, and the rewarding physical movement, players were encouraged to leave their home. Playing outside opened the possibility of exploration and discovery, which could in turn provide the foundations for building a sense of belonging". Vella et al (2017) argue the notion of "place-identity" to rival that of "third place" as described by Proshansky et al (1983) cited in Vella et al (2017, p.4) "where components of self-identity is composed of ever-changing cognition about the physical locale in which we live. That contribute to a psychological healthy sense of self, the physical world becomes embodiment of the individual's memories, experiences, ideas and the values build up over time and in place". Vella et al (2017, p.4) research found that the association of "being outside was described in terms of its overall social value - one which overwrote the narrative of the socially isolated video game players, with one that was

perceived as being physically and socially healthy". In terms of my opinion, not by consequence, most of the research part-takers almost entirely play with family and friends (siblings, romantic relationships and/or parents). This adoption of "multigenerational play was facilitated by casual game mechanics, capturing players with varying levels of time commitment" (Vella et al., 2017, p.16). It also applies the notion that these collective activities are beneficial both physically and mentally, giving a healthy sense of oneself to its surrounding which merits this fluid shared and joint part-take.

Pokémon Go is unique and has dropped its anchor within it, as a tool to re-enact the adventures of Pokémon trainer, collectively with the safety of family and friends and reminiscing in the world of a beloved franchise, all the while travelling from one location to the other and creating memories along the way.

However, how much sustainability is in this method? Location-base has its place as Vella et al (2017, p.5) point out, "technologies that are mobile, accessible and discreet, is uniquely well positioned to act as an intermediate between gameplay and the physical world". The researcher would suspect that more titles would try to enter this genre but being much different to that of Pokémon Go or Ingress, by having a more diverse play.

Few titles can compete against the high level of 'share passion' associated with Pokémon Go; the researcher suggests that its incredible popularity derived mainly from its past history as explored in imagined community. That in turn, has a significant impact on community of presence, with pre-game formulated opinions and favouritism of different Pokémon through previous medias which are discussed at meet-ups, creating a pre-game point of contact. Although the game Mechanics emphasises those talks such as the location of a Pokémon, the required balance to catch a new Pokémon, or the right Pokémon for a raid for instance. However, it will require much more from new entries to the location-based AR genre to differentiate themselves beyond the novelty attachment to cement this genre; it will require a greater adaptation. Pokémon Go is unique and can afford to ignore the virtual community,

but a new story needs new protagonists. Howard Rheingold (1993, p.7) describes cyberspace as "a social petri dish, the Net as the agar medium, and virtual communities, in all their diversity, as the colonies of microorganisms that grow in petri dishes. Each of the small colonies of microorganisms—the communities on the Net—is a social experiment that nobody planned but that is happening nevertheless". Howard Rheingold (1993) in his version of virtual community is diverse, which allows multiple overlaying interaction to take place, extending its appeal but more importantly, its longevity. Ducheneaut et al (2011) talk about the correlation of a game community and its growth and longevity to that of the game itself.

More Americans now play video games than go to the movies (MediaKix, 2019). The demographic of video game players is vast and strikingly different than that of the common misconception of teenage boys in their bedroom. No more so than in mobile games with 2.2 billion worldwide mobile gamers; 63% of mobile gamers are female and 78% are over the age of 25 years old (MediaKix, 2019); it is suffice to say, it is diverse and far-reaching. These changes not only alter the motivations and experiences this game offers, but also the fundamental nature of its social play by looking at a more stablish 'third place' of virtual world Massive Multi-player Online games (MMO) and to an extent, other multiplayer online games genres. The researcher tends to explore the reflection of this diversity in the game world.

The most poignant work on motivations and experiences of gamers is that in Richard Bartle's (2008) essay "Hearts, Clubs, Diamonds and Spades" on Multi-User Dungeon (MUD) games; however applicable in the wider play of online gaming. In his essay, it differentiates players in four roles, according to Salen and Zimmerman "externally deriver, coming from outside the magic circle" (2004, 465), pre-game alignment of purpose of play, these are Achievers, Explores, Socializer and Killers. More importantly, each external role regards the other three styles of play in an intertwined dependency of each other creating a web of variety and a rich eco-system in the online world, much like the players inhabiting this world. Salen and Zimmerman (2004) Rules of Play considers another typology of social play roles, one that derives from within the magic circle, from Brian Sutton-Smith's (1971) "A Syntax for Play and Games". Within the system of social relationship i.e. an arch-enemy, partner-in-crime to a

team leader and many more, these roles have their own motives; game designers can foster these roles by building a layer of mechanical traits. In MMO, a variety of activities revolve around character advancement and translate into a functional advantage in terms of mechanicals of the world (Yee, 2006), Yee (2006) argues that role undertaking enables unique collaboration where all members take full advantage of their own strengths while mitigating the vulnerabilities of their teammates, and trust their teammates to provide crucial support. Under this stressful circumstance, many relationships grow out of, or are augmented, through these bounding experiences.

Whether it is an external role to the magic circle, or one formed within, or even that introduced by the game designers, all these different roles according to Kolo and Baur (2004) allow the players control of their online personae, which we will call characters. This undertaking of what is essentially an identity, whether it is spontaneous or fostered over many hours of play, allow the player to create their own narrative. Schell (2015) describes it as "story machine" and argues a story is still a story even though there is no author. The researcher will add that a story is only a story if someone reads it; hence, according to Ducheneaut et al "without this audience the game will make little sense" (2011, p.7).

To conclude, saying that AR games do not possess communities would be inaccurate and much can be learned from, with further readings. However, more research, for example exploring Han and Moore (2006) three distinguish identities and how each are represented in the creation of communities, or Yee's (2006) research on the different motivation of genders, and how to encompass different source of thoughts will help inform new research. Also, by exploring Xu et al (2011) and Ducheneaut et al (2011) on the different player skills and how to mitigate such, also time with Kolo and Baur's (2004) four type of players commitments, and finally Richard Garfield's metagaming and the way a game interface outside itself, will add to further research needed to be conducted into the diversity of such communities, expanding on the above, for the longevity of the genre beyond the novelty transient of location-based gameplay, but more so embed this new technology to create new form of communities, with the potential to be more inclusive and far reaching than any other genre.

References

Ducheneaut, N., Yee, N., Nickell, E. and Moore, R. (2011) "Alone together" Exploring the social dynamics of massively multiplayer online games. Proceedings of the 2006 Conference on Human Factors in Computing Systems. Canada, 22-27 April. Canada: CHI.

Johansson, J. (2009) What makes online collectible card games fun to play? Proceedings of the 2009 DiGRA International Conference – Breaking New Ground: Innovation in Games, Play, Practice and Theory. London, 1-4 September. London: DIGRA.

Kim, A. J. (2000) Community Building on the Web. USA: Peachpit Press.

Kolo, C. and Baur, T. (2004) 'Living a virtual life: social dynamics of online gaming'. *Game Studies*, 4(1). [Online]. Available at: http://www.gamestudies.org/0401/kolo/ (Accessed: 12/03/2019).

Mediakix (2019) An Inside Look At The Massive \$70 Billion Dollar Mobile Gaming Industry. Available at: http://mediakix.com/mobile-gaming-industry-statistics-market-revenue/#gs.2wnm61 (Accessed: 12/03/2019).

Rheingold, H. (1993) The Virtual Community. USA: Addison-Wesley Publishing Company.

Rutter, J. and Bryce, J. (2006) Understanding Digital Games. London: Sage Publications.

Salen, K. and Zimmerman, E. (2004) *Rules of Play: Game Design Fundamentals*. London: The MIT Press.

Schell, J. (2015) The Art of Game Design. London: CRC Press.

Schmalstieg, D. and Hollerer, T. (2016) *Augmented Reality*. London: Addison-Wesley Publishing Company.

Vella, K., Johnson, D., Cheng, V., Davenport, T., Mitchell, J., Klarkowski, M. and Phillips, C. (2017) 'A sense of belonging: Pokémon Go and social connectedness'. *Games and Culture*. [Online]. Available at: https://journals.sagepub.com/doi/full/10.1177/1555412017719973 (Accessed: 12/03/2019).

Xu, Y., Cao, X., Sellen, A., Herbrich, R. and Graepel, T. (2011) *Sociable killers: understanding social relationship in an online first-person shooter game. Proceedings of the 2011 ACM Conference on Computer Supported Cooperative Work.* China, 19-23 March. China: CSCW.

Yee, N. (2006) 'The demographic, motivation and derived experience of user of massively multi-user online graphic environments'. *Presence Teleoperators & Virtual Environments*, 15(3), pp.309-329.