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The Playeur and Pokémon Go: Examining the effects of locative play on spatiality and sociability

Abstract:

Pokémon Go is a hugely popular hybrid reality game (HRG) that enables players to occupy a space that is simultaneously physical and digital. The general aim of Pokémon Go is to discover and then capture Pokémon. This article reports on an original research project designed to explore the impact of Pokémon Go on spatiality and sociability. The project was conducted between May 2017 and July 2017, using an online survey which received 375 responses from users of Pokémon Go geographically spread across the globe. Drawing on the concept of the 'playeur' as an established approach to understanding the effects of locative play on spatiality and sociability, this research follows three lines of enquiry. First, the research examines whether the intermingling of play and ordinary life might encourage players to spend more time outside in public spaces, and how this mode of play is experienced. Second, the research explores whether the game mechanics of Pokémon Go might lead players to traverse their environment using modified routes, as well as frequent new places. Third, the research examines whether the praxis of Pokémon Go might enable new forms of sociability to emerge that extend beyond earlier HRGs.

Keywords

Introduction

Pokémon Go is a hybrid reality game (HRG) that enables players to occupy a space that is simultaneously physical and digital. Following its release on the 6th of July 2016, Pokémon Go quickly became a global phenomenon. It's supposed 'novelty', coupled with the lasting appeal of the Pokémon brand, has culminated in this HRG being downloaded roughly 750 million times to date (Kinsley, 2017). In contrast to earlier HRGs like Mogi (2004), as well as location-based social networking sites (LBSNs) like Foursquare (2009), Pokémon GO is an augmented reality (AR) application. Utilising both the global positioning system (GPS) and gyroscope embedded in

modern smartphones, the amalgamation of the physical and digital is realised through the screen interface of the mobile device. Players are presented with a digital representation of their immediate surroundings that has been augmented with the superimposition of Pokémon. Pokémon appear on players' screens as if they are a part of the "real" world, even if it is 'still a bit crude in phenomenological terms' (Licoppe, 2017: 2).

In line with the dialectical commentary that customarily surrounds new technology (Humphreys, 2017; Marvin, 1988), popular media coverage has tended to either celebrate or critique the spatial and social impact of Pokémon Go. Following its release '[stories] circulated about players going to inappropriate places such as the Holocaust Museum or an old church that has been turned into a private home to capture Pokémon and play against others' (Humphreys, 2017: 15-16). Similarly, stories surfaced involving players unwittingly putting themselves in physical danger by focusing on the digitality of their smartphones at the expense of the materiality of their environment (see Frank, 2016; Rosenberg, 2016). This eventually culminated in the first reported Pokémon Go death linked to player negligence (Soble, 2016). At the same time, these adverse stories have been tempered by reports of Pokémon Go reinvigorating previously underused public spaces (Perry, 2016), as well as producing genuine 'human-to-human interaction' (Wawro, 2016).

While an examination of the positive and negative effects of Pokémon Go is important (see Pavvyilainen, et al., 2017), this is not the focus of this article. Instead this research seeks to critically explore the emerging themes of spatiality (including both approaches to space and place, as well as the mobilities underpinning this) and sociability that have become recurring motifs of mainstream coverage of this HRG. More specifically, it is our intention to contextualise the spatial and social effect of Pokémon Go within the broader canon of locative media. This article therefore reports on an original research project designed to explore the spatial and social experience of Pokémon Go users. Chiefly drawing on the concept of the 'playeur' (Saker and Evans, 2016) as an established approach to understanding the spatial and social effects of locative play, this study follows three lines of enquiry. First, the research examines whether the intermingling of play and ordinary life might encourage players to spend more time outside in public spaces, and how this mode of play is experienced. Second, the research explores whether the game mechanics of Pokémon Go might lead players to traverse their environment using modified routes, as well as frequent new places. Third, the research examines whether the praxis of Pokémon Go might enable new forms of sociability to emerge that extend beyond earlier HRGs.

In the following section, we provide a more detailed overview of the ludic elements of Pokémon Go itself, before outlining the conceptual framework that underpins this research. This begins with an examination of Hjorth and Richardson's (2017) notion of 'ambient play', which specifically deals with the intermingling of locative play and ordinary life. The suitability of this position is then demonstrated by the tendency of recent studies to examine Pokémon Go in the context of daily mobilities (McCartney, 2016), with the implicit suggestion being that Pokémon Go might improve the health of players (leBlanc and Chaput, 2017) by reducing sedentary behaviour (Nigg, et al., 2016). It is not, however, our intention to contextualise the spatial and social impact of Pokémon Go through recourse to implications surrounding physical health and wellbeing. Instead we are principally interested in examining how this HRG might merge with and reshape users' experience of the spatial and social facets of their daily life, as well as provide an updated understanding of the praxis of locative play. Following this, we introduce Saker and Evans' (2016) 'playeur' as a framework for conceptualising the spatial and social impact of Pokémon Go, before identify gaps in the scholarly literature surrounding this HRG that will be addressed by our research. The methodological basis of this research is then described before our findings are presented and discussed.

'Ambient play' and hybrid reality games (HRG)

The aim of Pokémon Go is to discover and then capture Pokémon. Players must physically move through their environment to find and capture Pokémon, with different species of Pokémon residing in different locations. Once a Pokémon has been found, the process of capturing it involves throwing a 'Poké Ball' in its general direction through the AR functionality of the game. If players are successful, the Pokémon will then be under their control. Beyond a variety of Pokémon to discover and potentially capture, the Pokémon Go world contains additional places of interest, as well as important features. Pokéstops are where players go to collect items including eggs and Poké Balls. Pokéstops are commonly found at noteworthy places, such as historical sites, monuments and art installations. Gyms are where Pokémon trainers (players) battle each other, and are similarly found near places of interest. Lastly, a significant element of Pokémon Go is the continued provision of communal 'events'. These events go on for a specified period of time, and usually offer players the opportunity to collect special rewards, such as rare Pokémon. Details of these events are publicised through Pokémon Go's official website, as well as other social media platforms.

Playing Pokémon Go therefore 'requires time, patience, skill, and the freedom to access the game map (i.e., spaces in the real world) to its fullest extent' (Salen, 2017: 35). Likewise, playing Pokémon Go has the potential to impact upon the spatialites and socialites of daily life. For Hjorth and Richardson (2017) '[mobile] location-based and augmented reality games such as *Pokémon Go* are manifestly ambient, as they become embedded in our daily routines, pedestrian movement, and interaction with the familiar strangers populating our neighbourhoods and urban spaces' (p. 5; italics in original). It is the mobile interface itself that alters 'what we "turn to" and face (and turn away from) in the everyday lifeworld, and the modalities and duration of that attentiveness' (Ibid). However, and as Hjorth and Richardson (2017) also note, this accusation could be levelled at *all* mobile games that are not locative, such as Candy Crush Saga or Flappy Bird. This is because non-locative mobile games similarly affect what players choose to focus upon. Nevertheless, HRGs notably differ from non-locative games as they explicitly mediate physical space through digital interfaces and data by integrating that data into the experience of spaces on the part of the player.

At a phenomenological level HRGs 'require us to adopt an "as-if" structure of experience, moving through the environment "as if" it was game terrain or an urban playground' (Ibid). From the perspective of locative play, physical space is intimately involved in the development of the game world. For the most part, it is unimportant where non-locative mobile games are played. While environmental distractions and social norms might limit full gamic immersion, the physicality of place is not an integral part of the virtual landscape as the digital aspect of the game is not incorporated into the materiality of place. In contrast, through the 'augmented layering of the digital onto place' that is evident with HGRs, 'banal and familiar surroundings are transformed to become significant game loci' (Hjorth and Richardson, 2017: 4). Hjorth and Richardson (2017) argue that it would be incorrect to regard Pokémon Go as being a 'casual game'. Pokémon Go does not simply weave itself into the daily activities of players, instead it has the power to modify, adapt and transform activities.

At the same time, it would naïve to suggest Pokémon Go offers a completely 'novel' experience (Licoppe, 2017). As de Souza e Silva (2017) explains, '[for] at least 15 years, researchers and artists have experimented with the affordances of location-based technology to create playful experiences that take place across physical and digital (hybrid) spaces' (p. 21). The confluence of the physical and digital that underpins Pokémon Go has a long history in the context of digital media. Notable examples of locative media include Botfighters (2001), Mogi (2003), Pac Manhattan (2004), Foursquare (2008), Shadow Cities (2010), and Ingress (2012) which Pokémon GO was built upon.

A body of research has gradually coalesced around these applications (see de Souza e Silva and Frith, 2010; Evans and Saker, 2017). Studies have examined the impact of locative media on how users move through their environment (de Souza e Silva and Sutko, 2008), experience spatiality (Saker and Evans, 2016), and maintain social connections (Wilken, 2008). As a result, various conceptual frameworks have been established to help approach and explore the various impacts of HRGs. Saker and Evans (2016) developed the concept of the 'playeur' for understanding the spatial and social impact of the location-based social networking site (LBSN) Foursquare, and, more generally, locative play. The playeur builds upon both Benjamin's (1999 [1927]) '*flâneur*' and Luke's (2006) dystopian 'phoneur' as ways of conceptualising changing urban mobilities. Addressing the lack of digital consideration of the former, and overtly political economy critique of the latter, to address the spatial and social impact of mobile location-based games. The playeur thus merges and updates both positions. While the 'playeur' *does* engage with the urban environment in a playful manner, this practice is explicitly mediated through locative play. Similarly, while the playeur *does* experience a digital city, this configuration is not outwardly implicated in consumerism. Instead, the ''playeur' is an engaged actor who develops relationships with space and place through intentional playful activities' (Saker and Evans, 2016: 13), with physical environments taking on multiple symbolic and social meanings through the gamic mechanics underpinning locative play. In the context of theoretical understandings of play this is noteworthy, as traditionally play has been theorised as somehow separate from 'ordinary life'; spatially and temporally confined to a specific area or 'magic circle' (Huizinga, 1992 [1938]). The playeur theoretically has three defining features. First, the symbolic and playful reworking of place serves as a spatial motivator that draws the playeur out into public spaces. Second, and allied to the previous point, the playeur moves through his or her environment using altered routes, frequenting new and unplanned for spaces. Third, through the mechanics of locative play the playeur becomes more aware of places he or she frequents as well as the social connection underpinning them.

In the context of this article, themes pertaining to spatiality and sociability (de Souza e Silva, 2017: 21) have dictated emerging scholarly interest in Pokémon Go. Recent papers have discussed what effect this HRG might have on urban mobilities (de Souza e Silva, 2017). These deliberations have included the potential for large number of congregating players to be implicated in political demonstrations (Licoppe, 2017), as well as small businesses benefitting from an increase in surrounding footfall (Frith, 2017). Pokémon Go has also been discussed in relation to sociability (Humphreys, 2017), and the extent to which this HRG might facilitate the development of community (Zach and Tussyadiah, 2017) or thwart social interactions. Equally,

Pokémon Go has been explored in the context of spatiality (Hjorth and Richardson, 2017), the locative inequalities this form of play could reveal (Salen, 2017), and the potential role Pokémon Go could play in the gradual ludification of society (Mäyrä, 2017). While these studies are important to the canon of locative media, and have unquestionably developed new lines of enquiry surrounding the potential impact of Pokémon Go, for the most part this research has tended to present thought-provoking propositions that require additional empirical work that engages with the lived experience of Pokémon Go players, and that addresses the potential differences between this HRG and earlier locative media.

The playeur (Saker and Evans, 2016) accordingly provides a fitting framework to empirically examine the impact of Pokémon Go on spatiality and sociability. The research questions guiding this study are as follows. First, does the intermingling of play and ordinary life through Pokémon Go encourage players to spend more time outside in public spaces, and how is this mode of play experienced? Second, does underpinning game mechanics lead players to traverse their environment using modified routes, as well as frequent new places? Third, what new forms of sociability might Pokémon Go enable that extend beyond earlier HRGs? To reiterate, the importance of this research is threefold. First, while recent studies have focused on Pokémon Go, for the most part this research has not empirically engaged with the spatial and social experiences of Pokémon Go players. Second, while studies have examined the impact of locative play on sociability, findings have often revolved around the competition emerging though individual play (Saker and Evans, 2016). Third, while Pokémon Go does share many similarities with earlier locative games it is also different. Not only are the gamic mechanics more complex and potentially richer, but Pokémon Go has achieved a level of success that far exceeds any previous locative games. As Licoppe (2017) concurringly comments, 'the sheer commercial scale of the game turns such mobile behaviour into a new kind of issue' (p.2). In all instances, then, it is our intention to explore how the tendencies of the playeur might be reshaped by the gamic mechanics of Pokémon Go.

Method

This article reports on an original research project designed to explore the impact of Pokémon Go on spatiality and mobility. The project was conducted between May 2017 and July 2017, using an online survey (in the English language) which received 375 responses from users of Pokémon Go: 235 from the UK, 75 from the USA, 17 from EU countries, 4 from Australia, 2 from Canada, and one each from Hong Kong, Kuwait and India. 40 respondents declined to

state their location. 213 respondents identified as female, 157 as male, 1 as bigender, 1 as gender fluid, 1 as non-binary and 1 preferred not to disclose. The survey was organised into 4 sections, which posed a mixture of closed questions (quantitative) and open questions (qualitative) on the following aspects of the use of Pokémon Go: space and place, concerned with how Pokémon Go has affected everyday movements; play, concerned with the reasons for playing the game; sociability, concerned with who the game is played with and why; and identity, concerned with how Pokémon Go contributes to a sense of self- and group-identity. A macro-analysis of the survey data established a series of codes for the responses for each qualitative question asked. For example, the question "How has Pokémon Go impacted your day-to-day movements" saw answers that fit into three broad themes or codes: exercise and increased mobility; changed or altered everyday mobility; and mobility based on game mechanics, where the need to fulfil the obligations of the game dictated everyday mobility. This approach to the remaining survey data had both inductive and deductive elements. While the initial coding of responses was independent of the theoretical framework of this paper, the survey itself was informed by the concept of the playeur, albeit not exclusively by this framework as other work cited in this paper were also influential.

Results

The survey found that 79% of respondents (n=295) reported that playing Pokémon Go had impacted upon their day to day movements. 93% (n=347) reported that Pokémon Go had led to them exploring their environment more than they would before playing the game. 89.5% (n=333) reported that Pokémon Go play had led them to going to new or novel places and 86% (n=321) reported that Pokémon Go play had changed the routes or pathways that players used to move around their environments. Given the large majorities of players reporting that playing Pokémon Go affected everyday mobility, the remainder of this paper offers explanations for these effects based on qualitative reasons for these changes in mobility given by players, through the theoretical lens of the playeur. In addition, 49.6% of respondents (n=184) reported that playing Pokémon Go led to them making new friends. In explaining why they had begun playing Pokémon Go, many players also remarked upon the influence of friends, family or social connections in playing the game. That aspect of use is commented upon to reflect on how the concept of the playeur requires refinement in light of the emergence and playing of Pokémon Go.

The intermingling of play and ordinary life

As an aspect of the experience of the playeur through Pokémon Go, the survey found that respondents commonly associated the game with an increase in physical activity, with this increase in activity evident to respondents as an integral facet of the intermingling of play and ordinary life.

> I walk everywhere now. Any excuse to pop out of the house is welcomed and we try to discover a new park or place each week
> (Parker, 25-34, male, Birmingham, UK)

> I have lunch at the cafe in range of the nearest gym. I regularly go for extended walks to play the game which I would not have done previously.
> (Evan, 18-24, male, location not specified)

> I spend triple the amount of time outside walking than previously
> (Sarah, 25-34, female, Weston-Super-Mare, UK)

For these respondents, Pokémon Go is notably part of their daily lives; it modifies their mobilities and clearly increases the time spent moving through public environments.
In a similar vein, our survey also found that physically disabled players experienced a comparable desire to be more active as part of the praxis of locative play.

> I am disabled and would normally spend the day asleep on the settee
> (Yasmine, 35-44, female, Birmingham, UK)

For Yasmine, the positive benefits of play and the mobility it encourages are outwardly greater than the advantages previously identified. As a disabled person, the game has emboldened her to change previous non-mobility into mobility, and this is again framed as being a positive impact of play. There is the possibility in this instance to speculate that social isolation and exclusion themselves can be reduced through everyday play and playeur practices (see Kato, et a., 2017). This point is reinforced by Yalanda:

> I'm a disabled mobility scooter user - the desire to get a pokestop every day means I push myself to get out every day when I may not have before.
>
> (Yalanda, 25-34, female, Bristol, UK)

Yalanda discusses the impact of Pokémon Go in a manner that echoes Saker and Evans's (2016) study of Foursquare, in that playing the game creates a necessary condition for mobility to emerge as a playeur, where this condition may not have existed without the game. In their research on Foursquare, Sarah, who is 'registered … disabled with M.E', explained, 'using Foursquare made me want to break my boundaries a bit; try and go out a bit more than what I did' (Evans and Saker, 2016: 6). Resonating with this sentiment, Yalanda uses the word 'push' to describe how her motivation to achieve in the game results in an increase in mobility and to get out every day, which was not the case previously.

> Before playing the game, I was literally sitting on my couch all day (on days off work), watching videos/TV. I wear a FitBit, and would be lucky to get 1,000 steps on days off work because I just sat all day. The game has gotten me off the couch on days off, and I'm now taking as many or more steps as work days -- 15,000+.
>
> (Zara, 25-34, female, Lansing, MI)

> I get a great deal more exercise and have gotten to know my own neighborhood better. My back does not hurt anymore due to the increased activity.
>
> (Mickey, 35-44, genderfluid, Lansing, MI)

For these respondents, the benefits of the game emerge from increased mobility. Zara has actively quantified this change using a wearable device, but also recognises the benefits qualitatively through the changes in everyday activities and habits. For Mickey, the increase in mobility has had qualitatively-assessed health benefits as well as improving knowledge of the local environment. While these advantages (and those described by other users) could be considered independently to the intrinsic mobility of the game play of Pokémon Go, we argue that this mobility is intrinsic to these benefits. The playeur, as a game player that integrates the game into their everyday practices of mobility, may experience value that goes beyond the accomplishments and achievements of levelling up or capturing new Pokémon.

It is also our contention that the complex gamic mechanics of Pokémon Go, as well as the continued introduction of 'events', are important here. Whereas earlier HRGs, such as

Foursquare, motivated players to engage with public space, the motivation for play was ultimately mitigated by the limited number of gamic applications. In many instances, players commented that they only engaged in the playful side of Foursquare for a short period of time (see Saker and Evans, 2016: 8), and the benefits of increased mobility through play would be limited in line with the perceived novelty of the game. In contrast, the ludic complexity of Pokémon Go seemingly offers a richer locative gaming experience that extends itself beyond the initial 'novelty' of earlier forms of locative play. The ludic interface of Pokémon Go – the superimposition of animated digital characters over the 'real' environment and interacting with those characters – requires an engagement, and perception of engagement, which goes beyond the check-in and score points model of previous locative games. Pokémon Go may therefore have a longer-lasting effect on the physical and mental wellbeing of players. This suggestion is supported by many responses when respondents were asked what would make them stop playing Pokémon Go.

> I'll never stop!
> (Kat, 35-44, female, location not specified)

> I still play!
> (Dennis, 25-34, male, location not specified)

> I would never stop even if I got to level 40. Poke Go always bring out new events that I try to achieve no matter what.
> (Eryn, 35-44, female, Mason, Mi)

Modified routes and new place

Echoing the spontaneous movements of the *flâneur* (Benjamin, 1999 [1927]), many respondents to our survey noted that playing Pokémon Go involved a conscious and deliberate alteration of their daily, established routes to everyday activities. This is often realised through increasing the distance taken to achieve the goal of reaching a place, as the varying of routes by including more distance covered increases the possibility and frequency of encountering Pokémon, Pokéstops or Gyms.

> I may take longer routes to places or go for walks which I may have not gone on
> otherwise.
> (Bryony, 18-24, female, location not specified)

> I have used alternative routes to locations / been out and about more
> (Harry, 18-24, male, location not specified)

> I always make time to play and sometimes go a certain route that may be slightly out of
> the way
> (Mike, 35-44, male, Bristol, UK)

These three examples of responses from Pokémon Go users are indicative of the rationale for a basic change in daily routine. The alteration of daily mobility involves both a planning stage and an execution of that plan. The playeur in this instance is using the game map interface to plan routes rather than in a real-time wayfaring manner, while acknowledging that this intentional deliberation involves an increase in physical effort that is compensated by rewards in the game.

> I may take longer routes to places or go for walks which I may have not gone on
> otherwise.
> (Denise, 18-24, female, location not specified)

Here, Denise draws attention to the common response that routes to places usually traversed are lengthened through detours to play the game and receive rewards. The concept of lengthening routes differentiates Pokémon Go as locative media from applications that aim to rationalise wayfinding, such as Google Maps. The decidedly inefficient manner of lengthening routes and wayfinding as opposed to shortening such activity gives primacy to the game aspect of Pokémon Go over the locative aspect. Again, this becomes more interesting when one considers the role of play in altering everyday activity. For Huizinga (1992 [1938]) play is famously contained within what he terms the 'magic circle'. 'As a player steps in and out of a game, he or she is crossing the boundary – or frame – that defines the game in time and space' (Salen and Zimmerman, 2004: 95). In this case, the game is not defined in a specific time or place but through the overlaying of digital objects that make up the game; ordinary life becomes the game space and the game modifies and alters movement through everyday space. The modified mobility of individuals through Pokémon Go is therefore in accord with the playeur. The concept of the playeur makes

explicit the temporal-contingent possibilities of locative play. In these examples from Pokémon Go players, the modification of daily routes through play illustrates the notion of the playeur as a game playing agent that alters their physical practice because of playing the game.

> I change my dog walking route at home (Wimbledon) to collect more pokestops. I choose to walk more in central London when possible so that I can take advantage of the pokestop density. I take walks just to play pogo.
>
> (Erica, 25-34, female, London)

Erica's response is a characteristic example of this tendency of the playeur. Daily mobilities are reshaped to meet the demands of the game, in a variety of locations across a variety of activities. Mobility itself is not only increased in everyday life, but an aspect of everyday life that is opened to circumspection through the lens of inspecting practices of game playing. In other words, mobility and gaming become, for the playeur, intricately linked.

A number of respondents also indicated that Pokémon GO impacted their chosen mode of transport.

> I will walk instead take bus, and take different route to get to gym/Pokémon
>
> (Julie, 55-64, female, location not specified)

> I'd rather take the bus than the tube and I walk more often.
>
> (Gertrude, 25-34, female, London)

In the last extract, Gertrude's alteration of mode of transport from the London Underground to the Bus is a factor of the lack of connectivity and lack of Pokémon Go game space on the underground train network. Additionally, Gertrude walks more often indicating the increase in activity that is common to many players. The mass transportation systems used by playeurs must accommodate the game, or the playeur will change the mode of transport to continue playing.

> Travel is more varied. The shortest route is no longer travelled. I now goes via gyms and pokestops.
>
> (Rihanna, 25-34, female, London)

Rihanna provides a useful conclusion to playing the game in dense urban spaces: transport is varied to accommodate play in these environments, involving more walking, more use of over ground transport and deliberation on these modes of transport because of playing. Here, the playeur is engaged in intentional and deliberate consideration of their mode of mobility to enable and maximise the possibility of playing the game.

For other respondents, the playing of Pokémon Go also affected how they used their car.

> I try to get at least one Stop or gym a day, do detours for Pokémon or stops, walk some distances I used to drive and about once a week in average go out especially for the game.
> (Tim, 25-34, male, Dortmund)

> Drive home from school drop-off a certain route past pokestops!
> (Carol, 45-54, female, Hertfordshire, UK)

> Going the long way around on car journeys to add in pokestops
> (Emma, 45-54, female, Southampton, UK)

While Tim stopped using his car at times to play the game, Carol and Emma alter the routes they take in the car to play the game. Although playing while driving is dangerous, it could be that the game is played while the car is stationary and therefore this adds a new kind of mobility-based behaviour as a function of playing. Car journeys are not only planned differently (and less efficiently) but the journey itself is no longer constant, but intermittent as the game needs the journey to be broken up to be played. The more strategic planning of the modes of transport used by players indicates a marked difference between Pokémon Go and the spatial impact of earlier HRGs like Foursquare. While it was rare for Foursquare users to modify their chosen mode of transport, this kind of alteration is more common in the context of Pokémon Go. The ludic mechanism of scoring points could make people visit novel or out-of-the-way places (Evans and Saker, 2017: 29), but the catching of Pokémon appears to have more of an impact on altering everyday mobility habits than the achievement of mayorships or points. Again, it is our contention here that this is symptomatic of the richer gamic mechanics of Pokémon Go in which the ability to engage with the various spatial features is more impactful to the overall experience in a manner that transcends novelty.

Regardless of the mode of transport used, by including playing the game in everyday mobility, our survey also found that players will often go to new places that they have not been to before.

> Going to new locations never been before on a weekly basis to get gyms and pokestops
> (Tallulah, 18-24, female, Birmingham, UK)

> Our downtown area I really never visited a lot, and it's where or best spawns are, but I go at least once a week now.
> (Carly, 35-44, female, Winston-Salem, NC)

> Explore more of my local area regularly. Makes me want to cycle to places (work etc.) instead of drive so I can catch a few Pokémon, spin stops etc.
> (Uriel, 25-34, male, Thatcham, UK)

The game itself drives this need to explore new places. As Carly explains, there can be better gameplay elements in new environments which can motivate the playeur into exploring these places. This exploration of new places links the concept of the playeur with its antecedents the *flâneur,* and the phoneur. The playeur actively explores new places as a necessity of play and through a desire to progress in the game by accessing new aspects of the game in new locations. The locative media aspect is critical here, as are the networking aspects of social media and online forums that facilitate communication about aspects of the game. For the player that has integrated the game into their everyday mobility, a consequence is that everyday mobility is itself altered to encompass new places that were not part of that everyday mobility previously.

At the same time, the exploration of new places is subtly different to the kind of 'new place' experienced through other HRGs and LBSNs (Saker and Evans, 2016). While Foursquare, for instance, did lead some players to go to new environments as well as to follow new routes, the gamic mechanics of this LBSN were different and that difference is noteworthy. Foursquare entailed users checking-in at established places, such as restaurants, bars and so on. The digital information of Foursquare mirrored the physical environment that it overlaid. In contrast, the digital information of Pokémon Go does not replicate its concrete setting *per se.* Pokémon are not tethered to established sites such as buildings. Symptomatic of this, our survey found respondents attempting to capture Pokémon in environments that *really* were off the 'beaten path'.

Literally the middle of nowhere.

(Orla, 35-44, female, Mason, MI)

Abandoned automobile factory.

(Jane, 55-24, male, Lansing, MI)

An abandoned castle in the middle of nowhere in the Northumbrian countryside!.

(Martha, 25-34, female, Wantage, UK)

By some bins behind a restaurant.

(Peter, 25-34, male, Coventry, UK)

The private prayer chapel at Westminster Abbey.

(Betty, 55-64, female, Richmond, UK)

In these instances, respondents were acutely aware that they were inhabiting places outside of the daily mobilities of both themselves and others. However, this awareness was not commensurate with the decision to continue playing, with some players then knowingly placing themselves in 'unsafe' settings as a mean to continue the game.

A dark ally at night in an unsafe area.

(Jayne, 35-44, female, Michigan)

Closed building site. Looking back it was a stupid idea.

(Marco, 18-24, male, Michigan)

I thought I was gonna get stabbed but I didn't so it was worth.

(Souf, 18-24, male, Brighton, UK)

From this position, the exploratory impact of Pokémon Go extends beyond the spatiality of earlier HRGs. Whereas Foursquare did lead some playeurs to frequent places they otherwise would not, these places were still places that other people could visit. Pokémon Go is different. Playeurs are more likely to move through and inhabit spaces that they, and indeed others, would

not happen upon outside of this game. Accordingly, the locomotive propensity of the playeur is amplified when examined through the lens of Pokémon Go. In the main, this is due to the gamic mechanics of Pokémon Go, and the ability of Pokémon to spawn in spaces that are not tethered to established environments. Likewise, it is equally our suggestion that this intensified exploratory penchant is allied to the richer gameplay of Pokémon Go, which is demonstrated above by the desire to continue playing in physical spaces that, on the surface at least, feel markedly ill-suited to the facilitation of play.

Social Connections

Our survey significantly found that a considerable number of respondents did not begin playing Pokémon Go because of a personal interest in Pokémon *per se*, or locative play in general, but rather because of their children's desire to play the game, and the fact this this often could not be achieved without their assistance.

> My 6 yr old is obsessed.
> (Emeline, 35-44, female, Mason, MI)

> My children started.
> (Sara, 45-54, female, London)

In this instance, Sara specifically details her children as being the reason why she began playing Pokémon Go. In a similar vein, other respondents also alluded to their children being an important reason why they *continue* playing the game.

> Fun and because my son does.
> (Cath, 35-44, female, location not specified)

> The kids and I enjoy it.
> (Amy, 35-44, female, Birmingham, UK)

> My daughter and I play it together - she's 14.
> (Jordan, 35-44, female, Bristol, UK)

For other players, the motivating force behind this form of locative play did not simply involve wanting to please their children *per se*, but more specifically the opportunity this gamic space provided to forge closer relationship with their family.

> Bond with my kids.
> (Jayne, 35-44, female, Michigan)

For Jayne, the reason for playing Pokémon Go is not to take pleasure in the gamic experience, but rather to 'bond' with her kids. At the same time, it would be incorrect to suggest the game mechanics of Pokémon Go are not a factor. For many respondents, an important element of Pokémon Go was precisely that it motivated their family to spend more time being physically active, which runs counter to the usual discourses concerning the detrimental effects of computer games and such like.

> To get the kids out of the house.
> (Meg, 35-44, female, Michigan)

> I walk with my little children alone the beach and parks.
> (Paula, 35-44, female, location not specified)

> Positively going out waking and running with my family and friends whereas otherwise I might not have.
> (Jayne, 35-44, female, Michigan)

> Encourage me and my family to walk more.
> (Patrick, 18-24, male, location not specified)

In the context of contemporary gamic experiences, then, and indeed the canon of locative media, Pokémon Go is interesting here. Pokémon Go is the technological development of a mid-1990s computer game targeted at children. The technological ability to engage with this HRG, however, is predicated on the user owning a smartphone. In other words, Pokémon Go blends a technology ostensibly directed toward adults, with a gamic experience ostensibly directed towards children. While a young child is unlikely to own a smartphone, he or she has probably heard about Pokémon Go. Thanks to this, the ability for children to engage in locative play is

reliant on their parents letting them use their smartphone, which usually involves some form of co-mobility and co-play.

> My family play, we play together.
> (Linda, 25-34, female, Surrey, UK)

From this position, the gamic experience of the playeur extends beyond the usual sociability associated with locative play in the context of competition and individual play (Saker and Evans, 2016); reshaping the praxis of HRGs as a familial activity that appeases the parental desire for physical exercise and family time, with the adolescent desire for play. While this might lead to new challenges in the context of limiting game play usage (see Serino, et al., 2016), it might equally produce new opportunities for familial connections to be expressed in playful and mobile ways. Similarly, it might equally elicit new forms of digital labour, as children become more adept at outsource their gamic experience to parents who are willing to work in exchange for protracted periods of sociability.

Conclusion

This paper argued that players of locative games that integrate their game-playing into everyday routines are more likely to alter routes, visit novel places and understand their environment differently thanks to the mediation of location by the game. The research conducted with Pokémon Go supports this position. Three main inferences about the spatial practices of the Pokémon Go players surveyed can be made. First, players will often use new routes and break established, habitual routes of movement to improve their performance in the game and to play the game to a higher level. Second, thanks in part to this need to change established wayfinding players are more likely to encounter new places in their everyday playing of the game, and are in some cases more inclined to visit new places or go to places they normally would have no need or no desire to visit because of their playing. Third, the playing of Pokémon Go has subsidiary social benefits that move beyond changes in mobility but are the result of this modification. While these findings largely replicate the findings of Saker and Evans (2016) it is also apparent that the spatial and social tendencies of the playeur in the context of Pokémon Go are markedly amplified.

First, the playeur's desire to spend more time engaging with public spaces is more pronounced. The benefits of this kind of play do not simply revolve around the physical benefits

of spending more time outside, but equally involve a genuine pleasure in the game itself. Second, while playeurs similarly move through their environments following modified routes and so on, the exploratory penchant of the playeur is notably intensified. In part this is because of the gamic mechanics of Pokémon Go. Because Pokémon can spawn in settings beyond established environments, playeurs can pursue Pokémon in spaces that are usually cordoned off from physical interaction. Likewise, playeurs are often more willing to place themselves in physical danger to continue playing the game due to the richer gameplay involved in this HRG. Third, for some playeurs, the gamic experience of Pokémon Go serves as a platform that effectively allows then to spatially and temporally strengthen their familial connections. Given the limited research on HRGs being co-played by families, or facilitating such familial connections, this is noteworthy and suggests a new trajectory for the playeur that should be further explored.

More generally, the impact of Pokémon Go is seemingly more enduring than that of other HRGs or LBSNs. In part at least, the pleasure of Foursquare revolved around the 'novelty' of locative play. As Saker and Evans (2016) point out, 'the gaming aspect … was the key driver for using the application, but the limited value of this in the long-term meant that the application [had] a limited appeal to the users' (p. 10). Due to this, some players found that their desire to engage with the playful side of Foursquare diminished as the novelty wore off. The ludic mechanics of Foursquare ultimately were not meaningful enough to sustain this experience. In a similar vein, it could be argued this lack of meaning was also responsible for the death of most other early locative games. 'The likes of Brightkite, Gowalla (bought by Facebook and closed), SCVNGR, Loopt, Sona and Rumbble have either fallen by the wayside and closed, or retooled and become other services in the digital economy' (Evans and Saker, 2017: 2). While the 'novelty' of locative play evidently could not support the long-term adoption of early locative games, it would be wrong to assume this implies something more telling about the nature of HRGs. Pokémon Go resembles and 'plays' far more like a video game than any early HRG or game-based LBSN, and engagement with the game itself appears to be far stronger in Pokémon Go than in the more-limited gaming experience of earlier location-based games. Consequently, the effects of the game on mobility, spatiality and social mobility appear stronger in the use of this game. Through a confluence of complex game mechanics, frequent updates and lasting brand appeal, Pokémon Go has achieved a level of success that goes beyond all previous locative media and LBSNs. Consequently, the embeddedness of Pokémon Go in the everyday lives of users may provide longer term mediating effects on spatiality and sociability than the predecessors in locative gaming. Pokémon Go might therefore represent a new stage of locative

play; one marked by absorbing, compelling and durable socio-spatial experiences that extend the nexus between location, game, play and digital device.

Given that this research can only make suggestions on the long-term future of HRG play, future research should examine how the spatial and social effects of Pokémon Go develop over time. Given that 83% or respondents in this survey were either from the UK (63%) or USA (20%) it is also difficult to establish the cross-cultural significance of these findings without further research. However, the confirmation of the findings allows at least for the discussion of an updated understanding of the playeur. The importance of these findings is not in the confirmation of concept, but in what these findings mean for the everyday understanding of location and everyday practices of the HRG players. The "playeur' is an engaged actor who develops relationships with space and place through intentional playful activities' (Saker and Evans, 2016: 13) - this engaged actor moves more, goes to different places and experiences many benefits of this increased mobility and socio-spatial awareness thanks to their play. This engaged actor, experiencing new spatialities through play, warrants further research as new and more complex HRGs emerge.

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