Reality has always been augmented: Play and the promises of Pokémon GO

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Abstract
This piece provides an explanation to the early success of Pokémon GO. It proposes an argument about how this game exemplifies a computational culture of play. By drawing on philosophy of technology (Floridi, 2013) and game design research (Montola, Stenros, & Waern, 2009), this article argues that the success of Pokémon GO is the result of the development of a play experience and a computational interface for a reality that is already augmented. These interfaces open new possibilities for digital play in public, but they also raise concerns regarding corporate appropriation of public spaces.

Keywords
augmented reality, game design, pervasive games, philosophy of technology, play theory

It was a warm early July day in Los Angeles. We were in a park, escaping from the heat, when we saw them: two teenagers, walking across the bridge, concentrating on their mobile phones. Suddenly they stopped, pointed their cameras to the lagoon and performed a manic ritual of taps and swipes. They cheered, looked at their phones, and hurriedly disappeared into the park. I realized I was not the only one observing this scene. A lifeguard had been following the scene too. “I guess they are playing that new Pokémon game,” he said. After a pause, he added, “that is pretty cool.” Pokémon had become cool, for everybody. Running around catching imaginary animals was “cool.” It dawned on me: Pokémon GO was revolutionary.

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But how so? What does Pokémon GO contribute? Is it because it popularizes technology that feels futuristic? Or because it appeals to the nostalgic resurfacing of 1990s popular culture? Or both? What does Pokémon GO promise, and in which ways will it break our hearts?

In this piece I want to provide one explanation to the early success of Pokémon GO. I also propose an argument about how this game exemplifies a computational culture of play. By drawing on philosophy of technology (Floridi, 2013) and game design research (Montola et al., 2009), I argue that the success of Pokémon GO is the result of the development of a play experience and a computational interface for a reality that is already augmented. These interfaces open new possibilities for digital play in public, but they also raise concerns regarding corporate appropriation of public spaces.

So what is Pokémon GO? From a game design typology perspective, it is an alternate reality game (ARG; Mcgonigal, 2006; Montola, 2005) that uses an augmented-reality interface. These genres and technologies adopt game mechanics from the game genre of card collection and trading, and from treasure hunts. Pokémon GO is the successful combination of already existing genres and technologies, using a well-known intellectual property to help engage new users.

Unlike the most popular ARGs of the past, Pokémon GO controls the access to alternate reality via one entry point: the mobile game application (see also Avery, Thomas, Velikovsky, & Piekarski, 2005). The application uses AR techniques and geolocation to locate and give agency to players in that reality. The real world is not modified by player actions, since the core mechanics are limited to the interaction with virtual creatures. This computational interface is a technological companion to the game structure: the game creates the alternate reality, the AR system and geolocation technologies allow us to play in it. Interface is here understood not as “something that appears before you but rather is a gateway that opens up and allows passage to some place beyond” (Galloway, 2012, p. 30), in this case as a gateway to the interaction with a computationally augmented reality.

Seen from this perspective, Pokémon GO is not revolutionary: it is the popularization of a number of game designs and computational technologies (see also Humphreys & Liao, 2013; Kirman, Linehan, & Lawson, 2012; Mäyrä & Lankoski, 2009). But it has had a surprising effect: audiences worldwide are now aware of augmented reality as a way of engaging and playing with the world.

Reality has always been augmented (Ong, 1982), and it has always been a space for play (Leorke, 2015; Walz, 2010). Some may argue that human culture is born when writing starts augmenting reality: from writing on walls to making way-finding signs and maps, culture develops as we add informational layers to the world (Monmonier, 1996). Pokémon GO has become the popular example of computational interfaces for augmented reality, de facto developing its design vocabulary, that is, a collection of patterns for the design and consumption of AR experiences.

Playful interfaces for augmented reality, from Pokémon GO to google Earth, create new opportunities (Brewer & Dourish, 2008). In particular, Pokémon GO heralds an era in which this augmented reality we access through our mobile phones can be
played with. Play has always been a way of inhabiting and appropriating public spaces. By playing, public and private spaces are given new interpretations and importance, and they are given meaning for social groups. Play is a way of making spaces culturally relevant for communities that identify with the practices of play in those spaces.

**Pokémon GO** capitalizes on the cultural capital of play in public spaces, on the ways play activities from parkour to skateboarding are used to revitalize and help engage with public spaces, to become a cultural phenomenon (de Souza e Silva & Hjorth, 2009; Leorke, 2015). **Pokémon GO** has popularized a way of playing using game and computational interfaces in realities created by and for those processes.

However, **Pokémon GO** also exemplifies the perils of AR and public play. **Pokémon GO** is a connected network of corporate interests, from the Pokémon Company to google and fast-food companies that have discovered that in AR, public space regulations are not necessarily applicable. Public space is threatened by an interface that is proprietary, and by the lack of regulations and codes of practice.

There are rules and regulations about public spaces and their use. For instance, advertisement and commercial enterprises should pay for the use of public spaces, contributing to their maintenance. But AR interfaces circumvent these regulations: since the world they create for users to experience is interfaced via a mobile application, conventional regulations about space do not apply. Nothing prevents advertisers or commercial agents to use the physical location of a public space for business purposes, in the augmented layer. If a company decides to use **Pokémon GO** for developing a layer of commercially relevant interests, there is little in terms of conventional laws and regulations to stop them. This erodes the commons, and instrumentalizes for private profit a space originally open and regulated for the benefit of the many. Losing sight over what commercial, propagandistic, or private activities can take place in the augmented reality space of public locations is a new variation of the tragedy of the commons. Without critical oversight, AR can erode the use of public spaces.

However, there is hope. **Pokémon GO** shows us that we can play in the computationally augmented world, how we can create communities of practice that make the game, and the world, expressively playful. It carries the danger of transforming the essentially free and expressive activity of play in public into a corporate commercial activity, but with **Pokémon GO** we have learnt a new language that will allow us alternative expressions. It is up to users, critics, and creators to harness this language and extend its expressive range beyond the corporate. We can use products like **Pokémon GO** in the future to commercialize and privatize the augmented layer of public spaces, but we can also use them to occupy those spaces, to reclaim them, even to extend the public to spaces of the private and the corporate. Reality has always been augmented. What **Pokémon GO** gives us is a new language and a new technology to access, experience, and most importantly play in and with this augmented world.

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Miguel Sicart is an Associate Professor at the IT University of Copenhagen, where he has been researching and teaching about game design and game culture since 2003. He has written extensively about games and ethics, as well as on play, politics, and aesthetics. He is the author of *The Ethics of Computer Games, Beyond Choices: The Design of Ethical Gameplay, and Play Matters* (The MIT Press, 2009, 2013, 2015).