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# Informal Communities for Hunter-Gatherers of Pokémons

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## **Abstract**

Why do large groups of people gather in special places in the city while they play the Augmented Reality (AR) game Pokémon GO? Do they develop specific types of community practices? – Do they small-talk about the game and other stuff? Does the game automatically promote social interaction and, in the affirmative, how does it work? The paper presents early observations of Pokémon GO players. These observations circle around: (1) The hunter-gathering culture in Pokémon GO; (2) Informal communities of people doing small talk; and (3) how the technology supports informal communities of practice. Going forward, I would like to make a larger study based on observations and interviews to illuminate the questions above and pros and cons of this first really successful AR game. There is no doubt players do small talk while being physically active and this is very unique for a casual game.

## **Author Keywords**

Games; Communities of Practice; Pokémon GO; HCI; Augmented Reality.

## **ACM Classification Keywords**

H.1.2 User/Machine Systems.

## Introduction

In the following, I shall present the unique physical activating game Pokémon GO based on my own experiences and some observations in the field and argue that players often participate in informal communities of practices while playing supported by the game mechanics.

Pokémon GO is an Augmented Reality (AR) game for smartphones. AR is an emerging technology utilizing mobile and situated devices such as smartphones and tablets [1, 3, 4, 5, 6, 7]. AR blends the physical and virtual environments, see Figure 1 [3, 7]. This can be illustrated as a continuum between lightly and heavily augmented environments [3, 7]. In physical reality, we interact with familiar surroundings, while the augmented version expands the physical reality by adding a digital layer on top.

AR is often divided into two types. The first is position-based, the other is image-based. These may of course be combined. The position-based AR is based on your physical location. Text, graphics, sound, video, 3D models are presented depending on e.g. GPS coordinates and/or compass measurements [1, 5]. The image-based uses the camera on a smartphone or tablet to scan a QR code or a 2D image enabling virtual content to appear on top of the camera content [1]. Pokémon GO uses location-based AR.

The game was published in the summer of 2016 and it has been downloaded by about 500 million users [9]. Users spend allegedly the Pokémon GO app for about half an hour a day [10]. Pokémon GO is developed by Niantec (a spinout from Google) in partnership with Nintendo and The Pokémon Company. In the past,

Niantec developed Ingress, which is also a location-based AR game where e.g. sculptures are hotspots and reused as Poké Stops in Pokémon GO.



Figure 1. AR blends the physical and virtual environments (Photograph: Stig Stasig)

Satoshi Tajiri, a Japanese game designer, is the creator of the Pokémon Universe and the first game for Game Boy was released in the late 1980s [12]. Satoshi Tajiri grew up in the suburbs of Tokyo in the 1960s and his favorite pastime was collecting insects [11]. Beetles,

caterpillars, moths and crabs and their life cycles inspired him in the creation of the Pokémon Universe.

The game Pokémon GO is about capturing Pokémon and letting the strongest battle each other. The approximately 151 Pokémon are small cartoon-like avatars which are both cute and scary at the same time [8].

Pokémon are often found in close proximity of Poké Stops which are located near churches, libraries, schools, universities, post offices, sculptures and other sightseeing locations. A Pokémon is captured by hitting it with a ball and upon a successful capture the player is rewarded with experience points, stardust and candy. Stardust and candy are used to develop the Pokémon and to make them stronger in combat. Pokémon doublets can be donated to the professor for a piece of candy. New balls are acquired at the Poké Stops. Also, the player chooses a team red, blue or yellow. The team affiliation is used for battling or training Pokémon at the gyms. Additionally, Pokémon eggs are hatched by walking 2, 5 or 10 km distances and larger rare Pokémon are often found in the 10 km eggs.

### **Hunter-gatherer culture in Pokémon GO**

During much of our history as a species, we were all hunters and gatherers. Our unique human traits are presumable adaptations to that way of life. Agriculture first appeared ten thousand years ago [2 p. 477]. Hunter-gatherers survived by hunting animals and gathering roots, nuts, seeds, berries, and other plant material [2 p. 477]. Pokémon GO supports our basic hunter-gatherer traits. For example, when the player gathers Poké balls and raspberries at a Poké Stop gatherer instincts are stimulated. The hunter instinct is

stimulated when the player walks around the city looking for Pokémon to hunt. Some types of Pokémon are near buildings and others are more frequently close to water. When a Pokémon is visible on the map on the phone the player can throw Poké balls at it. Often the player will have to throw several balls and perhaps feed the Pokémon with raspberries before it is captured or absconded.

### **Informal communities in the urban parks and gardens**

The player walks typically from Poké Stop to Poké Stop in order to gather and hunt. People will gather in larger groups in areas with many Poké Stops in one place. For example, in a Danish context the Royal Library Garden in Copenhagen, the Sculpture Park in Augustenborg, the Harbour Promenade in Fåborg or Munkemose in Odense. In such areas, players have the possibility to talk informally about the game and other things. Pokémon tend to spawn where there are more players in close proximity.

In the park Munkemose, I got into conversation with two boys and their father. The family talked about winning a Poké Gym for the blue team. They had won a Poké Gym in Højby, a suburb of Odense. They explained some of the tricky aspects of the Pokémon's battle abilities. For example, an Electabuzz is of the electric type that fights well against the water and flying Pokémon and purely against earth Pokémon like Rhyhorn. This family had downloaded an advisor app which gave advice about combat situations. In addition, they had bought power banks for their smartphones because the app is very energy consuming due to the use of GPS and camera.

Observations from The Royal Library Garden, see Figure 2: The number of players is overwhelming. Players are picnicking on the grass while they are busy catching Pokémons and gathering balls. Users seemed to be of all ages; however, there was a preponderance of boys between 9 and 13 years of age. However, there were also parent/child constellations, young couples lying on blankets, adults enjoying their their lunchbreaks etc. Now and again a rumor will spread among the youngsters about a seldom Pokémon nearby – sometime it is true and sometimes it is just a rumor.



Figure 2. (Left) The Six Poké stops in the Royal Library Garden; (Right) Players Picnicking in the Royal Library Garden.

An observation in Fåborg near the shore: A group of 3-4 boys on bikes met and talked about which Pokémons they had caught. One of them was low on Poké balls

and didn't want to waste them on catching a Weedle which is a small and rather insignificant and lively Pokémon. The boys seemed to know each other but their meeting seemed random.

These informal meetings in urban parks and gardens encourage both strangers and friends to small-talk about playing the game and improving their gameplay strategy. This can also be ascribed as a community of practice where everybody are active participants trying to achieve similar goals in the same realm [8]. Some are socially interactive and others are just playing the game.

### **The game mechanics supports informal communities**

*More Poké Stops in close proximity.* The Royal Library Garden holds six Poké Stops within easy reach; this means the players don't have to walk much around to catch Poké balls. It is a kind of hotspot where many players gather and settle down.

*Lure Modules.* According to my observations in the Royal Library Garden all Poké Stopshave active Lure Modules stops most of the time. Lure Modules attract Pokémons for 30 minutes and everybody near the Poké Stop can benefit from this effect.

*More Pokémons where players gather.* More Pokémons tend to spawn where there are more players in close proximity. This is observed in the Royal Library Garden.

*Gyms.* Groups of friends of the same team (red, blue or yellow) conquer a Gym by simultaneously attacking the Pokémons in the Gym with their strongest and most fitting Pokémons. Or it could be a married couple where

the husband is in the yellow team and the wife is in the blue team and they agree to defeat a red Gym.

The game mechanics: (1) More Poké Stops in close proximity; (2) Lure Modules, (3) More Pokémons where players gather and (4) Gyms support the forming of a community practice around the game. In other words: the technology enables playful interactions and social gaming with people nearby. The game mechanics for supporting social interaction could be developed further e.g. by adding possibility for exchanging Pokémons [14].

### **The virtual community around the game**

Niantic hasn't presented a rich game manual. Players are supposed to learn while playing. Most serious players also use virtual support pages or apps to improve their game experience, e.g. battle advisor [13] apps, evolution calculators [15] or dynamic maps [14] showing where and which Pokémons are about to spawn.

There are Facebook groups such as Pokémon GO: Denmark where casual and hardcore Pokémon players organize meetings and discuss aspects of the game [16]. They discuss quality power banks, variations of Pokémon populations, new versions of the game, share screen dumps from the game etc. Players also find news on YouTube videos or Snap Chat.

In the virtual community players meet and discuss with peers or experts. The users of the Facebook group Pokémon GO: Denmark can be viewed as legitimate peripheral participants where the newbies can learn from experts and gradually become experts themselves [8].

### **Summary**

It would be interesting to do a larger study of how this successful AR game promotes social interaction between users. There is no doubt that users had informal talks and many exercised more than usual. The players will get to see parts of their local environment and new sights, which they would not have noticed before. This is very unique for a casual game.

### **References**

1. M. Dunleavy. 2014. Design principles for augmented reality learning. *TechTrends*, 58(1), 28-34.
2. P. Gray. 2009. Play as a Foundation for Hunter-Gatherer Social Existence. Board of Trustee of the University of Illinois.
3. E. Klopfer. 2008. *Augmented Learning: Research and Design of Mobile Educational Games*. London: The MIT Press.
4. J. McGonigal. 2011. *Reality is Broken. Why Games Make us Better and How They can Change the World*. Jonathan Cape London.
5. G. Majgaard, L. J. Larsen, P. Lyk, & M. Lyk, M. 2016. At se det usete - Rumlig visualisering af solsystemet med fysiske prototyper og Augmented Reality. *Mona*, 2016(3).
6. G. Majgaard, & P. Lyk. 2015. På rejse med Virtual Reality i billedkunst: Erfaringslæring gennem kombineret fysisk og virtuel modelbygning. *Læring og Medier (LOM)*, 8(14).
7. P. Milgram, H. Takemura, A. Utsumi, & F. Kishino. 1994. Augmented reality: a class of displays on the reality-virtuality continuum. *Proceedings the SPIE: Telemanipulator and Telepresence Technologies*, 2351, 282-292.

8. E. Wenger. 1998. *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press. ISBN 978-0-521-66363-2.
9. Wiki Pokémon GO  
Retrieved October 11, 2016 from  
[https://en.wikipedia.org/wiki/Pok%C3%A9mon\\_GO](https://en.wikipedia.org/wiki/Pok%C3%A9mon_GO)
10. DMR 2016 Pokémon GO Statistics  
Retrieved August 22, 2016 from  
<http://expandedramblings.com/index.php/pokemon-go-statistics/>
11. C. Howard and T Larimer (14 November 1999). "Beware of the Pokemania". *Time*. New York City: Time Inc. Retrieved 10 October 2016.
12. Wiki Satoshi Tajiri  
[https://en.wikipedia.org/wiki/Satoshi\\_Tajiri#cite\\_note-Top-4](https://en.wikipedia.org/wiki/Satoshi_Tajiri#cite_note-Top-4) Retrieved 10 October 2016.
13. Battle advisor <http://www.pokebattleadvisor.com/>  
Retrieved 10 October 2016
14. Pokemon Go map  
<http://www.polygon.com/2016/7/20/12236574/pokemon-go-map-of-pokemon> Retrieved 10 October 2016
15. Pokemon Go Evolution Calculator  
<http://pokemongohub.net/pokemon-go-evolution-calculator/> 10 October 2016
16. Facebook – Pokemon GO: Denmark  
<https://www.facebook.com/groups/pokemongodk/?fref=ts> 10 October 2016
17. P. Jarusriboonchai, S. Paasovaara and T. Olsson (2016). Interactions between Nearby Strangers in Pokémon GO. Workshop of Interaction Between Nearby Strangers, in conjunction with NordiCHI'16, Oct 23–27, 2016, Gothenburg, Sweden.