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# The Concept of the Magic Circle and the Pokémon GO Phenomenon

**Lasse Juel Larsen and Gunver Majgaard**

**Abstract.** When Johan Huizinga in 1938 published *Homo Ludens,* he had no idea the book would father a future research field: *ludology* or game studies. In that respect, inspirations from Huizinga run deep in game studies and many researchers have since tackled questions like: what is play? what is a game? And perhaps most notoriously how should we understand Huizinga's description of the magic circle. This article revisit Huizinga's thinking on play, games, and his concept of the magic circle. Subsequently we investigate how the magic circle perform in relation to `traditional´ computer games, is challenged by `meta-referential´ games and is expanded by Augmented Reality games such as Pokémon GO. We present three understandings of the magic circle: 1) expression of a specific physical place, 2) metaphor for player experience, and finally 3) as a mix between the two. We regard and equate the magic in the magic circle with play. Juxtaposing magic as play and the magic circle as relating to physical space, player experience and its mixed combinations to Pokémon GO result in a multilayered expansion consisting of player experiences, social interactions with other players in a playing field that is close to engulf the entire planet.

## 1 Introduction

In the foreword to *Homo Ludens,* Huizinga claims that play is essential for nothing less than human civilization which "arises and unfolds in and as play" (Huizinga 2014, foreword). The statement places play at the heart of what it means to be human and as an almost transcendental force at the center of human culture.

Huizinga's understanding of play is closely tied to his famous formulation: *the magic circle*. The magic circle is only mentioned six or so times in *Homo Ludens*. Yet, it has caught attention and brought about many discussions (Juul 2008; Taylor 2008; Salen and Zimmerman 2004; Pargman and Jakobsen 2008; Stenros 2014), among which the magic circle may be understood metaphorically, conceptually or literally. The inherent tensions in the magic circle is centered on the relationship between the phenomenon play and the place where it takes place. Is the magic circle bound to the epistemology of play, the experience of being in play, or tied to formalism, as a description of play and where it takes place? Residing inside rests the notion that play most often is understood in relation to games. As such, the magic circle has given rise to discussions addressing the asymmetric relationship between play and game, between the experience of being in play and how any game is organized in a formal or ontological sense. To highlight this asymmetry, we will draw on the game studies research tradition on play and games to outline how selected game cases demonstrate divergent game systems and in a formal sense how they tie into the magic circle. In other words; we shall look at different game formats through the lens of the magic circle to outline how they (each in their own way) create fluctuations in the magic circle. The selected games cover formats from

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`traditional´ constructs such as mobile multiplayer games as *Clash Royale* (Supercell 2016), `meta-games´ understood as self-referential or postmodern design deliberately drawing attention to themselves represented by games such as *Calendula* (Blooming Buds Studio 2015), *The Stanley Parable* (Galactic Café 2013), *Doki Doki Literature Club* (Team Salvato 2017), *Max Payne* (Remedy Entertainment 2001) and finally we address Augmented Reality games (Klopfer 2008; Dunleavy 2014; Majgaard et al. 2017a; Majgaard et al. 2017b) characterized by their unique relationship to reality. In this case, *Pokémon GO* (Niantic, 2016). Before moving on to the game cases we need to take a closer look at how we can understand the magic circle.

# 2 Introducing the Magic Circle

The magic circle has been subject to both criticism and numerous attempts to understand and explain what the phrase entails. If we turn to *Homo Ludens* and an often-cited passage which also happens to be one of the first times the phrase appears, we get a sense of how to understand the magic circle. Huizinga writes: "all play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play and ritual, so the "consecrated spot" cannot be formally distinguished from the play-ground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within the ordinary world, dedicated to the performance of and act apart." (Huizinga 2014, p. 10).

It is noteworthy to draw attention to Huizinga's straight-forward claim that play takes place in a location. We have to assume he means a physical place. It is also of interest that there is no *formal* difference between ritual and play in the sense they both take place in a socially negotiated and rule-regulated "consecrated spot" or a playground. Play, then, takes place in a play-ground *marked off materially, ideally or as a matter of course*. This seems pretty straightforward if we consider a soccer match. The playing field is marked off both materially and ideally and follows a rule-based matter of course (Juul 2003; Elias, Garfield and Gutschera 2012). A soccer match takes place in a specific location i.e. the playing field and the activities of play find themselves acted out according to a matter of course regulated by rules. Included herein, we assume, we have a negotiated place, number of teams, players and goals, time (begin, pause and end), thrown-in, freekicks, off-side, corners and penalty kicks etc. This more or less material reading of the magic circle outlines a specific place (playground) isolated from, but still existing within the ordinary world not different in form and function from a host of other activities that follows a rule-based matter of course.

Now we have an initial idea of where Huizinga's play takes place and to some degree how, but little do we know of how he understands play. A few pages later Huizinga summarizes his definition of play, as "a free activity standing quite consciously outside "ordinary" life as being "not serious", but at the same time absorbing the player intensely and utterly. It is an activity connected with a material interest, and so no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means" (Huizinga, 1949, p. 13).

Reading Huizinga's definition of play and keeping his thoughts on the magic circle in mind, it is easy to see how they relate. The magic circle constitutes a "consecrated spot" where play takes place as something quite different than ordinary life. Play activities are "not serious" but still they can absorb the player(s) *intensely and utterly*. This formulation points towards the experience of being in play. In doing so, Huizinga unintentionally bridges formal descriptions of play with the

epistemology of play. We leave aside the opaque formulation that play promotes social groupings which shroud themselves in secrecy.
Untangling the epistemology from the formal description of play takes center stage in the following section.

# 3 Play – What is It?

Caillois (2001) dives in and he goes further than Huizinga's understanding play as "not serious" or "unproductive" when he outright describes play as "pure waste" (p. 5). The distinction between lack of seriousness and wasteful play rests on the traditional Protestant dichotomy between work and play (Weber 1958). Stevens (1978) points out that such a distinction is unproductive and as he writes, "a false dichotomy" (p. 17). Stevens claims that the dichotomy between work and play rests on a confused notion of play arising from mixing formal characteristics of play with the experience of being in play or as he writes, "we are taking the behavior for the experiencing of that behavior" (Stevens 1978, p. 21). In Huizinga's definition, as we have seen, these two aspects exist side by side unexplained and unaddressed even though Huizinga claims that play *utterly* and *intensely* can absorb players. Huizinga never expands on what utterly and intensely means.

Stevens' distinctions broaden the scope for understanding play, from addressing it from a strictly formalistic perspective to an epistemological venue. Especially beneficial is Steven's separation of "play form" and "play experience" (Stevens 1978, p. 20) since it separates the process of experiencing being in play from a formal description of the structure of play (Larsen 2015). Separating "play form" and "play experience" is more or less echoed by Malaby (2007) when he outlines play as "a mode of human experience […] a way of engaging the world whatever one is doing" (p. 100). The dense quotation actually divides play in 1) human experience, 2) engagement with the world. and 3) related to all kinds of activities. Such an approach is somewhat familiar with Sicart (2014) who seems to be inspired by Gadamer's (2013) transcendental understanding of play as a dynamic that cannot be dictated by volition, but "happens" and "grabs hold of its performers" from the "outside" on its own accord without a formal start or endpoint. It is not until after play has ended, the performers can say whether or not they experienced play. Sicart more or less formalize Gadamers phenomenological points when he stresses play as an appropriative dynamic that 1) "takes over" any unfolding activity, (2) reshapes the context as a result of negotiation, and (3) is tied to a specific situation (Sicart 2014, p. 6-11).

This perspective is familiar with Salen and Zimmerman's (2004) understanding of play which they define as "free movement within a more rigid structure" (p. 304). The definition is interesting since it echoes both Huizinga's and Caillois' emphasis on play as "free", and because free movement refers to "interstitial spaces" (Salen and Zimmerman, p. 304) in predefined structures. These interstitial spaces are exemplified as the degrees older steering wheels can move before the wheels begins to turn. Hereafter Salen and Zimmerman present three categories of play.

The *first* category being *game play* which by the way is widely used term very rarely accompanied by a definition (Leino, 2012; Costikyan, 2001). Here it simply outlines the difference between being in a running game or being out of game. In prosaic terms, there simply is a difference between before, during and after a soccer match. Thus, gameplay refers to the unfolding activities during play i.e. a soccer match.

The *second* category is *ludic activity* understood as the unpredictability in activities such as how a ball is bouncing "against a wall" (Salen and Zimmerman, p. 304). How it moves, its speed and angle are all aspects of free movement inside a system of shooting the ball against the wall. The focus here is on the players handling of unpredictability inside a system. This is similar to Costikyan's (2013) understanding of uncertainty in games when he directs attention to shifting *player actions* as responses to the exact same and repeatable game system. The player always handles and experiences

levels in the Mario-series differently even though they never change. What changes is the players' response to the mapped challenges. And opposite take on unpredictability is presented by Burgun (2012) when he defines games as dependent upon choice designed into the game system and not as choices players invent.

The *third* category *being playful* addresses experience or attitude towards an activity as demonstrating free movement while performing trivial tasks such as walking down the street. This perspective is echoed by Malaby (2007) when he determines play as a disposition "characterized by a readiness to improvise" (p. 209).

Placing Salen and Zimmerman's determination of *being playful* together with Malaby's *disposition* as a specific attitude towards an activity and Stevens' distinctions between *experiencing being in play* from a formal description of play and Gadamer's point that play "grabs us" from a near transcendental position, we can tentatively outline play as 1) a phenomenon, 2) and experience or attitude and 3) something larger that takes hold of us. To complicate matters further we have to insert game to the equation. Play is always situated in some sort of context regardless of whether it is understood as a phenomenon, experience or attitude or an "outside" force. Here is that something a game. So, before we can get a `firm´ grasp of the magic circle, we also need to understand what a game is. It should be noted that we don't claim to solve the object-activity tension inherent in the question. The following section will dive deeper into the undercurrents of how we understand what a game is.

# 4 A Game – What is It?

Is has proven to be difficult to conceptualize what a game is. The contours of the complexity are already present in Huizinga's definition. Here we find a formal game description entangled in an undeveloped epistemological inclusion. The two, for lack of better words, perspectives have been and are tied to the object-activity complexity in determining what a game is, elegantly demonstrated by Stenros (2017) in a recent article that digs through over sixty game definitions. The inherent tension in game definitions springs from viewing games either as *objects* (systemic artefacts) or socially negotiated *activities*. Two perspectives that simultaneously encapsulate a game centric approach addressing game ontology and a player centric approach investigating player epistemology.

Historically, the game centric perspective has been guided by more or less formal definitions of games (Caillois 2001; Juul 2003; Schell 2008; Fullerton 2008; Costikyan 2002; Salen and Zimmerman 2004; Burgun 2012; Suits 2005). From this perspective games are closed rule-based systems, entered voluntary, with variable and quantifiable outcomes, artificial and unnecessary obstacles, clear goals, feedback, endogenous meaning and players. Other scholars, game researchers and designers find themselves moving away from strict formulations to avoid ensnaring definitions. Instead, they point toward games resting on traits (McGonigal 2011; Elias et al. 2012). They see games as genres and experiences not always with overlapping recognizable structures. Games are affiliated with each other through traits. It is a move away from ontology towards epistemology, away from a game centric toward a player centric approach concerned with *how* players experience games, *what* kinds of feelings they get from playing, (Isbister, 2017), *which* mental states they achieve (Chen, 2007) or which social awkward situations they generate (Wilson and Sicart, 2010), and perhaps which recognitions or insights players achieve about themselves, others, life or the world (Sharp, 2015).

Still transgression attempts have been proposed to tackle the object-activity conundrum. Aarseth and Calleja (2015) inspired by Wittgenstein have proposed a super category (cypermedia). It is a descriptive model that takes sign, mechanical system, materiel medium and players into considerations. Games belong to the cybermedia category, but what is most important is that the game category is dependent on players' determinations of games i.e.: *if players say it is a game it is*. This

means we are left with a dilemma where our *views* or *perspectives* on games determines our definitions or understandings of games. A position similar to Sutton-Smith's (2001) 7 rhetorics on play, each representing the perspectives of play researchers. The relationship between reality and perception of reality is not an easy problem to tackle. A possible solution to the problem between game determinations and player experiences might be found in an investigation of how play and game relate to the magic circle.

# 5 Analyzing the Magic Circle

The idea of the magic circle is to describe how two different spaces and/or states are separated by a clear boundary. There is an inside of the game, an outside of the game, and a boundary between the two. It is the distinction Huizinga outlined when he wrote about play as separated from ordinary life. This understanding equates `circle´ with the physical space where the game takes place, much like a boxing arena or a soccer field. When the game is in motion game rules apply to the activity and when the game ends normal rules preside again (Zimmerman 2012). It is a formal distinction between game and reality. Transgression of the boundary, moving from being outside to inside, rests on a social contract (Montola 2009). A social contract entered voluntarily as Huizinga and Caillois point out. This perspective represents what has later been called the "strong-boundary hypothesis" (Pargman and Jakobsen 2008). It dictates a strict division between the game on one side and reality on the other. At times, Huizinga, seems to advocate for the "strong-boundary" only to point towards games as socially negotiated. This has made Calleja to critique of the magic circle. Especially what calls the "binary myth" (Calleja 2008) thought to demark what is *in*-side the game and what is *out*-side the game.

We suggest that the "strong boundary hypothesis" or the "binary myth" only works from an ontological naïve perspective where games are conceived as static objects frozen in time. When games are thought of as objects void of activity. It is a perspective cleansed of epistemology.

A further and important complication have been described by Pargman and Jakobson (2006). They have outlined how the magic in games disappears when players shift attitude from the subjective stance of being in play to regarding the game activity objectively. Doing so transforms play to work. Silverman and Simon (2009) have followed this perspective and investigated how work logic impacts gamer subjectivity. They found that work logic applied to gaming created hyperrationalism characterized by disciplined playless desire for control (Golumbia 2009; Malone 2009). Such perspectives are interesting since they unwillingly carve out play as vehicle for the `magic´ in games. The magic, following Gadamer, is "the transcendental grip" that captivates us. If these assumptions are right, then `magic´ has nothing to do with game properties speaking from an ontological naïve position. Instead, it seems, `magic´ has everything to do with play attitude, of experiencing play, being caught by and staying in play. When players drop out of play while interacting with a game, a systemic structure is opened up for hyperrationalization. Every game is exposed to this position.

Summing all this up lead to a perspective where we have games with no magic (no play) and therefore no circle of play. In one stroke the magical circle has disappeared, leaving behind hyperrationalized behavior striving for control and power within in a system game structure. This is, of course, radicalized. Still the perspective serves a pedagogical purpose. Now, it seems, we have an ontological naïve take on games associated with a strict boundary (strong boundary hypothesis) between games and everyday life contrasted by an equally naïve epistemology on games that erases the same boundary.

It should be clear that these distinctions are simplified caricatures serving to explicate far ends of a spectrum. Still they produce insights. First that `magic´ resides in play and not in the

formal structure or ontology of the game. Second that player attitude have to be included when addressing the magic circle.

Mixing the two rest on a negotiation between player *and* the game. A social construct which implicitly or explicitly a creates a play contract that Suits (2005) coined the `lusory attitude´. Only then can players be `captured´ by play (Gadamer 2013). Such play contract also rests on negotiations between players (Copier 2005). But, social negotiations or contracts constitute points for potential fluctuations in the boundaries of the magic circle. Negotiations can take place before, during and after play sessions (Montola 2008) just as it happens in Pokémon GO when the player determine when to play, what to do, and with whom to play. Fine (1983) has elegantly pointed out inspired by Goffman's frame analysis (1974/1986) that the player easily shifts between a reality frame (common sense world), a game context frame (rules and constraints) and a character frame (in-game identity separates from reality). Montola (2008) later refined Fine's frames dividing them in the *social frame* when players lay out the rules and behaviors for playing such as agreeing on rules like: do not speak on your phone while we play Pokémon GO; the *game frame* where players discuss in-game issues such as how much damage can your Pokémon do; the *diegetic frame* dealing with actions either prohibited or allowed according to mythos, topos and ethos (Klastrup and Tosca 2004) and of course storyline of the played adventure such has where are specific Pokémons likely to be found, where do they reside. Movements between frames create possible break points in the magic circle. Too long discussions about when and where to combat gyms populated by Pokémons from an opposing faction, dealing with players not showing up or leaving too early, handling discussions about which Pokémons to fight with, and players not having enough food to restore "dead" Pokémons in order to retry to take down the gym are all elements that challenge the play contract, lusory attitude and magic circle.

The highlighted social dimension of negotiations points toward a heterogenous and not a naïve epistemology of play in relation to the magic circle and as we shall see they are applicable to a host of different game formats.

# 6 Playing Games Playing with the Magic Circle

Until now we have addressed the magic circle from either an ontological or epistemological naïve point of view, equated the magic with play, and the circle with a physical geographic place. Even though Huizinga's descriptions have been perceived as a metaphor (Juul 2008; Zimmerman 2012). The metaphorical understanding inject epistemology into Huizinga's description of the magic circle. It equates the magic circle with a mental state, a psychological emotion or place players losses themselves to when in play. It is a mix of the games simulated space (Swink 2009), the physical place (Aarseth 2001) and the attitude and experience of being in play.

It then seems as if two understandings of the magic circle emerge. One refers the magic circle to a physical place, a geographical playing field. The other refers the magic circle as a simulated place which player are involved in whether we understand involvement as a mental state or an emotional psychological experience. It is of course troublesome to have two understandings side by side both referring to the magic circle. What makes it even worse: in some cases, the magic circle covers both at the same time and that happens in Pokémon GO.

In Pokémon GO whether the games take place ad hoc anywhere where players seek out Pokémons in the wild or fight Pokémons in gyms equivalent to a ritualized place player enter the magic circle. Often, they also become absorbed by the game activity. The play activity in Pokémon GO aligns itself well with both understandings of the magic circle. Still, seeking out Pokémons in the wild players can, as Fine (1983) pointed out, move between different frames. They can stop and buy a cup of coffee, make a call on the phone, or suffer interruptions from outside sources such as non-player persons getting in the way of the game. All acts potentially threatening the magic circle.

In traditional game cases such as the single player computer game like the renowned *Civilization*-series (1991-) by Sid Meier refers the magic circle to the epistemology of the player experience. Here players experience is stereotypically referred to as a state where players are `away´, `somewhere else´, `out of reach´ or `not here´. This observation points to the ontological discrepancies between being physically present in the world or subjectively engaged in a game (Salen and Zimmerman 2004) on the screen. When outsiders try to get in contact with engaged players, they often exhibit signs of frustration. The interruption bothers them. Players don't want the magic in the game experience to stop (Schoenau-Fog 2011). In Pokémon GO such interruptions are two-edged: one side interruptions disturb the magic circle bringing players out of play. On the other side can interruptions service deeper involvement such as when fellow players give each other hints about a just sighted legendary Pokémon. Such hints elevate attention and propels player engagement further deeper into the magic circle.

In multiplayer game scenarios the magic circle fluctuates in a different way. In games such as *Fortnite* (Epic Games 2017) players move around in a simulated space with other players all fighting against each other in an effort to be the last avatar standing. Very different from Pokémon GO where players have to move around physically.

*Fortnite* share temporal structure with *CS:GO* (Valve 2012), *Team Fortress 2* (Valve 2007). When players die they are pushed out of the continuous play stream. The games don't stop running when the player dies as was the case in older games like *Civilization*. These newer temporal designs are organized in such a way that the game continues without the dead player (they can reenter after a short time span). From a running game-time perspective *Fortnite*, *CS:GO* and *Team Fortress* are different from older single-player games, still they are fairly traditional in the sense that they have a predetermined allotted time frame i.e. 20 min or whatever the players agree on.

These time designs adhere to `traditional´ game design. It upholds an internal reference (Walter, 2006) system that creates stable meaning (Costikyan 2002). These games do not challenge the borders of the magic circle. They do not expand beyond their limited temporal frame.

Pokémon GO's in-game time structure is a one-to-one relationship with local time zones. There is no time compression which allows time to follow reality at the location of the player. If it is night outside, it is night in Pokémon GO, if it is daytime, it is daytime in Pokémon GO. The game runs 24/7 year-round. A similar time design can be found in *World of Warcraft* (Blizzard Entertainment, 2004-). Unlike the real world where time and life are stitched together, they are separated in Pokémon GO. The game worlds run independently of the player. Players simply log in and out on their own accord.

Having a one-to-one time structure challenges the epistemology of play. Players can lose themselves everywhere and anytime all the time. There is a significant drawback to this design. Players will never be able to take full advantage of the game possibilities. They are always behind in relation to the games internal clock. It is impossible for players to always keep up in relation to the game. A design choice that creates internal player pressure that forces players to regard in-game progress in relation to other players instead of game dictated goals, storylines or achievements. This time design inherently challenges the magic circle. It goes mostly un noticed since it is "hidden" in plain sight.

Postmodern games are very different that Pokemon GO. They openly challenge the magic circle by making in-game references that shift players attention toward the game as a game. It is play with play itself. To give a few examples: in *Max Payne* (Remedy Entertainment 2001) suspects the main character, Max, in one of the game's graphic novel story pages that he is in-side a computer game. A suspicion triggered by Max's observation that there is a lot of shooting blended with a sensation of being controlled by outside forces (e.g. a player). He concludes he must be in-side a computer game. Such meta-references unmask the game's coherency and draws attention to the game

as a game. It transgresses the play experience and players become aware of themselves as playing (Frasca 2006) a computer game. The same scenario can be found in *The Stanley Parable* (Galactic Café 2013). Here the narrator speaks directly to the player when he or she is searching for the game character Stanley. Especially when the player has to decide whether to follow in Stanley's footsteps or choose a different path through the game world. Such meta-references are concealed in games like *Fortnite* or *CS:GO*.

Meta-games have other means of drawing attention to themselves. It happens when they isolate, single out and manipulate one aspect of what is normally seen as an integral part of a game. In *Calendula* (Blooming Buds Studio 2015) the player tumbles and get stuck in the game menu unable to navigate a way to the `real´ game. At some point the player realizes that `playing´ with and getting lost in the menu actually is what the game is all about. On the surface, the player is hindered from playing. *Calendula* deliberately plays with player expectations. Below the surface *Calendula* is a game that resists its player, works in opposition by not letting the player play as usual. *Calendula* stands up to play by drawing a line in the sand and not allowing `play´ anywhere near the game. Indirectly questioning all kinds of games and play. Making the player think not only about *Calendula*, but all games, their structures and related play experiences.

Similar fluctuations in the magic circle manifest themselves when games address their own `materiality´. Doing so by pointing to the fact that they are generated by code and files executed on a computer. *Doki Doki Literature Club* (Team Salvato 2017) is such a case. In an interactive anime-inspired story line mixing dating, coming of age with horror elements, the player finds him/herself in distress after the first playthrough that ends with a game character committing suicide. The player finds the young girl hanging from the ceiling of her room. When players try to go back and see if they can achieve a different outcome, they find all the saved files gone. The second-best option is to start the game again, but the character is still dead. She even appears in pixilated glitchy flashes almost as a ghost. The design deliberately draws attention to the game's coherency. At some point the player has to delete files from the computer to manipulate the game content (characters).

Such designs either diminish or enhance the game's playing `field´ depending on the player's perspective. No matter how the player chooses to regard the game, one thing is certain: It provokes the player's attention, challenges the standard conception of games as coherent wholes with solid and working internal structures. Provoked, the player sees the game's `materiality´ and the medium on which it is executed.

Taken together meta-referencing serves as a tool to perforate the magic circle epistemologically by making the player self-aware of the play activity as an activity which in turn directs attention to the ontological state of the game as a game. The same fluctuations, in reverse though, happens when games transgress the `material´ boundary as in *Doki Doki Literature Club*.

*Pokémon GO* (Niantic 2016) is not a meta-game as *Max Payne* and *Doki Doki Literature Club*. It draws attention to itself by a one-to-one temporal and spatial alignment to the magic circle both understood as a physical place/space.

# 7 Pokémon GO, Augmented Reality and the Magic Circle

Pokémon GO is not only in a one-to-one dialogue and dependence on the local time zones it is also in a one-to-one relationship spatially. The game draws on Google maps. The translation between game and reality is simply: when you walk 100 meter down the street in real life, your game character walks 100 meter in the game. This design highlight correspondence between the game's temporal and spatial structure and reality as such belongs Pokémon GO to one of the two archetypical ways in which augmented reality games can manifest themselves. They can be picture-based and the location-driven (the last possibility with different time structures).

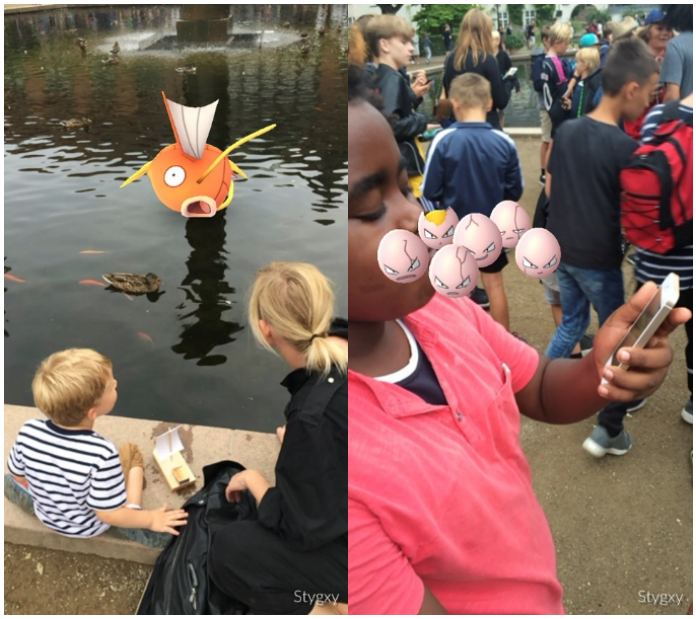


**Fig. 1** Left and right, Virtual Pokémons on top of physical environment. (Photographer Stig Stasig)

From the perspective of the magic circle transforms such a design the entire planet into a `consecrated spot´ or playing field, see Fig. 1. There is no exclusive playing field since it is everywhere. Pokémon GO spatial and temporally expand the magic circle. It extends and encapsulates everywhere and anywhere and align itself time duration and zones. In other words, it is impossible to escape the temporal and spatial boundaries of Pokémon GO except when we fly above the mobile data grid. It should be pointed out that Pokémon GO's world is 2D. It doesn't account for the height of buildings or sea levels. In that sense, it is flat which means you can catch a Pokémon next to your location whether you are on the ground floor or standing at the top of Empire State Building.

The `traditional´ and `meta-games´ mentioned earlier was limited temporally and spatially. In Pokémon GO is the play experience is not confined to a limited `consecrated spot´ neither in front of a screen nor on a geographical playing field. Players can engage in Pokémon GO on street sidewalks or in the middle of traffic. Engaged players regularly trespass to catch Pokémons transgressing real-world social aspects such as what is allowed or prohibited either by common sense or sanctioned by law. Here players display being "grabbed" by play from something (a game) outside themselves. Still the magic circle can be challenged by non-playing people outside (Walther 2011) the game world who are either passing by, looking at players or accidentally bumping into them. On the other side can the magic circle be reinforced by fellow players creating temporal and spatial pockets of interaction between strangers (McGonigal 2011; Montola 2009)). Not only do the player have a shared interest in catching Pokémons, they also help and inspire each other (Majgaard and Larsen 2017b). All in all, do interruptions in the real world influence the play experience as well as impacting the game world.

# 8 Informal Communities and the Magic Circle in Pokémon GO

The game mechanics (Sicart 2008; Burgun 2015) and rules (Elias et al. 2012) of Pokémon GO is built to encourage players to explore the game's possibilities. Such a call for player exploration is tied to player types such as explores, socializers, and achievers (Bartle 1996; Yee 2005). In the game this call is explicated by the trainer that tells players to venture out, to seek and find and develop

Pokémon's. Turning them into strong and powerful beings. Such effort (Juul 2003) is navigated by walking from Poké Stop to Poké Stop in order to explore, gather and hunt (Majgaard, 2016). Shortly after the game was published in 2016 players gathered in larger groups in areas with many Poké Stops. In Copenhagen the beautiful Royal Library Garden became a sanctuary for Pokémon players of all ages, see Fig. 2 below. The narrative among players allegedly was that Pokémons tended to spawn more frequent when there were more players and Poké Stops in close proximity. At the time, the Royal Library Garden held six Poké Stops within reach of each other. This design meant players did not have to walk as much to catch Poké balls and Pokémon's. About six month later, most of the Poké Stops were moved to a nearby parking lot in order to restore peace and quit in the old Library Garden. The nearby parking lot never became sanctuary for Pokémon players. Instead it moved to a new location, a shopping center not far from the Royal Library Garden. The shopping center bought over 20 Poké Stops eying an opportunity to capitalize from the game's success by attracting more costumers.

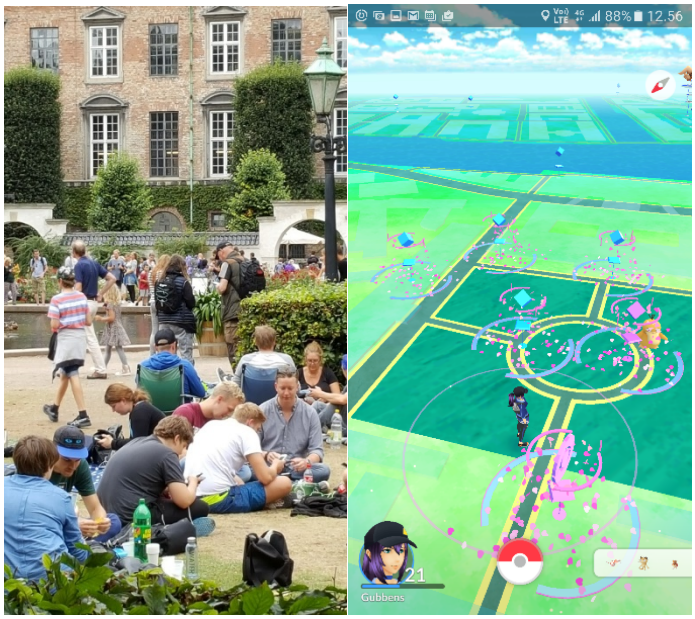


**Fig. 2** To the left, players in the beautiful Royal Library Garden. To the right, a Map from Pokémon GO showing Poké Stops with active Lure Modules also from the Royal Library Garden (Photographer authors).

Active Lure Modules on the Poké Stops accelerated the presence of Pokémons for 30 minutes. Such effects affected every player near the Poké Stop. Observations in the Royal Library Garden showed all Poké Stops to have active Lure Modules, see Fig. 2 to the right. The high level of activity afforded by a high number of players and Lure Modules on Poké Stops transformed the singular play attitude into a collective play experience where players together could dwell in the game's magic circle while at the same time socialising with fellow players. Here players seamlessly could move between social, game and diegetic frames discussing everyday stuff while at the same time being engaged in catching Pokémons.

Players have since the game's release sought the ability to trade Pokémons. It wasn't until recently this option got implemented in Pokémon GO. It could seem a trivial thing to add a trading option, but it isn't. It forces players to meet up in reality to exchange a Pokémon for Stardust-money thereby accelerating player agency and following engagement with the game. The design change reinforces the game's social interaction among players adding to the collective play experience and recalibrate the magic circle dual move toward both the game structure and physical reality. Such efforts can also be found in the in-game gym design. It too has undergone several

changes since the initial release of Pokémon GO. In the beginning minor groups could conquer a Gym to earn the game currency usable only in the in-game shop. In the initial gym design, players could single handedly conquer a Gym. No assistance needed from fellow players. Later implementations introduced raid battles forcing players to meet up in physical reality and combat gyms. Here players could also join raids with strangers just as in a multitude of online multiplayer games. The goal of joying a raid and combatting a gym was to defeat the powerful Pokémon residing there. If successful, players got a chance to catch the residing Pokémon which often was a rare or legendary Pokémon. This design modification changed player behavior from solitary presence in the magic circle to a cooperative play style (Fullerton, 2008). These two developments propelled the physical, virtual and social community around Pokémon GO and added elasticity to players ability to play.

# 9 Virtual Forums around Pokémon GO as extension of the Magic Circle

The virtual community around Pokémon GO can be viewed as an extension or augmentation of magic circle. When Pokémon GO was released, Niantic left out a rich game manual or virtual gamer forum. The idea behind this design choice was to promote and appeal to the before mentioned explorative, socializer and achiever player profiles. Considered and deliberate shortcomings opened up opportunities for creation virtual communities such as support sites distributing apps ranging from crowd sensing (Wang 2017), Pokémon spawn sites (Pokémon GO map 2016), battle advisors (Battle Advisor 2016), and evolution guides on how to evolve Pokémons (Pokémon GO Evolution 2016) to social media platforms such as Facebook, YouTube and Snap Chat where players discuss and share progress and news about the game.

On Facebook, strangers shared meaningful player experiences (e.g. the Danish Pokémon GO Facebook group more than 13,000 participants). The dominant themes were: discussion of how-to development rare Pokémons, the rules associated with evolving Pokémons, game bugs, sharing screen shots of Augmented Reality situations, screenshots of rare and special Pokémons and promotion of personal milestones. In the virtual community, players met up and discuss with peers or experts. The users of the Facebook group Pokémon GO: Denmark can be viewed as a platform for legitimate peripheral participators (Wenger 1998). Newbies learn from experts and gradually become experts themselves. Additionally, the virtual community can be viewed as an extension or expansion of the magic circle adding to the elasticity in player experiences of playing Pokémon GO. The same goes for the opportunity to include fellow players. Gamers seem to need forums to discuss resent game developments, bugs, and to promote achievements among fellow players. This dialectical movement between players in-game reactions as well together with out of game discussions about the game and the game developer's response demonstrates a spiral shaped propelling the evolution of Pokémon GO and the game's magic and the magic circle.

# 10 Conclusions

In this chapter, we have investigated the magic circle and found not one but three different interpretations, each with its own implication for how we understand playing and gaming. The first understanding of the magic *circle* placed emphasis on a physical place different from everyday life where play unfolds. The second understanding of the magic circle draw attention to the *magic* of the magic circle and the mix between play experience and a more or less static simulated space with no significant reference to physical reality. The third understanding of the magic circle

blended the two conceptions exemplified by the Augmented Reality game case, Pokémon GO. Here the one-to-one relationship between game time and real time *and* simulated and real space acted as a guide for understanding the *magic circle*.

Subsequently, we argued that play was the carrier of the *magic* in playing games. In a spectrum ranging from naïve ontology to naïve epistemology we found that naïve ontology sees a clear difference between everyday life and play while naïve epistemology is found in hyperrational game activity dispelling play from the activity equating it with work.

The continued investigation highlighted how game formats ranging from `traditional´, `meta-referencing´, and `Augmented Reality games´ align themselves differently temporally, spatially and socially in relation to the magic circle exposing diverging layers of possible fluctuations in the experience of play. Here Pokémon GO serves an emblematic and special case via its one-to-one temporal and spatial correspondence with reality along with design decisions that meet explorative, socializing and archiver influenced player types and play styles. It demands rethinking the different frame layers and elasticity of the magic circle. It now includes in-game player to player interactions trading Pokémons with friends and strangers live in the playing field and out-of-game discussions in a host of different virtual environments. As such serves provokes and expand Pokémon GO the limits and elasticity of the concept of the magic circle, but also play as a phenomenon in itself.

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