Breaking Reality: Exploring Pervasive Cheating in *Foursquare*

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ABSTRACT
This article explores the notion of cheating in location-based mobile applications. Using the popular smartphone app *Foursquare* as the main case study, it addresses the question of whether and how devious practices impact the boundaries between play and reality as negotiated spaces of interaction. After establishing *Foursquare* as a prime example of the gamification phenomenon and pervasive gaming, both of which require us to rethink notions of game and play, I will argue that cheating in location-based mobile applications such as *Foursquare* has the potential to challenge not just the boundaries of play, but also our playful identity.

KEYWORDS
Cheating, Gamification, Pervasive Games, Ludification of Culture, Location-Based Games, Playful Identity.

INTRODUCTION

"♫ This ain't Seaworld, this is as real as it gets
I'm on a boat, MF'er, don't you ever forget! ♫"
—"I'm on a Boat!," The Lonely Island (2009)

These song lyrics accompanied a badge I earned in February 2010 while using *Foursquare* on my mobile phone. This location-based social-network service, created by Dennis Crowley and Naveen Selvadurai and launched in 2009, offers its users opportunities to check in at real-world venues, earning rewards such as badges in the process. The badge I was awarded, appropriately titled "I'm on a Boat!," is the reward for the first time one actually checks in on a boat in real life.

The problem, however, is that I never actually *was* on a boat. I checked in at Amsterdam Central Station to take the train to work. *Foursquare*'s virtual venues are supposed to be linked directly to real venues, but Central Station was *virtually* changed into something else. Amsterdam Central Station "ain't Seaworld," to quote The Lonely Island, but for *Foursquare* users, it suddenly was also no longer "as real as it gets." And in case I would

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“ever forget,” *Foursquare* had automatically posted the fact that I had earned the badge on my Facebook wall, triggering friends to question not only my real location, but also my sincerity: “Have you started cheating?”

After a short investigation, I found out what had happened. As a service dependent on user participation, *Foursquare* invites its users not only to add new venues to the database, but also to describe what these venues are, or what one can find there, through a system of tags. Many different tags are possible, but only certain ones are linked to badge rewards. The person responsible for the “I’m on a Boat!” badge had to know this; he or she had apparently added the tag “boat” to the station. By doing so, this person not only cheated the system, but included me—and everyone else checking in before the tag was removed—in this devious act.

This paper deals with the notion of cheating in the location-based mobile social-networking application *Foursquare*. It addresses the question of whether and how practices like the one described above impact the boundaries between play and reality as negotiated spaces of interaction. Having actively participated in using *Foursquare* and observed its development for over a year, I will use this application as my main case study. *Foursquare*, with its millions of users, is, furthermore, a prime example of what has become known as *gamification*, a phenomenon which stretches the notion of what constitutes a game. To investigate the conceptual boundaries of play, I will start by elucidating what the gamification phenomenon entails. I will then move on to frame *Foursquare* as a pervasive game and, subsequently, cheating in *Foursquare* as pervasive cheating. Finally, an investigation of the various stakeholders involved in and around *Foursquare* will show how pervasive cheating impacts both play and use of the application. This allows me to focus on the pervasive nature of *Foursquare*, which is central to my argument that cheating in these types of location-based mobile media results in shifts in control and agency over play, as well as potential shifts in identity for both players and users.

THE MATTER OF GAMIFICATION

The term *gamification* is a true industry buzzword, often used to refer to applications with gamelike characteristics. As game designer Jesse Schell put it during one of many gamification conference panels, gamification is “taking things that aren't games and trying to make them feel more like games” (quoted in Graft, 2011). In an effort to show that gamification does, however, demarcate a distinct group of phenomena, Sebastian Deterding, Dan Dixon, Rilla Khaled, and Lennart Necke describe it as “use of game design elements in non-game contexts” (2011, p. 2). Gamified media, then, are not games but media which are designed to offer a certain level of “gamefulness” which depicts the experiential qualities of gaming. These qualities, they argue, make gamefulness distinct from playfulness in a sense that they are about “rule-bound, goal-oriented play” rather than “open, exploratory, free-form play” (20122, p. 3).

When it comes to non-game contexts, Deterding et al. do not explicitly link gamification to “specific usage intentions, contexts, or media of implementation” (2011, p. 5). In practice, however, the goal of gamification is to make applications and online services more like games, and therefore more engaging for the user—i.e.,the consumer.

As an industry term, gamification is in danger of following the path of “interactivity,” which, as game scholar Espen Aarseth has noted, became a form of industry rhetoric implying that “the role of the consumer had (or would very soon) change (sic) for the

better" (1997, p. 48). The way in which gamification is promoted as a revolutionary push towards making both old and new media more engaging for its users sound very similar. Take, for instance, this statement about *Foursquare* in game designer Jane McGonigal's *Reality Is Broken*:

> What makes a *Foursquare* social life better than your regular social life is the simple fact that to do well in *Foursquare*, you have to enjoy yourself more. You have to frequent your favorite places more often, try things you've never tried before, go places you've never been, and meet up more often with friends whom you might not ordinarily make time to see in person. In other words, it's not a game that rewards you for what you're already doing. It's a game that rewards you for doing new things, and making a better effort to be social (McGonigal, 2011, p. 166).

While McGonigal calls *Foursquare* a "good game" (2011, p. 167), gamification's detractors would argue that an app like *Foursquare* is hardly a game at all. It is a borderline case at best when viewed through classic definitions of the word *game* (see Salen and Zimmerman, 2004; Juul, 2005), and some argue that apps such as *Foursquare* consist mostly (or only) of feedback systems, without any game mechanics (Deterding, 2010; Bogost, 2011). Feedback systems, like points or badges, are seldom part of game-play; they usually communicate the results *of* game-play. As game designer and critic Margaret Robertson argues: "What we're currently terming gamification is in fact the process of taking *the thing that is least essential to games* and representing it as the core of the experience" (Robertson, 2010; emphasis in original). She proposes the alternative term *pointsification* to describe the phenomenon, adding that while the implementation of gamelike reward systems in media is not bad per se, it has the potential to strip out the sense of agency and competence so important for game-play (Robertson, 2010).

It should also be said that the team behind *Foursquare* does not consider it to be a game—on the official website, it is referred to as a "location-based mobile platform" (Foursquare, 2011). The fact that the creators sometimes have trouble addressing the exact nature of this platform becomes clear in a statement by *Foursquare*'s head of product, Alex Rainert. In an interview, he stated that they "don't consider *Foursquare* a game," adding that they do "recognize the value of using game mechanics to change behaviors" (van Buskirk, 2011), seemingly supporting and criticizing the various opinions on *Foursquare*'s status as a game.

While the above discussion is certainly interesting, it is not my goal in this article to untangle the different, sometimes conflicting views on gamification or to argue for or against the phenomenon. Rather, I want to explore play practices that emerge from the increased implementation of gamelike characteristics in location-based mobile media. In their overview of current uses of the term, Deterding et al. point to another industry use of gamification, the "increasing adoption, institutionalization and ubiquity of (video) games in everyday life" (2011, pp. 1–2). This characterization of gamification can be seen as part of a larger process of *ludification* of culture that can be traced back to the 1960s (e.g. Stenros et al., 2009; Frissen et al., 2010). With games and play increasingly pervading mainstream culture, the gamification phenomenon only adds to the articulation of the playful dimensions of our individual and cultural identity.

Critics might lament that gamification substitutes game-play for mere feedback systems; for some players, however, playing the feedback system *is* the core of the experience. For these players, the "new things" they undertake through *Foursquare* might *not* involve

getting out more or being more social, as McGonigal attests in her work. Instead, these new things could involve finding out new ways to not leave the house at all, or being rather antisocial, while still receiving the same rewards as those who play "by the rules." Such players, who play not by, but rather against, the rules, are usually referred to as cheaters.

According to the *Foursquare* FAQ, cheating is not a "widespread" phenomenon within the service (*Foursquare*, 2010). Many instances of cheating are subtle and often indirect, invoking at most annoyance in other users. I need to point out, however, that instances of cheating do bring with them new questions about identity formation in a ludified culture (Raessens 2006, Frissen et al., 2010, Frissen et al., forthcoming), as well as concerns about how cheating practices influence the relationship between play and nonplay (i.e., regular use) in location-based mobile applications like *Foursquare*. If we want to explore the notion of cheating in these media, we need to first acknowledge that cheating, both as a practice and as a term describing such practices, is rather hard to define. To understand the volatile nature of cheating, one should first look at the boundaries of play.

FRAMING THE *FOURSQUARE* EXPERIENCE

Cheating covers a host of deviant, devious, antisocial and/or unsportsmanlike practices which break the metaphorical "magic circle" that separates the activity of play from the outside world—a term originating from Johan Huizinga's *Homo Ludens* (1938; reprinted 1955). This magic circle supposedly defines the boundaries of play. The concept is that breaking the magic circle, as happens in some forms of cheating, results in play being suspended momentarily or indefinitely by the players and/or referee. The magic circle has been the subject of much discussion within game studies since the early 2000s.

The consensus seems to be that the magic circle, if such a boundary exists, never really excludes the outside world. It is framed as an "imperfect separation that players negotiate and uphold" (Juul, 2008, 62); as a "ritualistic and contractual boundary" based on a "somewhat implicit agreement" (Montola, 2009, 10); or as nonexistent, as ordinary life always pervades play (Pargman and Jakobsson, 2008; Consalvo, 2009). Goffman's discussion of *frame analysis*, as embraced by sociologist Gary Alan Fine in his classic ethnographic study of tabletop fantasy gaming (Goffman, 1974; Fine, 1983), has become a popular alternative to the concept of the magic circle (e.g., Jørgensen et al., 2011). Rather than dealing with a somewhat formalist notion of boundaries between the play world and the real world, frame analysis looks at different levels of engrossment that players experience when engaging a game. Players organize these experiences through frames of meaning. While the types of frames which can form during play are endless, Fine focuses on three main frames: the primary frame of the real world, grounding all activities; the game context with its rules and structures; and the fictional world presented within the game, in which players are present as characters (1983, pp. 183–86).

The concept of frames is helpful for dealing with gamified media like *Foursquare*, as it leaves more room for games which, like the role-playing games Fine studied, deviate from classic game models. As a location-based social-network application, *Foursquare* can be considered a pervasive game, a type of game with one or more salient features that expand the spatial, temporal, or social boundaries of play (Montola, 2009, p. 12). *Foursquare* exhibits all three forms of boundary expansion. First, it uses the real world as its playground and, as such, does not feature a fictional game world in which players

create characters. While the explicit link with the real world does not prevent players from creating fictional characters[1], in theory, players "play" with hemselves. Second, although there are weekly rankings of top users, the game is persistent, rather than divided into separate play sessions. Third, when it comes to play *Foursquare* features a large number of nonparticipants among its users, expanding the game beyond the core players.

The concept of having nonparticipants among *Foursquare*'s users may need some elaboration. Playing *Foursquare* does not seem to involve any bystanders, at least not in the way many pervasive games use them as audience, challenge, or obstacle (Montola et al., 2009). There are, however, nonparticipants in play who are nevertheless active within *Foursquare* itself. Although it might be considered a pervasive game because of its gamified nature, for many users, it remains mainly a location-based social-network application. As Frissen, De Mul, and Raessens point out, "A playful affordance is . . . 'virtual' (in the sense of a potentiality) until it is actualized by the playful attitude of the user and experienced as such" (2010, 8). Not all *Foursquare* users engage with the service with such an attitude, and for them, it might never feel like a game. Because these users are aware of the playful affordance of *Foursquare* (they, too, receive points and badges when checking in), they are not "unaware participants" (Montola, 2009, p. 16), but rather *aware nonparticipants* in play.

The line between being a player and being a user is, of course, thin. As Deterding et al. point out, it is a boundary that is "empirical, subjective and social: whether you and your friends 'play' or 'use' *Foursquare* depends on your (negotiated) focus, perceptions and enactments"; they add that "the addition of one informal rule or shared goal by a group of users may turn a 'merely' "gamified" application into a 'full' game" (2011, p. 3). From a frame-analysis perspective, however, players and users approach *Foursquare* from noticeably different frames. As Fine points out, every frame has meanings associated with it, and "these meanings are not necessarily shared with figures (persons, players, characters) operating in other frames" (1983, p. 187). The regular users' experience of *Foursquare*, for the most part, remains in the primary frame of the real world, which makes them less sensitive to issues which matter to players who are engaged in the game from a ludic frame.

PERVASIVE CHEATING

The dual experience of *Foursquare* as a game and as a location-based social app—manifested through the presence or absence of a playful attitude—is not usually thought of as problematic by either players or other users. Players, for instance, benefit from other users' involvement in adding and editing locations for the game, expanding their playground. Conversely, users can see their experience enhanced by players who never miss a check-in anywhere they go, making *Foursquare* feel alive as a social service. The exposure to one another's attitudes and practices mostly remains indirect. Players who *cheat*, however, not only potentially break the metaphorical magic circle of other players; they also directly expose nonplayers to their antics, potentially breaking or at least influencing *their* user experience as well. Montola states that "Pervasive games can take

[1] Some *Foursquare* users do create fictional characters, often meant for humorous purposes. One cheater claimed to have created, among others, a fake Martha Stewart checking into dollar stores and pawnshops, a fake Tommy Chong whom he made mayor of 120 cannabis clinics, and a "random nerd" who likes to check in at large Silicon Valley campuses (Krazydad, 2010).

the pleasure of the game to ordinary life" (2009, p. 21). Cheating in pervasive games, or *pervasive cheating*, as I will show below, can pull ordinary life into a game—whether nonplayers want this to happen or not.

As an application heavily dependent on user-generated content and honest behavior when it comes to check-ins, *Foursquare* offers ample opportunity for cheating practices. As a result, cheating practices vary greatly in form and (perceived) severity. Cheating practices are not limited to breaking the boundaries of play that result from the social negotiation processes discussed above. The socially negotiated rules could be called "soft rules"; in digital games, however, there are also "hard rules," which are presented through the actual game code (Consalvo, 2007, p. 87). Additionally, everyone using a service such as *Foursquare* agrees to obey certain contractual rules put forward in the Terms of Use. Cheating in digital games, therefore, is sociotechnical in nature, with the rules and boundaries of play both set and contested on the levels of play, game design, game contracts, and game culture (Kücklich, 2008; De Paoli and Kerr, 2009; Glas, 2012). With pervasive cheating, the act and the effects of cheating are further complicated by the differing frames of engrossment through which players and users approach *Foursquare*. While I will forgo the effort to categorize cheating practices, I will explore different forms of cheating to show how they affect the various parties involved in creating, playing, and using *Foursquare*, and I will show how these parties all have different stakes in pursuing and contesting pervasive cheating.

THE STAKES IN *FOURSQUARE*

All parties with certain interests in a game can be considered stakeholders. In the case of *Foursquare*, these parties include the aforementioned players and users, but also its makers and the other companies and businesses associated with the game. Whether their interests are commercial or affective in nature, stakeholders usually strive to achieve what they think is in the game's or their own best interest. Cheaters are no exception: while their practices might be deemed deviant or even devious, many of them see their activities as highly pleasurable. They, too, can be seen as stakeholders. In the following sections, I will seek to describe how *Foursquare*'s stakeholders are affected by and deal with cheating in different ways. Exposing various negotiations between these stakeholders about the rules of play provides valuable insight into the ways cheating influences the pervasive nature of play in gamified media.

The Players

According to Salen and Zimmerman, there is a hypothetical "standard" and honest game player, who plays a game as it was designed to be played. This player type forms the "test case against which all other types of players are contrasted" as he or she is the most "law-abiding citizen" when it comes to following the (hard) rules (2004, pp. 268–269). The other types they mention (the dedicated player, the unsportsmanlike player, the cheat, and the spoilsport) all deviate in various ways from the rules of play—by finding ways around them, breaking them, or ignoring them altogether. The standard player, however, is an idealized player, at least from the viewpoint of most game designers. While Salen and Zimmerman rightfully point out that such an ideal player might not exist, the idea itself provides a "backdrop against which less rule-governed styles of play can be understood" (2004, p. 269).

And indeed, while most *Foursquare* players would probably consider themselves standard players, many do bend the rules. The idea behind checking in at venues, for instance, is that you do so only when you are actually there. Many players, however,

check in beforehand (to show friends that they are on their way) and/or retroactively (in case they have forgotten a check-in). One reason for this is that the app tracks and keeps all of one's check-in data, making it available on the website for oneself and, if desired, others. Many players (and regular users) would like this list to be as complete as possible. While not complying with the basic check-in rules, these practices are generally considered acceptable behavior; this would suggest that what defines a standard player not only depends on the way a game is designed, but also is influenced by the rules created and negotiated socially. In a blog post on cheating practices, the *Foursquare* design team indicates that it is well aware of these socially accepted rules: "We're fine with pre-check-ins and post-check-ins. . . . (Trust us, we do it too to fill out our history pages!)" (Team Foursquare, 2010).

While check-in etiquette might be lenient toward pre- and post-check-in practices, standard players see honesty about checking-in as key to the *Foursquare* play experience. According to some disgruntled players, the first year after *Foursquare*'s launch in March 2009 saw rampant dishonest check-ins. During this period, it was easy to check in at any location from anywhere. This situation forced *Foursquare* to implement "cheater code" (discussed below), but also triggered players to vent their dissatisfaction through social media like Twitter and blogs.

The players' ire was provoked particularly by people using dishonest check-ins to become mayors of venues. Becoming mayor through standard play requires consecutive visits to places, and only the person who has visited a given place the most times is crowned mayor. Places such as train stations and coffeehouses are therefore hot spots for *Foursquare* players who are trying to oust each other as mayor. In terms of time investment, being a mayor of such a hot spot has high value for players, and one can imagine the general frustration if someone who has never been there suddenly grabs the mayorship.[2] When the stakes are high for players who are abiding by the rules of play in gamified media, cheating can feel just as destructive as it does in classic games.

The Cheaters

Why players cheat or deviate in other ways from the rules (social and/or coded) is difficult to address. As game scholar Mia Consalvo points out after having conducted countless interviews on why players cheat, "Perhaps the only constant is the lack of a constant factor" (2007, p. 94). In the case of the "I'm on a Boat!" badge, the person responsible might just have wanted to have the badge without going to the trouble of actually getting on a boat. Maybe adding the "#boat" tag was just an act of stretching the truth a bit, since right behind the station there is actually a waterfront area with ferries. Maybe he or she wanted to annoy -or please- other *Foursquare* users by forcing the badge upon them. Maybe he or she just wanted to show how easy it is to trick the system.

While the reasons behind deviant behavior in games may vary, an overarching theme in the way players generally talk about cheating in games is that it provides an unfair advantage over those who play by the rules (Consalvo, 2007, p. 87). In a game like

[2] As *Foursquare* was one of the first big gamification phenomena early 2010, the frustration about cheating practices during battles for mayorships even entered pop culture. Popular webcomic *Player vs Player*, for instance, dedicated a story arc to it (Kurtz 2010), and it even spawned an online video series called *Foursquare Cops* (Tondorf 2010).

Foursquare, which hardly has any quantifiable outcomes that could be deemed a winning scenario, this idea of what constitutes an advantage might sound exaggerated. With the exception of deviously achieving a mayorship, which might directly affect players striving for this position in the standard way, in most cases cheating in *Foursquare* affects other players only indirectly, lessening the impact of cheating considerably. This suggests that cheating in a game like *Foursquare* functions mostly to annoy other players. Some cheaters have, however, seen larger stakes in the way they play—and cheat in—the game.

An interesting case to illustrate this point is that of a group of cheaters in Indonesia. In 2010, many players made complaints about this group. These users, whose online profile made it clear they were in fact located in Indonesia, managed to amass almost all possible badges with thousands of check-ins all over the world. The badges include those tied to very specific locations and/or very specific events or times. Examples include a badge for having voted in a U.S. midterm election on Election Day; one for having participated in political comedian Stephen Colbert's "March to Keep Fear Alive" event in Washington, D.C.; and a Banksy Badge, which one could earn only by checking in at select movie theatres playing the street art documentary *Exit Through the Gift Shop* and, while being there, mentioning its director Banksy in a "shoutout" (one of the ways *Foursquare* allows players to alert others to their presence). To acquire their large numbers of badges and other rewards, these players had managed to check in from one place to another (including locations in different countries) faster than realistically possible, a deviant practice called "jumping." Many of the Indonesian jumpers were to be found in the top *Foursquare* user lists (and still were there at the time of this writing, early 2011).

According to one Indonesian blogger, this trend among Indonesian *Foursquare* users can be seen as a continuation of their use of social-network sites as a form of popularity contest, with the goal of getting as many "friends" as possible into their network, by whatever means, and regardless whether they actually know these people ("mia1984," 2010). In this blogger's view—and that of many other players—these users just don't understand how services like Facebook and *Foursquare* work (i.e., what the rules of play are). However, as cultural anthropologist Michiel de Lange points out in his study of mobile-media practices in Indonesia, cultural context is important. In Indonesia, "Being able to play with, and subvert pre-programmed rules is considered a valuable asset" in view of people's experience of having lived under the strict laws/rules of Suharto's regime (2010, p. 193). Subversion is seen not only as fun, but as a source of prestige among peers. In other words, for these cheaters, the stakes are such that they consider their behavior not deviant, but status-enhancing.

Other Users

As noted above, the distinction between players and other users, or aware nonparticipants, of *Foursquare* can be difficult to make. However, one can argue that when users are the direct or indirect victims of cheating practices, the effect on them is somewhat different from the effect on players. Cheating, for players, means that the metaphorical magic circle of play becomes unstable, transporting them back from the play world to the real world. To use Goffmanian terms (1974), the game is temporally *downkeyed* from the ludic frame to the primary frame. For a user who is normally not really concerned with the ludic frame, cheating practices can cause a reverse frame switch, where the game is not downkeyed but, instead, reality is *upkeyed* to a ludic level.

The “I’m on a Boat!” anecdote can serve as a useful example of frame switching for the purpose of analysis. The fact that Amsterdam Central Station was turned into a “boat” within *Foursquare*’s venue database confronted users with the ludic frame, diffusing the service’s supposed link to the real world. Furthermore, the unfair advantage of getting the badge was distributed to both players and users *without their consent*, making them involuntary and potentially unwilling “accomplices.” While I consider myself a participant who engaged with *Foursquare* with a playful attitude—engaging it within a ludic frame—many nonplayers also were affected by the devious action that had taken place. When they suddenly got the badge that day during their routine check-in, they were turned into cheaters, an identity that is mainly linked to the ludic frame of the game rather than the primary frame of the real world.

Cheaters therefore not only focus nonplayers’ attention on various deviant uses of *Foursquare*, but can actually pull aware nonparticipants into reluctant (or willing) participation in play. As frames are shifted as a result of cheating practices, we can observe that while cheating may break a game for the players, it can simultaneously break reality for all others.

While it can be argued that a playful attitude is always voluntary and therefore cannot be forced upon a user by a cheater, the same cannot be said about the user’s identity. Even when people using *Foursquare* consider themselves nonplayers, their user profile still shows the points, badges, and mayorships they have earned by using the service. If maintaining social-network profiles functions is a way to write one’s (virtual) identity into being (Boyd, 2007, pp. 13–15), and if we follow the notion of a ludification of culture, we can argue that maintaining profiles like *Foursquare*’s attribute to what can be considered *playing* one’s identity into being. If cheaters interfere with these profiles, identity construction and/or proliferation of players and users alike are affected.

The Designers

The design team behind *Foursquare* is well aware of cheating practices and the potential annoyance or even grief they can cause to both players and nonplayers. They have implemented barriers against practices they identify as cheating. On the level of game contract, for instance, they warn users against taking any improper action, or contributing any content which “you know is false, misleading, untruthful or inaccurate” (from the Terms of Use, *Foursquare*, 2011). The game contracts, which all users agree to when they create their account, allow the design team to block or even cancel accounts. On a technical level, there is the aforementioned “cheater code” to prevent location cheating. While *Foursquare*’s design team keeps details about its anti-cheating techniques deliberately sketchy, an investigative study has shown that they involve using a phone’s GPS for verifying locations and for monitoring check-in frequency at single venues, distance between different check-in venues, and rapid-fire check-ins in multiple venues in one location (He et al., 2011).

While the measures mentioned above sound tough, checking in while not actually physically being at a venue still remains possible. The catch is that the potential to unlock rewards (mayorships, points, badges) is blocked during false check-ins. Technical loopholes for reaching these rewards still exist, as shown by the Indonesian jumpers, who mostly check in through mobile web browsers (an option developed as an alternative for users without GPS-enabled phones). While checking in through mobile web browsers does allow users to earn badges and use many of *Foursquare*’s other social-networking functionalities, it does not allow check-ins to count for mayorships. This design feature

prevents users without access to modern smartphone hardware and data plans from becoming mayors, but, at the same time, it does not stop those willing to cheat from exploiting the potential for earning badges deviously.[3]

Foursquare's design team makes no secret of the need for balancing issues like these. Commenting on a well-known cheater's blog post, the company's co-founder Dennis Crowley asks:

> What's more valuable—a system in which everyone can play & participate? Or a system that places emphasis on the validity of each check-in/post at the expense of all-inclusiveness? I think the thing that makes foursquare [sic] so interesting—and yet so difficult—is that it wants to be both things at the same time. And if you survey users, just as many use it for finding their friends as they do for trying to get points/badges/mayorships" (Crowley, in a comment on Krazydad, 2010).

What these remarks suggest is that *Foursquare* is designed to appease both players and users existing within different frames of engrossment. Cheaters, on the other hand, constantly raise the stakes for the designers, prompting them to act against them to keep the playful spirit of *Foursquare* alive while preventing other users from leaving in frustration at overly strict check-in systems. Keeping both players and other users on board is important, as the service's business model depends on it; this brings us to the final stakeholder group to be discussed here.

Businesses

As *Foursquare* is a free service for its users, its business model depends on other means of income. Primary sources of income are marketing partnerships, with various brands using the service to reach the social-media crowd. *Foursquare*'s reward system is comparable to loyalty programs like airlines' frequent-flyer systems, rewarding repeat customers in a similar fashion (Bogost, 2010). Interested parties can tap into this loyalty by offering promotional, brand-unique badges. For venue owners, a free set of tools is available to setup "Specials" for regular customers or mayors. These forms of in-game marketing, in which both *Foursquare* and participating businesses have not affective, but commercial, stakes, can be derailed by cheating practices.

Specials are especially sensitive to exploitation. Promoting a Special, like free drinks in a bar for the mayor, invites potentially dishonest check-in behavior. This in turn might put off honest players—potential customers for a business. To protect *their* customers against situations like this, in late 2010, *Foursquare* began offering businesses the possibility of ousting mayors from their venues if they have reason to believe a mayorship was not gained through legitimate means.[4] Although understandable from a commercial perspective, decisions like these make businesses, rather than game makers or players, into arbiters of the rules of play.

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[3] This situation has, furthermore, prompted the design team to implement a system in which players suspected of cheating practices are flagged. When deemed guilty, they will have their accounts blocked from earning any rewards.

[4] Additionally, business can assign employees and managers for their venues (in effect preventing these users from collecting rewards) and display check-in codes on screens which players need to type in for validation.

While the experience of players and nonplayer users, as well as the content they generate, matters greatly to the design team, we should not underestimate external business partners, whether they are big brands buying their own badges or small companies using the free Specials tool. They are increasingly becoming key stakeholders, forming a source of (potential) revenue and fueling the growth of gamified media like *Foursquare*, but also acting as participants in the realm of play. Whether and how these commercial parties use (and potentially misuse) their agency over the rules of play is beyond the scope of this article, but this unquestionably shines new light on the ways the boundaries of play are negotiated in gamified media and culture.

CONCLUSION

In their discussion of pervasive games in media culture, game researchers Jaakko Stenros, Markus Montola, and Frans Mäyrä have pointed out that having a clear distinction between serious and playful mindsets and contexts is not sufficient to cover all pervasive play forms. They argue that it "omits the constantly growing phenomena of fabrication and pretense, which exist in the gray borders of playfulness" (2009, p. 271). Both fabrication and pretense result in situations in which one party is oblivious to playful intentions while the other is not. This paper has been an effort to address another such grey area of pervasive games, cheating, in which all parties are aware of the presence of playful potential, but deviant practices challenge the boundaries between play and ordinary life. To this purpose, I first discussed the status of these boundaries in gamified media and pervasive games, concluding that cheating adds further complexity to the already blurred distinction between play and nonplay inherent in these forms of games. By exploring various forms of cheating as well as the ways different stakeholders influence and are influenced by these practices, I have shown that cheating can be much more than just a nuisance. In a way similar to fabrication and pretense, where an "asymmetry in information also creates an asymmetry in power and control" (Stenros et al., 2009, p. 273), cheaters can create situations in which other stakeholders' agency over gamified media like *Foursquare*—and, as a consequence, their own identity—is at stake.

Games scholar Julian Kücklich reminds us that the study of cheating "foregrounds the fact that games are embedded into a larger social and cultural context with undeniable links to the world we inhabit" (2008, p. 69). With the phenomenon of gamification on the rise in our culture, we will most certainly see an increase in the quantity and variety of pervasive cheating practices. For this reason, we need further research to explore the concept of cheating in relation to the increasingly prominent role of the ludic in our culture.

There are, however, additional areas for research into the notion of pervasive cheating. Kücklich, for instance, points out that cheating in massively multiplayer online role-playing games (or MMORPGs) is of special interest, since

> These [games] are novel participatory media forms that are infused with cultural codes from the real world such as the flow of currency and commodities. Insofar as the characters themselves become a commodity in MMORPGs, cheats that address this commodification can be said to possess critical potential (Kücklich, 2008, p. 69).

Like MMORPGs, gamified media like *Foursquare* are novel participatory media forms too, and here cheating has critical potential as well. Take, for instance, Bogost's argument that gamification, or *exploitationware*, as he suggests calling it, perverts the traditional two-way relationship between institutions and customers. In his view, "Organizations ask for loyalty, but they reciprocate that loyalty with shams, counterfeit incentives that neither provide value nor require investment" (2011, p. 4). From this perspective, we should explore whether and how pervasive cheating practices that highlight the futility of gamification's reward systems have the potential to make players aware of such asymmetrical relationships.

The link between cheating and critique is not limited, however, to exposing the business models behind the gamification phenomenon. Players themselves find other creative uses for manipulating the rules of play. I have, for instance, come across a *Foursquare* venue which, translated from Dutch, was named "Hangout for idlers, potential criminals, and people who've lost their way" and was tagged with terms like "#freeloaders," "#homeless," and "#dangerous." Additionally, someone used *Foursquare*'s "tips" option (usually reserved for positive feedback about a venue) to point out how the local government had failed to stop the deterioration of the building in question—as it turned out, an old, derelict high school building. Entries like these suggest that bending the rules of a playful platform like *Foursquare* can even be used in forms of political activism.

While we could debate whether actions like these can still be considered a form of cheating, the link between pervasive cheating and critique is nevertheless intriguing. It demonstrates once again that, as a practice pervading the spatial, temporal, and social boundaries of play, pervasive cheating has the potential to affect the real world in unexpected ways.

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