

On Gamification and Persuasion

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Abstract

The discussion around gamification has been gaining strength in recent years, and game scholars are focusing on the term and the phenomena it describes. The main goal of this paper is to contribute to this discussion by understanding the gamification phenomenon from the perspective of the persuasive questions it poses, both as a discursive term and as persuasive systems. The paper shortly reviews current debates around the gamification term and present definitions, as a basis for the analysis of gamification and persuasion. A description of the rhetorics of gamification is then made, discussing the positioning of gamification in relation to video games and larger cultural and societal contexts. Next, the persuasive characteristics of gamification systems are analyzed using concepts of persuasive technologies and procedural rhetorics, highlighting the connections between those characteristics and the gamification rhetorics described.

Keywords: gamification, persuasion, rhetorics, persuasive technology

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1. Introduction

This paper investigates the gamification phenomenon from a persuasive perspective, focusing both in its discursive and systemic aspects. In the first part of the paper a review of applied definitions of gamification and of the academic one proposed by Deterding et al. [2011a] is made, to demarcate the nature of the gamification analyzed here. Then, the academic definition is discussed in the light of the relationships between gamification and game systems, as a way of understanding the specific qualities of gamification systems in their present form and their differentiation from serious games and video games in general. Also, the problems faced by current definitional efforts of gamification are highlighted, providing an overview of current discussions, in order to present the divergent fields of application, ideas and actors entangled in this debate. Finally, a division is proposed to mark which group of ideas and systems are here analyzed as being gamification.

The following section of the paper builds on top of that definitional debate to analyze the persuasive qualities of gamification. The analysis is structured around two

main dimensions of persuasion: the rhetorics about gamification, games and society, and which are the persuasive elements and tools of gamification systems. The first dimension draws on the concept of rhetorics as a persuasive discourse or narrative within culture and society, following the criteria set by Sutton-Smith's methodology in his study of the rhetorics of play [1997] and in dialogue with Bogost's critique of the gamification term [2011]. A description of gamification rhetorics is then made, pointing to discursive, cultural and societal aspects and implications of that phenomenon in contemporary society, highlighting its subjects, advocates and assumptions. This analysis places these gamification rhetorics in the context of present discussions of video games' roles and functions in contemporary society as in the works of Wark [2007] and Dyer-Witthford and Peuter [2009], in accordance to the connections between gamification and video games exposed in the first section of the paper.

The second dimension of the analysis of gamification and persuasion is that of the persuasive qualities of gamification systems, which consists in a more systemic look at their functional and design qualities. Fogg's formulation of persuasive technologies [2003] is applied to gamification systems to describe the persuasive tools used by those, with special attention to tunneling, self-monitoring, surveillance and conditioning. This description is put into the context of current discussions of gamification systems and examples are used to clarify the implementation of those tools. They are also connected to the rhetorics described earlier, in order to explain how the persuasive technology characteristics of these systems also operate in the broader cultural and societal positioning of gamification. The concept of procedural rhetorics [Bogost 2007] is also taken into consideration, showing how the specific nature of processes in gamification systems is related to aspects of contemporary society such as immaterial labor, in Dyer-Witthford and Peuter formulation [2009] as presented in the rhetorics section of the paper. Finally, the concluding section discusses further implications of persuasion and gamification, pointing to directions of research that can benefit from the present analysis.

2. What is Gamification?

There is growing discussion around the concept of gamification, which is recent and quite incipient in game studies circles. In general terms, working and applied definitions of gamification have been around since 2008, but its major momentum arrived in 2010

[Deterding et al. 2011b]. The most comprehensive and detailed definition of gamification has been provided by Deterding et al. [2011a], and it will be contrasted with applied definitions used by those who sell or advocate gamification systems, as a way to highlight the different emphasis the use of the term can present.

2.1 Applied Definitions of Gamification

A relevant set of actors in the discussion of gamification are the companies and services that sell gamification systems or services to other businesses. According to their marketing need of establishing themselves and their product, such companies have their own definitions of gamification which are focused at convincing executives into investing in the alleged positive values of gamification. As seen in the three quotes below, there is a strong emphasis in values like participation, engagement, fun, and good behaviors which will provide improved productivity and customer retention. These values are the result of the application of fuzzy concepts like game mechanics, game dynamics or game strategies.

The verb 'to Gamify' means to apply game mechanics in everyday applications and situations to boost engagement, fun and good behaviors. [Gamify, Inc. 2011b]

At its root, gamification applies the mechanics of gaming to non-game activities to change people's behavior. When used in a business context, gamification is the process of integrating game dynamics (and game mechanics) into a website, business service, online community, content portal, or marketing campaign in order to drive participation and engagement. [Bunchball, Inc. 2010, p. 2]

We offer consulting services to help enterprises develop a game strategy optimized for their challenges and workforce. As part of our services, we've developed a set of software products which allow our clients to quickly realize some of the wide ranging benefits that gaming mechanics can offer, including an immediate impact on employee productivity, engagement and retention. [Seriosity Inc. 2010]

Another noteworthy component of such applied definitions is the emphasis, explicit in the Seriosity Inc. quote above, in the speed and immediacy of the benefits of gamification. This is a common strategy in business rhetoric which aims at creating a need for a new service, even if such innovation is not yet fully developed. The emphasis on the speed of the results combined with the hype around the term, e.g. in the BusinessWeek website [MacMillan 2011], is not only an indicator of a self-appointed importance. It is also a rhetorical strategy [Bogost 2011], as laying the boundaries and domain of gamification serves as a way

of consolidating vantage positions, which will be discussed in more detail later.

2.2 An Academic Definition

Moving away from the overly enthusiastic domain of business focused definitions, it is important to analyze the academic definition of gamification proposed by Deterding et al. [2011a, p. 10]: “*Gamification* is the use of game design elements in non-game contexts”.

If we look at the applied definitions mentioned before, we can see that this definition properly describes their use of the term. When explaining this definition, the authors propose ways to understand some of the most important questions around gamification, such as 1) its relationship with play and games, 2) the use of game design elements instead of full-fledged games, and 3) the non-game contexts in which gamification systems are deployed.

Gamified systems are imbued in the idea of gamefulness [Deterding et al. 2011a, p. 11]. Gamefulness can be understood as an emphasis on the gaming, the *ludus* dimension of games and play, their more structured and goal-oriented experiential and behavioral aspects [McGonigal 2011a], in contrast to *paidea* and ideas of playfulness, with their more open and improvisational quality. Deterding et al. rightly point to how this gamefulness of gamification guides the nature of its appropriation of game design elements [2011a, p. 11], and this gameful character also has implications in the persuasive structures active in gamification systems, as will be detailed later. For now, it is enough to mention that the elements of game design most used by gamification systems are marked by this goal-oriented and reward-focused character, e.g. badges, leaderboards, and achievements, and the widespread, and sometimes problematic, adoption of such mechanisms is an important point of contention for gamification critics [Robertson 2010; Schell 2010; Deterding 2010a; Deterding 2010b].

However, gamification systems do not implement these elements trying to create full game experiences, and should not be judged by the exactly the same criteria as fully-fledged games. In gamified systems, it is unnecessary to create full-fledged games to generate gamefulness. Deterding et al. describe this incompleteness as a perception of gamefulness that is more about “*affording* gameful interpretations and enactments, rather than *being* gameful”, with a relevant example being the dubious character of Foursquare: is the user playing the “get more badges” game or just using a location-sharing application? Both interpretations are possible and can exist interchangeably in the use of the same system [2011a, p. 11]. While full-fledged games are stricter and focus on affording *primarily* gameful or playful interpretations, gamification systems are intertwined

with other instrumental perceptions and rely on constant shifts between them.

Finally, this incomplete and shifting approach to the use of game design elements can be used, when coupled with the gamefulness/ playfulness categories, to differentiate gamification from other efforts of using games to affect non-game contexts [Deterding et al. 2011a, p. 13]. Serious games, then, can be seen separately from gamification efforts, as their emphasis is on the creation of full-fledged games to tackle a large variety of topics besides entertainment [Sawyer and Smith 2008]. Even though Deterding et al. do not circumscribe gamification to a specific kind of functional goal [2011a, p. 13], the use of the gamification term and the non-game contexts associated with it are somewhat different from those of serious games and other efforts of affecting people through games and play. As an example, it is noticeable the emphasis on buzzwords and business jargon in the applied definitions above, showing a preoccupation with consolidating the term and making it attractive, which contrasts with the original focus of serious games on educational and training goals [Deterding et al. 2011a]. The relationship between gamification and the non-game contexts where it has been deployed will be further analyzed later, as it has strong connections to the persuasive elements of the gamification phenomenon.

3. Gamification and Persuasion

From our brief discussion above about the definition of the term gamification, it can be seen that in the core of its formulation is the idea that the use of games, both as an applied subset of design elements or as models for simulating whole activities, can imbue non-game contexts of positive values associated with games. These gameful values would, then, foster change of behavior and perception about the non-game activity being gamified. This persuasive capacity of gamification operates in two dimensions, one related to cultural and societal framing of games and gamification and the other to the systemic persuasive characteristics of these systems to foster change of behavior and perception in users-players.

3.1 The Rhetorics of Gamification

As stated by Bogost, gamification is a powerful term because it maintains the notion of a potentially magical power of games to affect people while claiming that such power can be added to another activity seamlessly, as well as stating that the act of naming is an important tool to advance a position [2011]. This is an important argument about the cultural dimension of the gamification phenomena, because it speaks of the cultural perception of games within culture and society and to the changes this perception is going through. To analyze the gamification phenomena in this context, it is important to refer to discussions of play and games

in culture and society to find useful tools for the analysis of gamification's rhetorics. Here, the concept of rhetoric is applied based on its use by Sutton-Smith in his analysis of what he calls rhetorics of play. A rhetoric is understood as:

[...] a persuasive discourse, or an implicit narrative, wittingly or unwittingly adopted by members of a particular affiliation to persuade others of their beliefs. [Sutton-Smith 1997, p. 8]

Sutton-Smith, then, proceeds to apply the concept of rhetoric to the phenomenon of play, placing it within its cultural and societal contexts, noting also that such rhetorics apply to scientific discourses and carry power by defining a knowledge base [ibid, p. 8]. In his analysis of such rhetorics of play, he describes seven rhetorics which are characteristic to common framings of play: play as progress, play as fate, play as power, play as identity, play as the imaginary, play and the self and play as frivolous. To validate these rhetorics, Sutton-Smith lists eight criteria to which they should conform [ibid, p. 15-16]:

1. A rhetoric can be shown to have a clear basis in spread cultural attitudes of a contemporary or historical kind;
2. A rhetoric has its own group of advocates, in order to be persuasive rhetorics and not only narratives;
3. Each rhetoric applies primarily to a specific type of playfulness, and that some epistemological affinity must exist between the rhetorics and the ludic subject matter;
4. Each rhetoric applies to a distinct kind of player;
5. There must be affinity between the rhetoric and particular scientific or scholar disciplines;
6. That there is some matching between the nature of the rhetorical assertions and the type of play to which they are applied;
7. Rhetorics are persuasive narrative because there is some kind of gain to their advocates;
8. Definitions of play relate to the functions of play to the players' motives and to the functions of play in the larger culture.

Gamification as a persuasive discourse can be validated and analyzed in more detail according to those criteria, but some adaptation needs to be done. First, the above criteria are focused on play, and the present focus is gamification. Second, as mentioned in the definition section, gamification is not strongly formulated as a scholar field and academia is recently

starting to focus on its study, therefore the academic discourse focus of Sutton-Smith criteria 5 is less relevant in this analysis. Third, the basis for the discussion of the rhetorics of gamification (criteria 1) was mentioned in the definition section, through the overview of the growing talk and discussion by different actors, both pro and against gamification. Also, it needs to be stated that gamification, being recent and connected to video games as cultural phenomena, must be analyzed in light of its intertwining with the role of video games in culture and society.

The reviewed criteria, then, can be combined into four larger groups for discussion:

1. Criteria related to the advocates of a rhetoric of play and their possible interests for doing so (criteria 2 and 7).
2. Criteria connected to the role assigned by a rhetoric to the functions of play in the larger culture and the basis of such rhetoric in society (criteria 8).
3. Criteria about the nature of the players involved in the rhetoric and the functions of play to them (criteria 4 and 8).
4. Criteria that describe the nature of the types of play associated to a rhetoric, their epistemic connections and affinities (criteria 3 and 6).

The discussion of the last group will be made separately in the later section that analyses the persuasive properties of present gamification systems, as the two are deeply interrelated. Finally, some of the criteria above are connected to aspects of the definition problem of gamification mentioned in the previous section and will be noted here in less detail, to give room for others which need to be detailed further to provide a clear depiction of gamification as a rhetoric.

3.2 Advocates of Gamification Rhetorics

As seen in the applied definitions of gamification earlier, there is a group of advocates for gamification that try to establish it as a relevant topic of discussion and as a desired buzzword for businesses. These advocates argue that it is a potential untapped market, with big gains for those who adopt gamification. Bogost acidly criticizes such advocates by saying that their efforts are the same as common marketing practices of selling generic solutions that can be adopted by several brands [Bogost 2011]. Indeed, these advocates are also the companies and individuals that are marketing gamification services or getting economical and status benefits from talks and books on the subject, e.g. Gabe Zichermann. Their expectation of profit clearly validates and makes explicit their good

reasons for advancing gamification, in its current business and value-production format.

Such advocates are active in the definitional debate around the term, and also work to produce more and more discussion and a public presence for it. Recently, gamification has been the theme of series of talks [McGonigal 2011b; Deterding 2010a; Deterding 2010b; Schell 2010b], books [Reeves and Read 2009; Zichermann and Linder 2010], online discussions [Yu 2011; Gamify Inc. 2011a], and services [Bunchball, Inc. 2010; Huotari and Hamari 2011]. In that milieu, ideas of gamification appear shoulder-to-shoulder with other concepts, such as “gamefulness”, “direct impact games”, and “serious games”, in fields as diverse as political action [McGonigal 2011a], altruism [Boom Boom! Revolution 2009], positive social interaction [Akoha Inc. 2011], formal education [Quest to Learn 2009], informational work [Reeves and Read 2009] and services [Huotari and Hamari 2011].

Some of the authors involved in these discussions do not even adopt the term, and many are critical about it, e.g. McGonigal, but their ideas have been appropriated as examples or basis for further developments of gamification. Some of those indirect gurus participated in gamification conventions, e.g. McGonigal in the Gamification Summit 2010, or are, like Reeves and Read, creating applications that are taken as examples of gamified systems, e.g. *Attent*¹. Again, the creation of public debates around the term is an important rhetorical mechanism to legitimize it and, by extension, make the positions of its current advocates stronger.

3.3 Gamification in Culture and Society

As Deterding et al. propose, gamification is not necessarily defined by its digital component [2011a, p. 12], but it is also reasonable to say that many of the conventions and motivations being deployed in gamified systems draws heavily from video games instead from other non-digital formats. Therefore, to understand the role and function reserved for gamification in its rhetorics, it is necessary to highlight how video games, as the main basis for gamification, are placed in society and culture.

With the growth of video games in the last decades of the 20th century, the perception of games within society and culture took a strong turn in the direction of a more object-focused view, and their relevance has been more and more recognized. Digital games are products, with their own specific producers, workers, studios, factories and consumers. The video games industry is a large segment of the entertainment

¹ An email management application that uses a virtual currency, *Serios*, to establish value in each email sent or received. It aims at increasing productivity in the workplace through creating a scarcity economy and tracking data to overcome information overload [Seriosity, Inc. 2010].

complex, producing revenues in the house of billions of dollars, interacting in a scenario of media convergence with movies, recording companies, advertisement and merchandise products. That industry is constituted of several distinct features of the contemporary information industry: a globalized workforce, with unequal division of labor between rich and poor areas, a global and expanding market, also very unequal in its distribution around the globe, and a peculiar mode of value production. The industry produces economic value through immaterial labor, "labor that produces the informational, cultural or affective element of the commodity" [Virno and Hardt 1996, p. 262], which, in contemporary societies, "occupies a strategic position because of its role in intellectually and affectively shaping subjectivities" [Dyer-Witthford and Peuter 2009, p. xxiii]. Immaterial labor also characterizes a blurring of boundaries between work and leisure for the individuals performing it and a different structuring of the work context [ibid, p. 23], which are important elements in gamification's model of its user-player.

By being perceived as objects rather than as an activity, video games can circulate easily through different contexts of life, especially due to the convergence of media scenario of contemporary society. Playing them is not confined to the nearly sacred and ritual boundaries of Huizinga's magic circle or to the contexts and tropes assigned to play in the rhetorics described by Sutton-Smith. As Castronova states, the sociocultural context of the player and play in the virtual worlds of video games "cannot be sealed completely; people are crossing it all the time in both directions, carrying their behavioral assumptions and attitudes with them" [2006, p. 147]. Through this circulation capacity, video games have taken hold in different traditionally non-game contexts, as exemplified by the serious games concept and by gamification.

The distinction between serious games and gamification goes beyond the completeness as game systems and perception as games mentioned in the definitions section. It is also related to the functions in society assigned to each of those systems. Serious games are usually positioned as games that can refer to real-life issues with meaningful results [Bogost 2011] as well as teaching players the skills and knowledge about these issues that can be used outside the game, in the situated cultural and societal contexts of players' lives. Gamification, in the other hand, is not much worried about knowledge or useful skill acquisition: from its formulations, the focus is clearly in the improvement of engagement of its players with a non-game service, activity or product, ultimately achieving "the cause of a business objective" [Zichermann 2011] of producing value in the form of identification, loyalty or productivity.

Gamification's appropriation of video games is not focused in their learning potential, but on their capacity to generate affective, informational and economic value through the shaping of individual's emotions. This capacity allows for "the mobilization of players themselves as immaterial labor" [Dyer-Witthford and Peuter 2009, p. 23], in which content and data generated by players through playing have economic value. In gamification, the emotional engagement of the user-player equates to economic value and strategic advantages for the enterprise: an imagined wide and profound adoption of gamification systems would then allow for a society of satisfied and engaged individuals that are producing value in its different forms through their use and play of systems present in most contexts of their lives. From a negative perspective, this would be a constant state of emotion-driven immaterial labor, which critics have equated both to a "gameapocalypse" of completely ubiquitous gaming and tracking of performance [Schell 2010b] and to exploitation schemes [Bogost 2011]. However, business thinkers claim that some spheres of life will reach similar states of fuzziness between work and leisure, whether or not it is established by gamification:

It's inevitable that serious play will invade the workplace, and the phenomenon will be disruptive. The only choice is to purposefully construct the play so that individuals and the companies who employ them both win. [Reeves and Read 2009, p. 190]

The question then becomes: who wins what? Enterprises aim to produce value, but what is the impact on individuals? And who are they in this gamification discourse? This leads to the next section on the subjects of the gamification rhetorics.

3.4 The Subjects of Gamification

"No wonder digital games have become the emergent cultural form of our time. The times have themselves become just a series of less and less perfect games" [Wark 2007, p. 22]. To Wark, individuals cannot leave the atopian gamespace of contemporary society [ibid, p. 1]. In the context of contemporary societies, games and their players become an ideal metaphor for their context, as novels and cinema were for the 19th and 20th century respectively [Dyer-Witthford and Peuter 2009, p. xxvii]. Players of video games are strongly connected to the roles of both users of software systems designed for fun and play and consumers that must be satisfied with products. They have come to be called *gamers*, being named after their favored object of entertainment, the video game. This is distinct from the different types of characterizations of players articulated by the rhetorics of play of Sutton-Smith, which are centered around the attitude and role of the individual in the activity being performed, not in its defining objects: the child (play as progress), the gambler (play as fate), the athlete (play as power), the

symbol (play as identity), the creative person (play as imaginary), the lonely player (play of the self) and the trickster idle (play as frivolous). Gamers are both active and selective in their use of games as well as part of a complex network of subjectivization in which games are multi-layered machines [Dyer-Witthof and Peuter 2009, p. 71] that act upon the desires and identity of gamers:

Virtual games simulate identities as citizen-soldiers, free-agent workers, cyborg adventures and corporate criminals: virtual play trains flexible personalities for flexible jobs, shapes subjects for militarized markets and makes becoming a neoliberal subject fun [ibid, p. xxviii]

The user-player of gamification systems is that contemporary subject. He or she has access to varied digital platforms, both mobile and stationary, and is proficient in the use and consumption of online technologies. These individuals are engaged with digital technologies in their work and leisure time. It is expected of them to be able to understand conventions borrowed from video games, like badges, achievements and experience points, which are present not only in complex and demanding, so called “hardcore”, video games but also in casual, easily accessible ones. These individuals are, then, faced with the turning up of gamespaces in every aspect of their lives, “from cell phone Tetris to your quarterly pension fund statement” [Wark 2007, p. 117]. The player in the gamification discourse is constituted by a gamer component, but is not defined only by it. In its two-layered compound presentation, the gamification individual is first a user, a worker, a consumer or other trope, who becomes a player when engaged with the gamified system added to the non-game activity, which primarily defines him or her and is dependent of the context of use of the gamified system.

However, this two-layered definition is complex in its nature: the individual-as-worker or user or consumer is, in the gamification rhetoric, the victim of a chronic lack of motivation and engagement. The boredom that haunts individuals in Wark's gamer theory is the menace perceived by gamification, a state in which its production of affective value does not function to its optimal degree. That is also strongly connected to the end of heterotopias that allowed for the relief of that boredom outside of the agonistic gamespace of contemporary society [ibid, p. 156-157]. Then, the individuals of contemporary society are not motivated, engaged or participative enough, and gamification is built on top of the idea that such values will be instilled in individuals by the gamification process. Hence, the focus on ideas of intrinsic and extrinsic rewards and motivations and how to design, implement, and evaluate those values. This process is marked by specific persuasive characteristics of gamification systems, and is analyzed in further detail below, highlighting also its connections to the last group of

criteria for the validation of the gamification rhetoric: that of the connections between the nature of the phenomena and the rhetorics assigned to them.

4. Persuasive Aspects of Gamification Systems

Gamification systems apply video game design elements to improve user experience and user engagement. Deterding et al. state that “the study of the use of game design and game elements in other contexts is an old topic in human-computer interaction” [Deterding et al. 2011b] and provide a review of the different dialogues between HCI and video games: heuristics for interfaces, design features for player enjoyment, motivational psychology and affordances in video games, usability in games and persuasive technologies. The question they pose is an important one: are those findings applicable to gamification? [ibid, p. 3] The present discussion and use of the persuasive technology concept in the analysis of gamification systems engages with that question and hopes to provide useful insights. Specific qualities of gamification systems will be analyzed in their persuasive aspects through the lenses of persuasive technology and persuasive games both to understand how the systemic qualities of gamification relate to its rhetorics presented in the section before.

4.1 Gamification as Persuasive Technology

To Fogg, a persuasive technology tool is “an interactive product designed to change attitudes or behaviors or both by making a desired outcome easier to achieve” [2003, p. 32]. Four of the seven types of persuasive tool described present important overlaps with gamification systems: tunneling, self-monitoring, surveillance and conditioning [ibid].

Tunneling, the guidance of users through a step-by-step process, is important to gamification as gamified systems often operate through very specific courses of action in their connection to the non-game activity being gamified: the performing of an action is only meaningful to the system if it complies with the milestones set by it. This feature is dependent of the reduction of the process in smaller, quantifiable, chunks which can be shown to the user in an intended order by the system. As an example, in Taskville², the completion of a task passes through a stage of logging its scope and time in the system, which then inputs a building piece on a growing, collaborative virtual city. In Foursquare, the process of going to a place receives

² Collaborative workplace application in which each completed task reported is visualized as a building, of various sizes and types, in a virtual city. Other workers tasks also add to the virtual cityscape with a SimCity-like visual-style [Arizona State University Herberge Institute for Design and the Arts 2011].

a new stage of opening the application and checking-in.

In gamified systems, all the data from the performance of the user-player is usually tracked and fed into the system: this characteristic is closely connected to Fogg's idea of self-monitoring and surveillance persuasive tools. In the gamification context, the data metrics are seen as beneficial features for the services and companies that gamify their applications: such data would be reliable indicators of engagement and enjoyment by the user-players [Bunchball, Inc. 2010, p. 4]. However, the tracking of data is controversial. In self-monitoring gamified systems, which ease one's own evaluation of his or hers performance in an activity, like Green Goose [Green Goose Inc. 2011], dealing with data adopts the "little sister" model of data privacy [Berdichevsky and Neuenschwander 1999, p. 56]. In other systems, focused on surveillance, the knowledge that others can see the tracked data is essential to the social pressure mechanism of persuasion [Fogg 2003, p. 46]. The common use of various forms of leaderboards and public badges in gamified systems is based on the surveillance premise, even when thinly justified as being used for the individual's own tracking of performance. However, this type of data is more controversial as its use can generate both social conflicts between different actors engaged with the system, who might or not see the system in its game form [Cramer et al. 2011], as well as ethical concerns over data privacy and power relations [Fogg 2003, p. 48].

The use of the data tracked in gamified systems has another component that goes beyond persuasion by surveillance, going into the conditioning type of persuasive tool. Gamification systems have a strong focus on providing feedback and positive rewards for their user-players, and its advocates frequently draw on similar ideas to McGonigal's positioning of games as models for motivation in everyday life [McGonigal 2011a]. The presentation of these rewards in gamified systems is usually borrowed from video game conventions, like virtual badges, levels, achievements and virtual points. This is a major feature of gamification which is contested by critics [Bogost 2011; McGonigal 2011b; Robertson 2010; Deterding 2010a] and defended by advocates [Zichermann 2011; Zichermann and Linder 2010; Yu 2011]. This focus on the reward process echoes behavioristic views of operant conditioning and psychology, which are controversial at least. The assumptions that rewards generate motivation and engagement and that reward systems are "key game mechanics" [Zichermann, 2011] are contested by critics through the syllogism stated by Robertson: "games are good, points are good, but games \neq points" [2010]. As the characteristics of video games valued by gamification are their engagement and motivation, then this syllogism could be best formulated as: video games are engaging, reward systems are a part of video games, therefore, game-like reward systems are engaging. The following

proposition can be extracted: game-like reward systems, or any other out-of-context video game design element, are motivating per se or are a main motivational aspect of games. Such proposition has not yet been proven by current game motivation models [Deterding 2011, p. 1-2], but it is taken for granted in the persuasive efforts of gamification.

Much critique has been made about gamification's appropriation of the idea of intrinsic and extrinsic motivation and its coupling with the use of rewards and positive feedback. The first critique points to the tensions between rewards and motivation in the recurrent use of a limited range of reward systems. Those would be considered to be extrinsic rewards that can or not generate extrinsic motivations that are unrelated to the nature of the original activity players have to perform and are harmful to the intrinsic motivations that could occur in other settings [Schreiber 2010]. As pointed out by Bogost, the virtuality of rewards is both a rhetorical argument for the use of gamified systems, which would be cheaper than economical or non-game related status rewards, and at the same time a dysfunctional distortion of the existing relationships around the activities [2011]. The second critique draws on the behavioristic view that such coupling relies upon, and discusses the point that motivation seen through the lenses of video game-like positive reinforcements cannot account for the specifics of each different context and situation, not even in the field of games and user experience [Deterding 2010a]. Motivation is also dependent on identification and the cultural values of each context, with different emphasis beyond competitiveness and individualism [Khaled 2011].

4.2 Gamification and Procedural Rhetorics

Another consideration to be made about gamification and persuasion is how gamification relates to procedural rhetorics. Even though the question of the completeness and perception of gamification systems as games is open, the systemic character of gamified applications and their depicting and shaping of existing processes and activities can be looked at from the perspective of procedural rhetorics. Gamification conforms to the model of "the practice of using processes persuasively" [Bogost 2007, p. 48], as seen in the above discussion of its use of different persuasive technology tools for the advancement of its arguments.

Gamification's procedural rhetorics do not focus on the simulation of real-world processes in order to draw attention and reflection towards them, as in the procedural rhetorics of persuasive games described by Bogost [ibid, p. 47]. As a matter of fact, they can be seen as reinforcing points related to the concept of immaterial labor discussed in the rhetorics of gamification section. The common structure of a gamified application consists of a task, usually broken

down in smaller measurable chunks, that has a reward system coupled to its completion, either partial or total, and tracks this data for evaluation. In this description, Fogg's persuasive technology tools mentioned before are contemplated: reduction, tunneling, self-monitoring, surveillance and conditioning. Tasks, to the gamified system, are informational in nature and disconnected to the possible materiality of the original activity. Task chunks can be completed and defined in a ubiquity of space and time that reinforces ideas of an atopian gamespace or of blurring of leisure and work time. Expected behaviors are reinforced by surveillance tools and conditioning, with the individual engaging in continuous processes of subjectivization while ideally conforming to the goals of the gamified system.

5. Conclusion

In this paper, the gamification phenomenon was put into the context of its definitional effort and of how the current application of the term is related to persuasion. This relationship is described as being two-folded, both as a rhetorical argument about games and gamification systems in culture and society as well as a specific implementation of persuasive technologies and procedural rhetorics that reinforce such arguments. In the following section, these points are summed up and further directions of research are suggested.

The novelty and broadness of the debate around gamification not only results in a definitional effort to circumscribe the phenomenon within existing knowledge basis or as innovative business practices. It points to the tensions around divergent views about how the incorporation of video games in new cultural and societal contexts is happening, and will continue to. A question that arises is how that debate indicates changes in the perception of what games are. In the discussion of gamification definitions, especially the activation of gamification systems idea [Deterding et al. 2011a, p. 11], it is noticeable how the criteria of systemic completeness can be seen both as a frontier which separates games and gamification and as further indication that games are not definable by formal characteristics only.

Another important consideration relates to the two-folded aspect of persuasion in gamification. It presents a strong discursive dimension, in the form of a rhetoric that advocates the gamification process as a viable aid to improve individuals emotional engagement and motivation in his or hers performance in contemporary society, with a view that equates improvement with better conformance with corporate practices which are not determined by the individual. It is a process naturally entangled with and reinforcing of practices of both contemporary workplaces and general media consumption, and which is only possible in a context where games have come to be perceived as relevant cultural objects that transcend previously defined

boundaries of time, space and purpose. A line of research to be developed would focus in questioning this conformed and performance-focused rhetoric of gamification and look for its limits in applications that still conform to Deterding et al. definition [2011a].

The persuasive characteristics of gamification systems point to another direction for further research, that of the ethics of gamification systems. Social conflicts over the framing of Foursquare as a game or not and the data that is tracked have already triggered some discussion [Cramer et al. 2011], and Schell's gamified dystopia also aims at debating ethics and morality of gamification [Schell 2010b]. As noted in the analysis of the persuasive technologies tools used in gamification, each of those tools can have unethical consequences, which must be taken into consideration, e.g. the data privacy issue briefly discussed. Guidelines for the ethical design of persuasive technologies were proposed by Berdichevsky and Neuenschwander [1999], and the analysis of existing gamified applications using those criteria can shed light on the ethical implications of gamification.

Furthermore, such ethical reflections must also take into account the context of each gamified application: in a leaderboard system for a sales department, the performance data can be used not only by the worker-players engaged with the system, but also by managers and human resources that might punish the less efficient members or reward the better ones. In the workplace context, the worker-player is bounded by existing hierarchical positions: if the boss orders you to engage with this gamified application, you simply have to. There is no opt-out and complaints might be seen as a lack of teamwork. The subject of gamification, in her duality as gamer and as other non-game defining role, exists in an ethical circle that must account for the gamer ethics, his or her ludic phronesis [Sicart 2009, p. 113], and the existing ethical framework of the non-game context. This ethical nature of gamification systems certainly deserves further inquiry.

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