Sociability and play on location-based social networks: dynamics of interaction and the Foursquare badge system

Sociabilidade e jogo em redes sociais baseadas em localização: dinâmicas interacionais e o sistema de badges do Foursquare

Sociabilidad y ocio en redes sociales basadas en ubicación: dinámica interaccional y el sistema de insignias del Foursquare

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Abstract *This paper discusses the relationship between play and sociability regarding the location-based application Foursquare, according to the hypothesis that the interaction between user and application creates layers of meaning, evoking what we may classify as redefinition of the idea of place, hence producing what we consider to be a fabricated sociability. This idea ensues that the social interaction engaged through a specific platform comprehends not only elements from generic social models, but also draws further from the material specificities of the platform. Such dynamics induce the need to review previous theoretical propositions concerning the interactional process.*
Keywords: *Sociability. Play. Materiality. Foursquare.*

Resumo *O texto busca problematizar as relações entre jogo e sociabilidade no Foursquare, segundo a hipótese de que a interação para com o aplicativo cria uma camada de significação, produzindo o que se pode classificar como uma ressignificação do lugar, e enseja o que se pode chamar de sociabilidade fabricada, à medida que se apoia sobre noções distintas para elaborar um contexto particular subscrito a dinâmicas materiais específicas. Estas dinâmicas induzem, a partir do modo como o sistema promove a conexão entre usuários, a necessidade de uma releitura de noções teóricas anteriormente propostas no âmbito das ciências sociais e humanas a respeito de práticas interacionais.*
Palavras-chave: *Sociabilidade. Jogo. Materialidade. Foursquare.*

Resumen *El texto busca problematizar la relación entre el juego y la sociabilidad en el Foursquare, de acuerdo con la hipótesis de que la interacción con la aplicación crea una capa de significado, produciendo lo que podría ser clasificado como una redefinición del lugar, y evoca a lo que podríamos llamar sociabilidad fabricada, ya que se basa en conceptos distintos para desarrollar un contexto particular suscrito a dinámicas materiales específicas. Dichas dinámicas inducen, de modo que el sistema promueve la conexión entre los usuarios, la necesidad de una reinterpretación de las antiguas nociones teóricas propuestas en las ciencias sociales y las humanidades sobre las prácticas de interacción.*
Palabras-clave: *Sociabilidad. Juego. Materialidad. Foursquare.*

One of the phenomena, which are most celebrated nowadays in the communication field, is called "spatial turning point in communication studies" by researchers who are concerned with the relationship between communication and space – such as Falkheimer and Jansson (2006), Adams (2009) and Lemos (2009) – and it consists in a chronic concern of the theorists of the geography and communication fields to conceive the relationship between communication and space not as if the latter were a direct product of the action of the anterior, but their concern is to defend the existence of an intrinsic correlation between both, so that it is possible to speak of a process through which space produces communication and communication produces space instead of concentrating on any polarization[3]. Falkheimer and Jansson (2006, p. 9) express this feeling in a synthetic way by affirming that "all the forms of communication occur in *space* and that all spaces are produced *through representation*, which occurs *by means of communication*"[4].

In the communication field, for example, in which the studies concerning the relationships with space appeared some time ago – especially by conceiving the use of mobile devices[5] – this movement began to reinforce the sense that an arena in communication and technology research reveals itself not only by taking into consideration the technologies positioned in the sphere which can be called 'cyberspace', but especially, to the contrary of what could be foreseen in the middle of the beginning of the last decade, it is concerned about the way in which the use of location-based mobile technologies changes the relationship established between the human being and the urban space in a considerable way.

What makes such devices so overpowering – and certainly one of the great motives to use them in such an extensive way nowadays – is that their functioning is intimately related to the precise location in which

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[3] There is an efficacious bibliographical review about the contact of the two domains in Paulo Victor Sousa´ work (2012): *Mapas Colaborativos na Internet: Um Estudo de Anotações Espaciais dos Problemas Urbanos* [*Collaborative Maps on the Internet: A study of Spatial Annotations of Urban Problems*]

[4] "The linkage between geography and communication lies in the fact that all the forms of communication occur in space, and that all spaces are produced through representation, which occurs by means of communication"

[5] With the work of James Katz, Rob Shields, Adriana de Souza and Silva, André Lemos, among other researchers of international fame.

each of them is located – thus their most obvious use consists in the use of a map-guided navigation system. Nevertheless, these media, which can be called *locative media*, do not only live on mere navigation. Their use was signalised in a more prominent way when projects of *urban annotation*, which were primarily developed within the eternally inquisitive sphere of art, absorbed typical characteristics of the use of social networking sites, as it can be seen in the researcher Raquel Recuero´s work (2009) – especially the content production aiming at the unrestricted publication of information which converted actions into social capital (DONATH E BOYD, 2004) – and combined them with the triviality of daily life.

Urban annotation projects such as Yellow Arrow[6], for example, can be classified as the precursors of a practice which we can classify as *collaborative urban annotation*, which nowadays manifests itself as an almost universal tendency in the use of social media through mobile devices. Their functionalities are multiple: they range from the most simple uses on applications such as Food-spotting (Foodspotting Inc., 2009), where it is possible to plot restaurants and snack bars and to qualify or disqualify their products or such as *Sound-tracking* (SchematicLabs, 2010), were the plotting of the place is followed by a musical indication – a *soundtrack*, as the very name of the application suggests it, to more complex uses, such as the way of using the application *Presença*, of the bank Bradesco, for iOS, in order to guide yourself on the map of the bank branches in the chosen neighbourhood.

Obviously, due to the hegemony of the need for self-exposition on today´s social network sites, none of these services – which are multiple and have the most various functionalities – exists outside a correlation with other services: it is very rare that an *Instagram* user, for example, does not have his account connected to a more generic service, such as *Facebook* or *Twitter*. Although this connection is not mandatory, these parameters of hyper-connectivity are included in each

[6] Available on: <http://yellowarrow.net/v3/>.

one of these systems. Products such as the applications we quoted are projected in order to be inserted into this given model, which normally appropriates the databases of a more important service – usually of *Facebook*. In short, what can be said is that there is a stimulus on the part of the very technology which occasions a generalised connection – something which can be classified as a persuasive effect that is present in technology and which we can call *prescription* (AKRICH, 1992; LATOUR, 1992; FALCÃO, 2011).

Although the status these aspects of the means of communication have nowadays is not exactly that of unanimity or of dependence, it is even possible to claim the functionality of each one of these services. About the *Cauda Longa*, Chris Anderson (2006) emphasises that, nowadays, personal recommendations – done by friends, family and acquaintances – have a much greater efficaciousness than traditional advertising. It is what the author calls "Cauda Longa filters", through the exploitation of "the distributed intelligence of a million consumers" (ANDERSON, 2006, p. 55). By means of these recommendations, people find what they most like at the same time in which they become new formers of preferences. Such applications precisely function in this dimension, allowing individuals, who have affective bonds between each other, to share their impressions or to seek other people´s impressions. These practices have a much more intimate relationship with dynamics through which the social capital appears and flows and this discussion is immediately raised when the topic comes to the surface.

Nevertheless the argumentation of this article does not deal with this question, which was previously approached by different authors of the communication and social sciences field (RECUERO, 2009; RECUERO, 2012; FALCÃO, SILVA E AYRES, 2012; among others). Our central question concerns an application which does not have a unique and specific functionality: *Foursquare* (Foursquare Inc., 2009). Our special interest precisely concerns the way in which this application evokes a latent question in the thought relative to contemporary communication: how does the dynamics of the convergence between services and ten-

dencies connect itself to social practices that are engaged by means of technological devices and that are able to give rise to a particular kind of sociability linked to such attributes? In a more direct way, which relationship designs itself between this convergence and a consumption dynamics inherent in the individuals´ interaction with the service – in this case following a way which concerns a functional behaviour that is occasioned by the symbolic system which is created by the tool and which is intimately linked to the nature of the game, more specifically its more formal counterpart (JUUL, 2005; FALCÃO, 2010).

About LBS, about Foursquare

The initial page of Foursquare receives the user in quite a direct way: "*Search people and places...* "; this is the sentence that is placed in the search field of this location based service (LBS) which has already more than de 20 million[7] users in the world. Reuniting places, people and content, which is generated in a collaborative way, the improvement of broadband and the almost universal propagation of GPS[8] see to it that more and more systems such as this one are being adopted by consumers, according to Lindqvist and his colleagues (2011). The growth of LBS is directly associated with the development of locative media which, relating information, mobility and urban space provoke modifications in the ways in which society consumes, produces and distributes information. (LEMOS, 2010).

Used in order to establish a location based upon a geographical position, LBSs are generally accessed through devices and mobile connection and serve to identify people and/or objects, besides allowing the discovery of places which are near the place where the individual is in a

[7] According to <http://glo.bo/ISiSXp>

[8] *Global Positioning System*, – is a navigation system via satellite, which provides location and time at any point of the earth, which is visible through four or more of these satellites. It is a system which belongs to the government of the United States of America and with free access to anyone with a receptor of its signal.

determined moment. Two phenomena determine the way in which we use the location-based devices: the first concerns the (1) miniaturisation and technical convergence accomplished on mobile phones. This phenomenon is directly related to the technological character of the device. A declaration which serves as a fundamental question for this argument opens the book *Convergence Culture: When Old and New Media Collide* (2008), by the North-American researcher Henry Jenkins. Jenkins relates his experience while he attempted to buy a simple mobile phone that only does calls, which seems to be impossible: all the options have ten other functionalities. One of these functionalities concerns the presence of the GPS – the appropriation of which is precisely our (2) second phenomenon – which allied with an internet connection[9], sees to it that the individual can locate himself on a map.

This appropriation occurs in the trivial way in which technological evolution occurred some time ago: a tool which was originally projected for bellicose purposes is popularised and is soon subverted by the market, which uses it for some purpose of less functional order – on short term, at least. Thus the commercial character is included in the LBSs, so that it is possible to associate promotions with establishments that are registered in these systems, which can also include game-based schemes, depending on the application one uses. The examples directed towards the promotion dynamics on *Foursquare* are organised in a myriad of forms which make them, in a way, impossible to be tracked. Each one of the specific activities of the system – which will be better explained further – has an event power which can be used when such action is being executed. The check in action, for example, or to be the mayor of any place can provide facilities to the user according to the service which is rendered there. In the case of the shop *American Eagle Outfitters*, for example (Figure 1), the check-in gives the customer a discount of 15% on any product he buys, whereas in the case of the confectioner´s *Les Glaceurs* (Figure 2), the reward is based on the customer´s fidelity: every

[9] It needs not be a prerequisite for the functioning of the system – some mobile phone brands, such as Nokia, already provide the access to the GPS without the necessity of internet access.
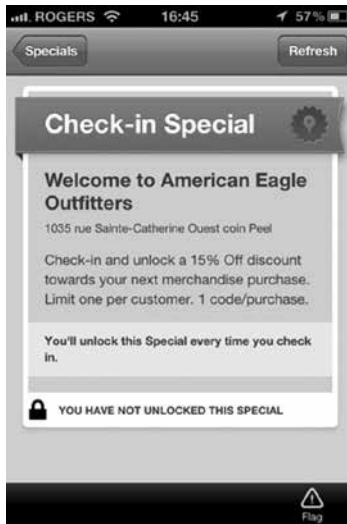
Figure 1. Special Check-in of the shop *American Eagle Outfitters*

Figure 2. Special Fidelity of the confectioner´s *Les Glaceurs*

third check-in, you get a free cupcake.

The first studies on LBS were carried out in the 1990s, based upon a system which was developed by Ericsson and upon a master thesis carried out by a collaborator of Nokia, Timo Rantalainen. In 1999, Palm VII was the first device capable of supporting LBS and, at that time, the existing services, *Weather Channel* and *Traffic Touch* applications used the CEP as information of the user´s geo-location. In Japan, in 2001[10], the first commercial LBS was launched by *DoCoMo*, using triangulation for GPS. In 2002, *Go2* and *AT&T* launched the first local LBS with the possibility of automatic identification, allowing the *AT&T* customers to determine their specific location and to search for places and establishments near the place where they were at the moment of this spatial identification – activities which were already dependent on the wireless connection. From then on, the CEP stopped being the main identifica-

[10] According to the data on <http://www.eurotechnology.com/market_reports/LBS/>.

tion element of spaces, a function which started to be delegated to the GPS, integrated into the mobile internet access. In 2010, the LBS potentialised the local search for people, places and objects, maximising the power of social networks around this kind of services based upon their users´ geo-location.

The first version of *Foursquare*[11] was launched in Texas, in March 2009, by *Southwest Interactive* and this version already allowed the user to connect with other individuals and to search for places near the place where he was – besides accumulating badges (which will be explained further). According to *Foursquare* data, the LBS, functioning in mobile devices with operational systems iOS, Android, Windows Mobile, BlackBerry and Symbiam, is already used by more than 400,000 companies in the whole world. It is by grouping different characteristics inherent in the digital context – interactivity and hypertextuality, among others (LANDOW, 2006; PRIMO, 2007) – that the use of *Foursquare* incorporates elements deriving from the notion of *mediatic convergence*, which enables the theoretical discussion on this topic, so that it is from the perspectives of *consumption* and *convergence* that this article discusses the dynamics of badge consumption on *Foursquare* as a way to reward for its users´ predefined – and expected - behaviours.

In the following part, we are going to elaborate a description of the object in the same way, with the purpose to explain its functioning scheme – and especially to examine the badge system, which functions as a reward given to the users for the behaviours which are expected of them, according to what can be sent by observing the rules of LBS. The objective is to engender a badge typology which reveals the elements of sociability that is developed through the use of the application on the basis of the relationships of convergence and consumption which are assigned to the phenomenon. Therefore the text attempts to problematise the relationships between *game, sociability and conver-*

[11] According to <https://foursquare.com/about/>.

gence on LBS, according to the hypothesis that the interaction with the application creates a layer of meaning for places – producing what we can classify as a re-signification of the *place* (LEMOS, 2010) – and occasions what we can call *fabricated sociability* (FALCÃO, 2012), based upon the way in which the system promotes a connection between the actors, that challenges certain international propensies which were proposed previously.

Functionalities of *Foursquare*

A person arrives in an unknown city in order to visit a friend, who previously guides him on how to catch a bus at the airport in order to get to the district in which he lives. The ride between the airport and this district lasts about two hours. During this period on the bus, the individuals exchange messages via *Twitter* about the location of the person, who is arriving in the city. Nonetheless, since he does not know the place, the native guides him on how to check in on Foursquare, so that he can identify the visitor´ s location in determined moments of the ride from the airport to the final destination. When the visitor gets there, he identifies not only the location of the district in which he is going to stay during the days he will spend in the city, but also the different establishments registered on LBS, which offer discounts and promotions associated with the use of the tool.

The anterior example demonstrates the main functionalities *Foursquare* offers, such as LBS: functionalities which concern services of (1) geographical location, of (2) connection between persons and of (3) commercial use. The system is described as *"a location-based mobile platform that makes cities easier to use and more interesting to explore"* and allows the users to check in and to share their location with other users of the system at the same time in which they accumulate points and badges as a reward for this activity; they store information about the nearest places they would like to visit in the future and leave tips concerning the places they already visited.

If we consider the social network elements, which Recuero (2009) presents, Foursquare is constituted of both: actors and connections. The LBS users construct profiles and can interact through comments on the check-ins they make in the spaces which are registered on the tool. Constructed like an application for the use through mobile devices, Foursquare can be integrated into other social networks, such as Facebook and Twitter, for example, so that the conversation on the dynamics of the check-ins transcends the very LBS and passes through other online spaces.

Elements coming from the structure of social networking sites warrant character to Foursquare – that of SNS –, although the application clearly absorbs some game-like aspects and transforms its use, so that it conveys a generative potential for appropriations on its users´ part. Lindqvist *et al.* (2011) relate the proximity of LBS to a game with a dynamics of virtual and tangible rewards for the check-ins made on Foursquare. The researchers (LINDQVIST *et al.*, 2011) point out that some users indicate sharing location with friends, that is to say, the fact to know where they are and where they are going to, as the main benefit which is provided by the application, besides the fact to get to know other users as well. Some indicate the discovery of new places through other users´ check-in; historical aspects of determined locations which are mentioned together with the check-ins and tips which facilitate the trajectory to get to the places were also some of the factors that were mentioned by the individuals we questioned during the research as the motivations for using the tool.

The possibility to get discounts and to participate in promotions through the check-ins in establishments registered on Foursquare was another kind of practice observed by Lindqvist *et al.* (2011), as a way not only to enjoy the advantages of visiting a place which commercialises good products, but also as a way to avoid places in which other users had already passed and had left tips concerning their negative aspects. Such use certainly occasions information sharing, as we quoted above.

Check-ins and their singular aspects

Check-ins is the most basic action within a system such as that of Foursquare. Nonetheless before describing it, it is necessary to make a short digression concerning what we can describe as the very nature of the system. Until now we examined the functionalities of the system – which technical characteristics are implemented and at which point of this short story they were implemented. There is an important consideration to be made about the project and the use of applications such as Foursquare: its functioning is based upon an extremely simple reward structure: for each check-in, the user is awarded a significant number of points, explained by the rules assigned to the LBS.

The existence of such scoring considerably differentiates Foursquare from applications such as *Sound tracking* or *Food spotting*, which are collaborative to the core and the economy of which only underlines the generation of social capital. The existence of (1) a point system, which organises the users by using ordinal numbers on its leader-board and that of (2) specific objectives, which concern a functional, almost structural experience of the city and which see to it that the use of the application transcends the mere collaboration and assumes symbolic values, which are to be found in the Greeks´ idea of *agón*: the essence of competition.

It is obvious that Foursquare does not consists in a game – if it is necessary to problematise the concept of game or to import an argument which explains this question, it was elaborated before (FALCÃO, 2010) and it basically points out that there are certain structural elements inherent in the idea of game the presence of which cannot be identified in the LBS, even if other elements can be found (such as scoring for example). To digress on such elements would deviate us from the scope of the present article – such discussion can be found in Jesper Juul´s work concerning the form assumed by the game nowadays (2005), among other authors of the game studies – but there is a latent argument which needs an incursion: that of the existence of what Juul (2005) classifies as *hybrid forms of the game*.

Such hybridisation is quite clear in the first contact with the tool, when, for each check-in a point score is attributed to the user – and this score can vary in a relevant way, according to the user´ s experience with the urban space. Here it is inevitable to describe how this happens. On any mobile device which correctly produces the platform by opening the device and by logging in, this will present a check-in button. By pressing this button, the user is presented a screen which lists all the places that are registered in the system which his GPS could identify near there. These places are not only remembered according to proximity, but they mainly depend on the user´ s previous experience: venues – in the platform jargon – the user had already visited generally appear before, in an effort which is similar to a locative memory.

After having chosen a specific venue, the users presses the *check-in here* button, which informs its location to his network[12] and gives him a number of points according to eventual circumstances which are pre-established by the system (first check-in in the place, first user of a social network in a place, mayor of the place, etc.). With these points, the user is classified with an ordinal number on the leader-board of Foursquare, an obvious acceptance score: who does more check-ins in different places is awarded more points and therefore remains more time at the top. He, Liu and Ren (2011) explain that this mechanism offers the four types of rewards, ranging from easier levels to the most difficult to achieve, like in a video game: points, badges, town halls and real rewards. Even if we do not necessarily come near to this classification – it is wrong, as we can see further – it has one merit: to map the reward systems of LBS.

Thus we can say that the check-in activity as a unique acceptation within the system: it congregates a *ludic value* (in default of a better word), that is to say, a value which is only associated with the attribute of the game: if a user is concerned about the ludic value of a check-in, repeated activities in a same place will serve him very little, because he

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[12] Unless the user decides to do a *check-in off the grid* – or an invisible one – in which only the database of the LBS is filled in with the location and the gained points, but such information is not published on the network.

will gain fewer and fewer points during the repetition. Thus the system impels the user to always look for new places *to stay.*

We can point out that still within the checking into a certain place, a second interactional mode with the device reveals itself. This one is much more related to the aspects of the Social Networking Sites (SNS) incorporated by the tool than its game functionality. This action imports SNS elements to the extent that you use a large number of its elements: users´ profiles; and it allows the users to connect with each other and to share information about the places, for example. The act to describe one´s location on Foursquare can be compared with the use of the Facebook wall– according to that line of thought, a check-in is nothing but a way of creating collaborative content, of posting messages on any wall: technically the action happens to the extent that the user fills in a database form by means of a visibility strategy the individual adopts.

In this sense the social character of Foursquare mixes with its technical functionalities and on this basis one can perceive the manifestation of the system characteristics, which attest the individuals´ involvement not only with the materiality of the application, but with other users: the very conversational flux is triggered by a check-in and attests a characteristic of a necessarily interactive order. These comments can see to it that the characteristic of *interactivity* evokes the notion of *hypertextuality,* to the extent that conversation generally involves external topics added to creation and appropriation of the venue, which contributes to the enrichment of the memory of the LBS.

This stage of the users´ involvement illustrates the convergence which establishes itself not only in technical terms, but it has also a social character as far as the use of Foursquare is concerned. The user´s progress in the use of the system and, for example, the increase in his visibility on the leader-board also depends on this convergence. To the extent to which the user uses the application, he acquires more visibility among the individuals to whom he is connected on Foursquare, which contributes to the stimulation of the competition through the system, so that the more check-ins he does, the greater the stimulus for the others to do

the same will be. This is the stimulus Jenkins (2008) refers to when he evokes the notion of the consumers´ *active participation*, that is to say that the user who registers on Foursquare and who does not check in is predestined to "failure" on this LBS, to the contrary of other networks such as, for example, Twitter, on which you can only follow other users and only consume information – an individual can choose to be only a lurker of the service, but he will have symbolically less relevance than he would have in other services of similar order.

Thus, since it is a functional use of the tool, we must consider that one of the elements, which compose the notion of game assimilated by Foursquare, is that of the *objectives*. In principle, on the basis of the observation of the use of the tool, we can conceive that the primary objective is quite simple: *to gain points* – and, in this case, the most immediate way to gain points and get up on the *leader-board* is *to do check-ins*.

Nonetheless, if we make this observation more complex, we must obtain a larger gain: it is by crossing the limit of this thrifty behaviour that we really get to that which makes Foursquare one of the most used LBS nowadays – and the place where a considerable part of its market potential is concentrated. There are certainly more elements in the system than those we described in this article up to now – above all in the competence of social interaction via the structural elements of the SNS, which do not particularly interest us. One element we only quoted shortly and which must be introduced here are the badges: electronic distinctives, which are "unlocked" each time the user engages in a kind of specific predefined behaviour. Thus badges are nothing but sophistication in the anterior graphic, where, besides the trivial objectives, the system begins to implement secondary objectives – *aim-objectives* – and it is more than just to have special awards for each task which is executed.

Since it deals with badges, it is very important to stress that they have an expiry dynamics – some of them, from a certain quantity of time on, are no more available on the system. This characteristic maintains the users connected to the system in a persistent way, because a Halloween badge is very common for a very short time span and afterwards it is im-

possible to collect it again. This triggers a flux dynamics of social capital associated with the use of the platform which, besides connecting the technological experience with the cultural daily life by commemorating important dates, also stimulates the continuous use of the platform – or at least a necessity to be aware of what is going on there – a sort of tethered self (TURKLE, 2008) specifically related to a product.

We must point out that the badge collecting is not an essential activity of the system – but one of the great motivators of the ludic behaviour associated with it is to be found in the awards which can be conquered. Badges are not only an attestation that the user *did* what he claims to have done – he visited five Starbucks, he went to ten different airports – carrying with him the idea of the *medal*, common to games of competitive *agonic* origin; but they are also tracks which serve to qualify the user according to the values he chose. In the electronic games, such aim-objectives are known as achievements, a practice popularised by Microsoft on its Xbox 360 console. Its functioning is similar: the player can play his game in a trivial way or he can guide himself by means of the achievements which make the game more complex or more interesting.

Badges: A Categorization Proposal

On the basis of the observation and analysis of the use of the application, we elaborated a classification cube for the badges, which can help to reveal elements of the sociability we perceived in a specific user. The intention of this categorization is to promote a mechanism which can reveal previous data concerning the use dynamics that are accomplished as well as the interactional dynamics that are established. From the cube we proposed it is possible to understand the attributes of each badge separately and to have a previous understanding with regard to the interactional events which are generated so that each one can be unlocked.

According to our categorisation, there are three specific axes to which a badge is necessarily related. These axes relate location practices, con-

vergence, sociability and consumption at the same time, to the extent that each one of them gives full play to a distinct symbolic proposal. The axes do not have a hierarchy or gradation; they only consist in organisation forms of the attributes of the system.

The axes are: (1) *Social Axis*: The s*ocial axis* concerns the interactional practices engaged by the users to unlock the badges. Foursquare, being a system, which is designed for mutual and multi-user interaction, there is surprisingly a large number of activities which can be performed on it without the need for other users´ presence, to the contrary of other ludic adaptations for digital culture, such as social games or MMORPGs/Virtual Worlds (RECUERO, 2012; FRAGOSO, 2012; ANDRADE and FALCÃO, 2012). According to the *social axis*, the badges of Foursquare can be:
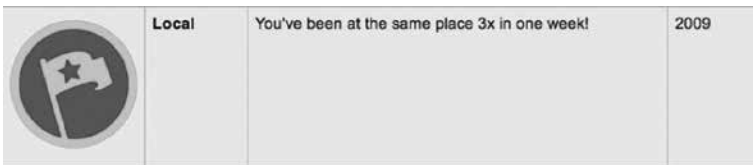

Figure 3. *Local Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

(a) *Independent*: badges which can be conquered by the user without the help of others within the system. The *Local Badge*, for example, is unlocked when the user checks into the same place three times in one week, independently of the other users – friends or not.

(b) *Interdependent*: they are those which depend on the collective action in order to be conquered, that is to say that the user needs the collaboration of other users to acquire the reward. The *Swarm Badge*, for example, is only conquered when 50 or more people checked into the same place.
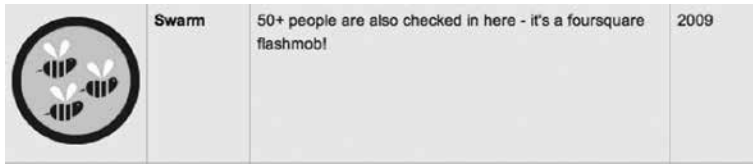
Figure 4. *Swarm Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

Hereafter we came across the second axis, the (2) *Commercial Axis.* The *commercial axis* concerns an appropriation of the system of Foursquare not on its users´ part, but it concerns the creation of a business model which is proposed by the very company that manages the service. This category occasions the visualisation of the characteristics of the *printing management* (GOFFMAN, 1969), since, in order to gain badges, which are not originated within SNS, the user must "follow" the brands and their respective updates. More than that, with the intention to gain badges and to progress in the game aspect linked to LBS, the users engage in a branding activity and generate the brand circulation on the social networks. According to the *commercial axis,* the Foursquare badges can be:

(a) *Native*: they are created by the Foursquare team and they do not necessarily have a relationship with the consumption products – unless with those of the very policy of LBS. The user acquires the *Explorer* when he checks into 25 different places.
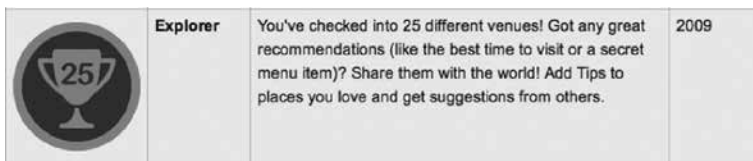

Figure 5. *Explorer Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

(b) *External*: they are badges sponsored, created by teams that are external to Foursquare and they have a direct relationship with a specific product. They are generally associated with quite specific actions or events (see the *commemorative badges* further) and they usually have a planned date of expiry, as it is the case of *Video Music Awards* of MTV, which can only be unlocked on August 28th 2011 and is "retired", now, according to the jargon of the site.

Figure 6. *2011 VMA Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

Finally the third axis concerns the geo-located use of LBS. The (3) *Geographic Axis* concerns the specific location at which the badge can – or not – be unlocked. In a certain way this category is fragile, because there are very few specific location badges which do not necessarily concern a commercial context. If we think of the *badge Barista*, for example, which is offered to the user after he has visited five different *Starbucks* cafés, we can certainly consider that there is a geographic aspect – but it is much more territorial or market-linked than necessarily *geographic per se*. By creating this category, we intent to establish a differentiation between the symbolic aspects – as it is the case of the Starbucks badge – and the *actually* geo-located aspects. According to the *geographic axis*, the Foursquare badges can be:

(a) *Generic*: they can be gained in any place in which the user checks in, as it is the case of *Super Mayor,* which happens when he wins the mayorship of ten places registered on LBS.

	Super Mayor	A special shoutout for holding down 10 mayorships at once!	2009

Figure 7. *Super Mayor Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

(b) *Hyper*-local: they are linked to a specific geographical location, such as, for example, Brooklyn *4 Life*, which is part of a set of badges dedicated to the city of New York. The idea of hyper-location attempts to reveal precisely, that one of these badges is associated with a precise location - not with a social practice, not with a market practice. In the case of B4L either the user does the 25 check-ins he needs in Brooklyn, in New York or he will never have the badge, because it cannot be gained in another way.

	Brooklyn 4 Life	That's 25+ check-ins in Brooklyn for you!	2009

Figure 8. *Brooklyn 4 Life Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

As far as time is concerned, there is still a nuance which can be considered as an extra category – or a special one; a subtype of the *commercial/external* category and which is worth noting: they are the *commemorative badges*, which do not only combine the individual and the space in which he is, but they also use the dimension of time in a very relevant way by marking a specific memorable event such as, for example, the Coachella Music Festival or the premiere of the film *Harry Potter: The Deathly Hallows*.

	Harry Potter	Seven years after Harry Potter learned that he is a wizard, it's just him against the Dark Lord. Join the battle at http://bit.ly/pIXd21, with code 'harrypotter25' for 25% off the of the video game. Grab your wands. The final battle is here.	7/14/2011 Original Post

Figure 9. *Harry Potter Badge*
Source: *About Foursquare* | <http://aboutfoursquare.com/>

Although the categorisation we proposed is certainly liable to criticism – like any categorisation – it helps however to observe specific interactional practices. Combined to the articulation of concepts, which aims at the following notion of *fabricated sociability*, this division into categories more clearly defines the borders which separate social practices and help to perceive the differences in each specific LBS user. Nonetheless it is necessary that we still examine a theoretical apparatus which can cope with the motive for which the creation of these categories reveals any framework with regard to the behaviours their actors engaged in. By introducing the notions of *framework* (GOFFMAN, 1974) and *materialities* (GUMBRECHT, 2004), our purpose is precisely to fill this gap by finally providing a solid analysis concerning the use of Foursquare.

A Distinct Form of Sociability

Until this point, the argument of the present article has concentrated on aspects which appear by means of specific behaviours which are engaged through Foursquare, particularly through internal dynamics of the system which establish themselves as differential points in a relationship of awards printed on check-ins and on the existence of special rewards for differentiated objectives – badges –. Nonetheless by only conceiving that the relationship between the individuals by means of the tool occurs through these practices, we would neglect the existence of the necessity to problematise which this phenomenon claims.

This criticism is specifically directed towards a poor and superficial understanding of the way in which people connect by means of the tool. Only to stress the existence of a peculiar way, through which such connections are done, is not sufficient to obtain an inveterate understanding of the interactions assigned to LBS.

Thus, on the basis of the question we pointed out, we propose the problematisation of the interaction through Foursquare grounding our argumentation on two distinct concepts which can provide a reasonable contingent of meanings for the interpretation of the phenomenon: the idea of *frame*, coming from Erving Goffman´s work (1974), can occasion answers to a question which is always put when the use of Foursquare is examined. "Why do people actually use a device which makes its location visible to all their friends of their social networks?" Besides the almost omnipresent explanation of the relationship between the check-in and the dynamics of the maintenance of a social capital, the idea of the existence of multiple frames helps to give support to the use not only of this tool, specifically, but it offers an almost cultural justification around the motivations which are behind any behaviour.

The second concept which offers us a differentiated understanding of sociability dynamics that are established through the system is that of *materiality*. In this case, we cannot only point out an unrestricted range of authors, who examine such question (in Brazil, we can say that this movement is led by the Universidade Estadual do Rio de Janeiro [University of the Federal State of Rio de Janeiro], especially by the figures of Erick Felinto and Vinícius Pereira), but we can mainly centre the argument on the figure of the German Hans Ulrich Gumbrecht, who is the main articulator of this epistemological proposal. According to Erick Felinto (2001), Gumbrecht´s intention (2004) with this proposal is not to create a hegemonic field, which substitutes the more traditional field – the field of hermeneutics, which is concerned with interpretation and meaning – but by creating what he entitles *non hermeneutic field* or the materiality field of communication, what the German thinker is predisposed to do is to point out a domain of the reception phenomenon which

produces the meaning before the sense – which occasions a certain production of meaning, basically in accordance with the form it assumes.

We use both concepts as interpretative lenses for the phenomenon we examine: given this conjuncture, it is probable that we come across an argument which offers *differentiated social contexts* because (1) they have additional layers of meaning to which not all the actors, who are involved in an interaction, are not necessarily assigned – which is explicitly responsible for the creation of an inedited frame for the interactional exercise that appears on the basis of the use of the given technology.

Let us briefly consider the idea of frame. The concept shows us that such frames are omnipresent: they adopt the position of message understanding mechanisms, information which are never told, contextual marks which are understood before and during each interactional process. It is through these marks that we succeed in guiding ourselves by means of any interaction: "parts of activities are perceived by its participants according to the rules or premises of a primary framework, whether social or natural"[13] (GOFFMAN, 1974, p. 247).

Although Goffman´s work is not generally concerned about technology – or about technical artefacts, in general, except for some few essays – it is important to point out that the use of the notion of *frame* here does not only concern the use of the tool, but much more the notion that an interactional practice develops itself around it. Our purpose here is not to slip into any notion of culture or subculture, simply because, by observing the phenomenon, we consider that the dynamics, by means of which the use of this technology persuades its subjects, is situated in a moment which is chronologically anterior to that of cultural creation. It is obvious that we cannot purify this movement – it necessarily happens in contact with a macro-cultural context (or it is immersed in one) – but our argument here is more concerned about the possibility of the formation of something proto-cultural than about the transformation of signs which would come from a larger context.

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[13] "*[It has been argued that] a strip of activity will be perceived by its participants in terms of the rules or premises of a primary framework, whether social or natural (…)*".

In any case, with regard to the users´ sphere of action with LBS, we can identify that there is actually a keying mechanism (GOFFMAN, 1974, p. 45), a modulation of the situation by means of which the users, who get near the tool, establish a "use agreement" – adhere to a common interactional code –, in which they start adhering to a series of behaviours which are suggested by the tool – which we will examine more thoroughly further.

Thus the point is that for the users of digital technologies who use Foursquare, the act of divulgating their location simply makes sense. Although this explanation is relatively simple and not laden with sophistication and complexity, this does not invalidate it, in this case. Here we do not examine the range of motivations which move the users to adhere or not to the use of the tool – we only seek to understand if, for the users who engage in the use of LBS, there is a common *frame* (GOFFMAN, 1974), which offers them "an understanding, an approximation, a perspective" (p. 21)[14]. What the existence of a new frame offers to these users is a *layer of meaning* which they must share with one another and which situates them on a specific level with regard to interactional exercises as well as with regard to actions relative to the game-like aspects which are scattered on the experience of the system.

The second point (2), which occasions the notion of *differentiated social contexts*, is composed, in a simplified way, of the material structure which is inherent in the system. Let us consider that, as a prerequisite for the sharing of the given primary frame, the user must certainly engage in the use of the tool. Thus this aspect, which we call material structure, interposes itself as an entrance into the given context; without experiencing the interaction with the material aspect – although it is not, in the given case, material *per se* but more related to informational elements which offer distinct elements and organise the user´s experience. There are obviously material aspects in the experience with the tool which are not confined to the digital information sphere: the very way in which

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[14] *"providing only a lore of understanding, an approach, a perspective"*.

the mobile devices, which are necessary to execute the platform, organise themselves today reveals itself as a material experience that cannot be avoided – although we invariably recognise this materiality, it is not this element we examine at the moment, but the informational organisation of the tool: its behaviourist syntax, that which occasions its interface.

This material experience dynamics evokes two concepts which, although they are very near each other, do not concern the same competence. The notion of *affordance* (GIBSON, 1986) definitely establishes a dialogue with the idea of *prescription* (AKRICH, 1992; LATOUR, 1992), although the latter positions itself more in a particularly persuasive dimension, whereas the first, roughly speaking, only points out the complementarity between bodies. Nonetheless, before examining these concepts, we must briefly come back to the materiality theory, with the purpose to clarify some nuances, which can help to understand the present work.

Although our intention is not to make a treatise on the materiality of the means of communication – but to point out that a peculiar form of sociability structures itself through the intertwining of distinct materialities and frames –, it is necessary to underline that the reason for which we evoke this theory here is associated not only with the phenomenon we examine, but with the very epistemology of science. In the introduction of his book *Inscribing Science*, Timothy Lenoir (1998) suggests that the way in which science is practiced today is associated not only with the objects and the phenomena that are being studied – but also with the way in which their analyses and reports are constructed. This discussion has an epistemological weight, which this article is not predisposed to support, but it is valid to evoke it, because it reinforces not only the idea that the materiality of the devices frames the way in which they are received, but that the context which is developed through their use depends on a large number of other factors – *inclusively* on the way in which they are academically described.

Simplifying – and opportunely appropriating – the argument, that which the materiality theory of communication offers is an understanding that every content which is produced by means of an interaction

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is the fruit of two distinct and permanently interconnected spheres: a hermeneutic sphere, which is linked to the production of meaning and which establishes an effective dialogue with the layers of meaning the subject/object brings into the interaction – according to the authors, who are involved in the materiality theory (FELINTO, 2001; GUMBRECHT, 2004, among others), this sphere was always in evidence and only with the *deconstruction* movement led by Jacques Derrida and with the interest which reappeared with Marshal McLuhan´s thought, the material aspect started to be considered as determinant of a meaning, which, roughly speaking, manifests itself before the meaning. One of the examples, which are universally used – and the apparently infinite repetition of which occasions a production of material meaning – is what Friedrich Kittler (1999) offers by pointing out that Nietzsche was the first philosopher who used a typewriter and that its form would have influenced the German philosopher´s thought.

Besides the determinist deliriums Kittler as well as McLuhan are accused of, Kittler´s thought (1999) piously defends that "mass media determine our situation, which deserves a description" (p. 39) and it is precisely by being based upon this maxim that this article identifies the necessity to add to the typical interactional situation, which is composed of the interaction located in another context, the domain of the material and that which *meaning does not succeed in conveying*.

Thus it is on the basis of this spirit that we come back to the idea of *prescription*, obviously with a reserve which enables this theoretical connection. Although the Actor-Network theory (LATOUR, 1992), of which we appropriate the notion of prescription, is not intimately related to the theory of the materialities of communication, although both are, in a certain way, an answer to the deconstructionist movement[15], its articulation in this framework occurs through a recognition of the figure of technology in its relationship with the human being. If Bruno Latour (1992) provides the objects with an agency meaning of their

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[15] Although the French anthropologist Bruno Latour vehemently denies any deconstructionist influence in his thought.

own, Kittler considers, in an incisive way, that technology moulds the human being (LENOIR, 1998, p. 15-16).

This relationship enables us to use the idea of prescription in any necessary meaning – as the expression of Latour´s non-human agency as well as the expression of the moulding force of the material aspect, as Kittler (1999) suggests it. Independently of the more or less deterministic framework, which one would like to confer upon the concept, it is certain that the moment in which the argumentation and categorisation we previously proposed in the present article and this framework – which defends the existence of a particular movement of sociability that is intertwined in the (1) formation of a framework which is specific to the experience of the tool, which (2), on its part, is laden with a discrete materiality – are to be found precisely in the mode in which the necessary actions performed to collect a badge acquire a persuasion meaning, which is present, at the same time, in the context the user experiences as well as in the system which is previously designed; that is to say: the way in which the badges have an effective incidence on a user´s behaviour is necessarily linked to these two notions – and so we can affirm that the relationship which has been developed in this interaction corresponds to the notion of *prescription* we previously evoked (LATOUR, 1992; AKRICH, 1992), to the extent that it respects the maxim that, to the extent that the user comes near the system, it necessarily teaches him which actions can/ must be executed. The way, in which the badges act, is persuasive, because it necessarily establishes a dialogue with the agonic structures we quoted previously, besides being capacitor, to the extent that it creates horizons of expectations and explains to the users how they can have access to such awards.

Closing the argumentative framework we initiated at the beginning of this article, we believe that the sociability dynamics which are generated through the tension between the game-like aspects and the material/persuasive structure of Foursquare do not only delimit interactional horizons which are conditioned to the tool but they also qualify them.

This peculiar interactional structure results in a sociability movement that is firmly assigned to such prescription mechanisms, which necessarily regulate the interactions that unfold in a context such as the one which is provided by the use of LBS such as *Foursquare.*

Final Considerations

As we initially mentioned, Foursquare has a specific functionality. Nonetheless the proposal we presented for this article, to observe the dynamics of the badges on the basis of the convergence and the sociability on the application, indicates uses which are stimulated by the very LBS mechanisms, it offers the badges as a reward for the users´ determined behaviours. The swaps which are established through the application attest the social character of the application, so that we sought to emphasize not only the technical aspects of the system, but the social factors which are involved in the interactions the users establish with one another.

In a similar way we approached the hybrid character with regard to the ludic aspect of Foursquare and we must still point out that there is nevertheless another acceptation as far as the check-in activity is concerned: another motivational contribution which deviates from the functionalism sphere of the game itself. This contribution does not concern the newness of the place or the number of points it will offer to the user, but the symbolic meaning of the place. Precisely, in order to paraphrase the mobile communication and urbanism studies, *what makes a place out of a place.* A user feels compelled to check in into *Times Square*, in New York or into Maracanã [football stadium], in Rio de Janeiro, not necessarily because they have to provide him an exacerbated scoring – again it is convenient to emphasize that, with the repetition, it is possible that the flux of points is ridiculous here –, but simply because of all the imaginary which surrounds each one of these places. Certainly the *place* is sometimes more significant than

the game-like aspects which are included in the tool. However this perspective is not considered in this article; it is doubtlessly a way for the carrying out of future researches.

On the basis of the consideration we made on the impact of the interactions and of the role of convergence and sociability in the dynamics provoked by the acquisition of the badges, we could construct a categorisation of the rewards through the analysis cube. This proposal does not exhaust itself in the categories we presented, since the creation of badges is recurrent and aims at their organisation on the basis of the presupposed dynamics for the acquisition of each kind. The objective of the creation of the categories is didactic and organisational, so that it contributes to the observation of the LBS mechanism and dynamics on the basis of its technical and social character, by observing how human being and machine establish a dialogue beyond the mere deterministic sphere, in a permanent flux of agencies which are not always mapped.

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