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'Timid Encounters': A Case Study in the Use of Proximity-Based Mobile Technologies

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ABSTRACT

We report a comparative ethnographic study of a proximitybased mobile "video game" (Dragon Quest 9) in Japan: the Nintendo DS game terminals may 'recognize' one another and allow players to exchange game resources when they are close to one another. Because different communication infrastructures are available, situations of encounter are shown to be potentially seamful and to support multilayered participation frames. Our observations show a variety of encounter formats, among whom 'timid' encounters are the most characteristic of the kind of sociality which may develop in urban public places turned into proximity-sensitive "hybrid ecologies" The normative order which governs such encounters is marked by a tension between the minimality expected of encounters with strangers in urban spaces, and the concern for identification and focused interaction that derives from being engaged in digital communication. proximal These empirical observations and framework of analysis offer insights for the design and the understanding of proximity-based mobile technologies.

Author Keywords

Proximity; gaming; mobility; encounters; hybrid ecology; locative media; public space.

ACM Classification Keywords

H.5.m. [Information interfaces and presentation]: Miscellaneous;

INTRODUCTION

The development of ubiquitous computing (Weiser, 1991) has stimulated a growing interest in the organization of activities, particularly collaborative ones, accomplished in complex ecologies, where a variety of digital resources, often based on different types of network infrastructures, intersect each other and are simultaneously available. This

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strand of research, centered on computer-supported collaborative work (CSCW), has focused on the way the 'seamlessness' or 'seamfulness' of actual situations of use can support collaboration (Chalmers & Galani, 2004), and how people are able to creatively combine 'assemblies' of artefactual resources and rely upon these in order to support new experiences of sociality adjusted to these complex ecologies (Hindmarsh et al, 2005). The development of locative media seems to go one step further with respect to the traditional version of ubiquitous computing. Their availability is constitutive of 'hybrid ecologies' in which different forms of access to a particular place (e.g. through embodied presence, and through various screens and terminals) are somehow articulated (Crabtree & Rodden, 2008). This perspective leads to a complete reshaping of our understanding of what has been dubbed 'virtual practices' and understood as actions performed online by a de-contextualized user engaging with his networked computer, a kind of practice perhaps best epitomized by online multiplayer games. Recent ethnographic work on the use of games such as that of World of Warcraft in China is pushing towards a reconsideration of how such online games are played: 'on screen' collaborative actions and copresent interactions are meshed in a way that can only be understood by taking into account the particular 'hybrid cultural ecology' of the internet café or wang ba (Lindtner et al., 2008).

Early examples of the uses of locative media concerned various games combining online actions and urban mobilities that led to the construction of 'playful urban spaces' (de Souza, Silva & Hjorth, 2009). Early studies showed how location awareness could support sociality in specific ways, and how the mutual knowledge of proximity made face-to-face encounters relevant (Licoppe & Inada, 2006; 2010). More recently, the idea that various forms of location awareness might support specific forms of cooperation and sociality has led to the notion of 'locationbased social networks' (de Souza, Silva & Frith, 2010) and an interest concerning their use in urban public spaces to produce 'digital cityscapes' (de Souza, Silva & Sutko, 2010). It has also made relevant a phenomenological orientation in which researchers try to bring together the articulation of the corporeal experience of mobility,

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sociality and the location-informed engagement of players with their mobile terminal into a single embodied experience, such articulation work being constitutive of the way players or more generally mobile users may inhabit together 'hybrid ecologies' (Richardson, 2010; Richardson & Wilken, 2010).

We can extend this argument to public settings other than the street. As soon as people are equipped with handheld connected digital devices, then any kind of public space, be it the street, the museum or the internet café, becomes a 'hybrid cultural ecology'. However, the focus of CSCW research on the way such ecologies support collaboration in general masks a sensitive issue regarding the specific kind of sociality that could be developing in urban spaces qua public places. Public places are where strangers can meet one another. The city as a public place is a 'world of strangers' (Lofland, 1973) where strangers are ceaselessly experiencing 'traffic encounters' (Hannerz, 1980). Public places are settings in which strangers 'appear' all the time and where such 'appearances' have therefore to be socially managed in acceptable ways. The normative rules that govern the patterns of such encounters with strangers are an integral part of the 'interaction order' that is constitutive of relations in public (Goffman, 1963; 1971). As this author has shown, strangers collaborate to move, interact and recognize each other through gaze and embodied resources with an orientation towards minimality and the avoidance of singularizing the other, as in the case of 'civil inattention'. Moreover, individuals in public places always constitute a potential audience for any events that might occur there (Lofland, 1998). The forms of collaboration that develop in urban public settings are generally marked by a particular form of 'laconic urbanity' (Joseph, 1993) in which requests for help are, for instance, framed so as to require only limited commitments.

The question is: what happens when urban public places become 'hybrid ecologies'? What kind of sociality is supported by these 'hybrid ecologies', and what kind of interaction order and public-sphere relations? How do we orient to strangers and how do we 'encounter' them in such connected settings? Will the urban hybrid ecologies of the future be as 'democratic' as the megalopolis of the 20th century, in the sense of treating all individuals as equivalent in innumerable traffic encounters? What kind of public place might the digital cityscape, 'augmented' with pervasive computing, become?

If we want to understand the use of mobile media in urban hybrid ecologies and the distinctive but culturally-shaped way we experience the latter as places, we need detailed ethnographies of their use and of the kind of sociality between strangers and interaction order that evolve around the availability of location-sensitive shared resources. This paper aims to provide such a case study, through the ethnographic observations we made of the use of Dragon Quest 9 in Japan. Dragon Quest 9 is a 'proximity game' (Soderlund, 2010) in which the proximity of players becomes a resource in the gameplay. The game scenario provides incentives for players to approach one another, leading them to meet and gather in urban spaces. When this occurs, traditional public places, such as malls, stations or parks, become crowded with groups of players, many of whom are not acquainted with one another (to varying degrees, as we will see), in an ecology which provides them with many different resources to become mutually perceptible and to interact together: those of co-presence (voice, gaze, gestures, etc.), but also those originating from digital networks, available either through a game terminal or a mobile phone. The way players articulate such resources to produce distinctive patterns of relations in public prefigures the kind of interaction order that may develop in public places as hybrid ecologies.

FIELDWORK

We began by studying exchanges posted on several forums used by Japanese players (Mixi & Shirabata. We were able to discuss online with ten players, and interview twelve players we recruited there. We also gathered and studied systematically the players' electronic discussions on forums three months before our ethnographic fieldwork and one month after, for the purpose of documenting some of the phenomena we were investigating. We did the fieldwork in Japan in two waves, in 2009 and 2010. This involved going to the players' gathering spots to observe the way they convened in urban public spaces. We tried to visit each meeting two or three times each so as to gain a sense of their variability. Each of these observations allowed us to observe in detail the behavior of a dozen of players each times, and to discuss informally with the meeting organizer and two or three players present on the average. The places we went to in Japan were: Akihabara and Odaiba Fuji TV in Tokyo, and the train station and the Apita commercial mall in Shizuoka, a town about 200 km from Tokyo on the Tokyo-Osaka Shinkansen line. In all these places we tried to talk informally with the players and organizers. One of us (Y.I.) also purchased a DS terminal with the French and Japanese versions of the game, enabling him to play in both countries. This was to allow us to familiarize ourselves with this form of play and to acquire thereby a direct experience of proximity-mediated game encounters.

ENCOUNTERS IN DRAGONQUEST 9

Dragon Quest 9 as a 'proximity game'

Dragon Quest is a game for Nintendo DS terminals. It was initially a Dragon Quest game where players perform quests, fight monsters and gain experience points that enable them to reach higher levels. The ninth version of the game is different in that it has three additional features in the game scenario that exploit the possibility for terminals to 'recognize' and connect to one another through a Wi-Fi connection when within twenty or thirty meters of each other, thereby turning the game into a 'proximity game' (Soderlund, 2010).

First, players who are within about 20 meters of each other may engage into multi-player gameplay. Second, when within the same range, players may 'appear' on each other's screen: a window pops up on the screen with the name of the other player's game character and description. When this occurs, the player may go to the place in the game called 'Rikka's Inn', where the other player's avatar appears. By clicking on it, the player's profile and tag message appear. During the event, some of the resources of the player who has just appeared may get transferred to the initial player. This is the case of maps, for example, some of which are rare and essential to make progress in the game and to reach higher levels. Japanese players call such mediated encounters 'surechigai tsushin'. 'Tsushin' means 'communication' or 'transmission' and carries here a connotation of exchange or transaction. 'Surechigai' is a substantive form of the verb 'surechigau' which combines 'sureru', 'to rub' and 'chigau', 'to differ'. It is ordinarily used to refer to a situation in which the paths of two persons come close (metaphorically in a situation of 'rubbing off with one another') before diverging further on. There is a constraint on the number of surechigai tsushin one can experience: the gameplay only allows three connections of this type at any one time. The screen needs to be refreshed before allowing three more to occur, and so on. 'Surechigai tsushin' is a crucial feature of the game experience that combines corporeal mobilities and digital actions in a way that may reshape urban experiences. In 2009, a Japanese user might experience ten or more such events during his commute to the center of Tokyo.

Third, there are specific incentives in the gameplay for users to assemble in groups. These go beyond the mere fact that in such gatherings there may be many opportunities for *surechigai tsushin* and exchanging rare game resources. For instance, the game narrative involves an inn ('Rikka's Inn' in Japan) whose cellar and first floor, which usually remain hidden, may appear when there are several players close by whose avatars have entered the inn.Within these new rooms, players can find additional resources to make further progress. So the game design in many ways invites players to make a strategic use of spatial proximity and its potential serendipitous translation into the event of *surechigai tsushin*.

URBAN ENCOUNTERS IN 'HYBRID ECOLOGIES'

Dragon Quest 9 players may 'appear' in several different ways in urban public spaces, because as one plays the game, such settings are experienced as hybrid ecologies, in which different infrastructures for access and communication are made available.

Co-present traffic encounters

Players may appear by just passing one another independently of any screen event, in a way which is indistinguishable from the traffic encounters with equivalent and anonymous strangers that are а commonplace feature of the experience of the modern city. Such encounters unfold as the paths of mobile and anonymous strangers cross. The spatial proximity and visual availability of the strangers who appear thus makes a possible interactional involvement relevant, but within the bounds of an overarching concern of the participants to preserve their 'personal territories' (Goffman, 1971), their right to remain inattentive and not to be interrupted, and thus their enjoyment of a certain freedom compared to the forms of obligation that the presence of other individuals might produce. So there is constant tension between the way a sudden proximity may make an interaction relevant and the way the urban denizen expects to benefit in such places from 'minimal hospitality', which implies a 'right to tranquility' (Joseph, 1999: 123). One common way to manage this tension is by exerting 'civil inattention', which Goffman argues is a characteristic feature of interactions in public places: an exchange of gaze to manage the embodied encounter that acknowledges the mutual proximity but evades any further involvement and singularization of the encounter and its participants (Goffman, 1963).

Such urban encounters perform city dwellers as mobile and anonymous bodies, endowed with perceptive, expressive and interactional capacities, categorizable as strangers with apparently equal rights and obligations regarding the management of proximities and encounters. Such subjects are usually expected to treat one another on an equal footing and anonymously, in a way that obliterates singularity, that is, all that might connect the person to a singular identity and make that particular identity relevant. The kind of urbanity that is routinely deployed in these public spaces, the enactment of which constitutes a background expectation of proper behavior, performs participants as anonymous and category-less strangers: 'by passing from the neighborhood to the city, the definition of urbanity is supposed to rid itself of problems of identity' (Joseph, 1993).

Surechigai tsushin

Proximity-based technologies introduce new issues into the organization and management of interactions in public places. They hybridize the random screen-based 'pop-up' of another player with urban traffic encounters with strangers, precisely because the digital 'appearance' only occurs when the paths of the mobile users meet, so that co-present identification and recognition may become possible and, as we will see below, a relevant concern. *Surechigai tsushin* in Dragon Quest 9 may be considered as a paradigmatic example of this type of hybrid encounter. When the 'random encounter' players and these come close to one

another, the name of the game character of the one may appear on the game terminal of the other, as in Figure 1. This is not necessarily reciprocal, and the function is activated on the DS game terminals of two player whose terminal has been 'entered' by the other has no way of knowing from the game whether his own character has 'appeared' to others, including those who have 'appeared' to him.

Moreover, players who have activated their terminal in the 'random encounter' mode may elect to make available one particular map in such mediated encounters. The map will be transferred to the resources of the players encountered without any action being required of any of the participants of such mediated encounters. The player on the receiving end will simply receive a notification that he has been given a map.



Figure 1. The game terminal interface showing three 'encountered' players

So it is part of the game's attraction that other players may pop up randomly on one's terminal as players get close to one another, and that one's urban mobility may be directly rewarded by screen-mediated encounters and gifts of game resources, on the basis of serendipitous proximities. We did a trial run in Shibuya with our own terminal and experienced rapidly three such 'apparitions' of players. Connecting to their avatars in Rikka's Inn we got their tag messages, which typically ran like: 'Hello, I am called X (the game name)! I am a legendary brave man well known in Saitama'; 'Hi, I live in Tokyo and I am a kaji-tetsudai. My name is X'; 'I ... I ... am called X. I am zero year old. I am a slow life of the blue sky who lives in the neighborhood'. It is remarkable how in these three examples we picked up randomly, the players interweave descriptions related to the gameplay (the name of their avatar and some of its qualities), with references to the place they live, which points towards a world of physical and embodied presence. The design of such tag messages marks an a priori orientation of players towards the hybrid character of *surechigai tsushin*.

Recently, CSCW and ubiquitous computing research have emphasized the need to look at the uses of these technologies outside the laboratory, in ecologies that are unavoidably heterogeneous, 'seamful' and messy (Bell & Dourish, 2007). The dual concepts of 'seamfulness' and 'seamlessness' try to capture this (Chalmers & Galani, 2004). In our case, the seamfulness of the Dragon Ouest game experience is related to what Goffman calls 'evidential boundaries' (Goffman, 1974): onscreen events are not visible outside the screen and are generally not made available to other players nearby. Moreover, when a game encounter occurs on screen there are often no cues to identify which of the individuals nearby is the player who has just 'appeared' on one's screen, though such an appearance would make such an identification relevant. So there is a potential evidential boundary separating what goes on on screen and in co-presence. In such a potentially seamful situation, players are confronted with a potential choice. The first is to ignore or elude the possibility of recognizing the 'encountered' player 'in real life'. This would accomplish the situation as seamful and as unfolding in channels of activity that are maintained as separate. The other possibility is to try to identify the nearby player who has popped up on one's game terminal among crowds of anonymous passers-by and potential fellow players. In this case, the player who looks around engages in an effort to make the situation seamless and to align what goes on in his/her screen with what is happening in his/her immediate urban surroundings. This shows that seamfulness and seamlessness are not just abstract qualities of a given situation and the hybrid ecology in which it unfolds. They constitute a collaborative and situated practical accomplishment. Furthermore, the fact that several heterogeneous infrastructures co-exist is a dynamic resource in the production of collective behavior in hybrid ecologies.

In the case of Dragon Quest 9, the heterogeneity of the situation of play is even greater, because players have other resources to interact during and around *surechigai tsushin* events, particularly in Japan. Japanese Dragon Quest 9 players interact through various internet-based social media, and particularly three forums, *Shirabata*, *Koryakukan* and *Mixi*. Because the use of mobile internet is widespread in Japan, players can interact continuously on their mobile phones on these forums, not only before and after encounters, but also during them. It is frequent to see players switch from their game terminal to their mobile phone and back, or to hold a terminal in each hand (Figure 2).



Figure 2. A player with the game terminal in his right hand and his mobile phone in the other

The mobile internet communication infrastructure introduces new seams in the *surechigai tsushin* situation, and the possibility of even more fragmented and multi-layered participation frames.

A crucial tension in surechigai tsushin events

There is one dimension of the proximity encounters which the concepts of 'seams' or evidential boundaries do not describe well, though. The availability of proximitysensitive digital communication makes relevant a particular tension in situations of play in public settings, a tension that is related to the issues of identification and recognition. Digital communication infrastructures rely on unique identifiers. Whether such identifiers lean more towards the 'technological' side (e.g. IP addresses, Bluetooth identifiers, etc.) or towards the 'human' side (e.g. handles, tags, pseudonyms, avatars, etc.), they all share the property of singularizing the participants of a digital communication event while at the same time allowing them to preserve their real life anonymity: there are no direct links between such identifiers and the usual cues for recognition 'in the real life' that might give their identity away. However, such identifiers constitute participants to such digital communication events as relationally singular. They are made unique with respect to one another by the very communication event they have engaged in and the way it relies on singular identifiers.

With regard to sociality in public places, when people just talk or chat on their mobile phone with others at a distance, there is a complete separation between the persons one may see and talk to in one's surroundings and the remote conversationalist(s). The issue of being able to identify or recognize the remote participant is generally irrelevant. However, this is no longer the case when the digital communication is triggered by proximity, as in the case of Dragon Quest 9 and similar proximity-based mobile social technologies. Then the 'real life' identification of the person with whom one is exchanging digitally becomes not only possible - because there is a good chance that he or she is close enough -, but also an issue.

Membership categorization analysis can help clarify the problem. In an event such as surechigai tsushin, players are affected by the mobility of fellow players they are unacquainted with. Furthermore, different sets of categories and category-bound activities, with differing rights and obligations, are enacted simultaneously. Once another player 'enters' one's game space and occupies part of one's screen with his avatar name and tag message, a first set of relational paired categories becomes relevant (Sacks, 1992): the two people are constituted as Dragon Quest 9 'players', and more specifically 'paired players', bound by the surechigai tsushin event. This makes relevant various category-bound activities (i.e. playing the game and more specifically giving or receiving game resources such as maps) and some types of mutual obligation (such as acknowledging the 'gift' and thanking the other player for it), which require for their achievement identification and mutual recognition on one communication channel or another (i.e. in co-presence or through mobile internet websites).

Surechigai tsushin events occur mostly in urban public spaces and are triggered by spatial proximity. Therefore, in addition to the category of '(paired) players', they make relevant a second category, usually related to traffic encounters, that of 'paired mobile strangers', and a specific set of rights and obligations, such as the obligation to manage tactfully the mutual and embodied proximity, and the 'right to tranquility' or to keep to oneself, which, as we have discussed above, is characteristic of public space urbanity in industrialized megalopoli. So one should avoid anything that goes beyond the minimal kind of acknowledgement characteristic of 'civil inattention', including any kind of engagement that might singularize the passing stranger and make him/her different from all the strangers one passes on an everyday basis.

There is therefore a potential tension that is inherent to the *surechigai tsushin* event itself. As a proximity-triggered digital encounter between fellow players, it implies an orientation towards acknowledging the exchange and identifying the other participant, something which spatial proximity makes possible in real life. As a specialized kind of traffic encounter with mobile strangers in a large city, its tactful management implies an orientation towards avoiding any kind of singularization of the event and its participants, from mutual ignorance to civil inattention. This makes it particularly interesting to make an ethnographic study of the way players manage this potential tension in public places where they may meet and assemble.

OCCASIONAL GATHERINGS AT THE SHIZUOKA STATION

We will now describe a typical type of urban settings in which players arrange to meet in Japan and in which assembled groups of more or less acquainted players equipped with proximity-sensitive game terminals and mobile internet communication resources mingle with crowds of mobile urban denizens. Beyond the particulars of the Dragon Quest 9 gameplay, we are interested here in understanding the kind of interaction order that is supported by public places when these become hybrid ecologies. In the perspective we develop here, places, the kinds of social encounters that unfold there and the interaction order through which the management of such encounters is made accountable are mutually constitutive. This definition is in line with the approach of some geographers such as Doreen Massey for whom places can only be understood as 'articulated moments in networks of social relations and understandings' (Massey, 1994), that is, as sites of 'throwntogetherness' (Massey, 2005). Indeed, in order to understand what an augmented public place might be, we must understand how strangers are thrown together in its hybrid ecology, and how they manage their proximity socially and turn it (or not) into various forms of encounters by relying on the many seams and multiple communication infrastructures of the situation.

The hybrid ecology of the Shizuoka gatherings

Because the gameplay gives players many incentives to meet, groups of players who live in the same area and interact on internet-based social media have taken to organizing regular meetings in various places. Unlike the Akihabara case, these are not permanent urban fixtures. They are planned and announced on player forums and newsgroups accessible through mobile internet. They mostly take place in malls, in or nearby train stations, or in food courts in busy commercial areas. This particular choice of location reflects how Japanese players establish a strong relationship between proximity-based game encounters and everyday urban mobilities. Meeting places are chosen at the intersection or in the immediate vicinity of well trodden urban paths. Such a choice allows players to come by in the course of their own activities, either because it is on their everyday commute in the case of a station, or because they can drop by for a few minutes while doing family shopping in the case of malls.

This is in marked contrast with what can be observed for instance in France from our preliminary observations. French players convene in public gardens and refuse to gather in stations or commercial places. The choice of parks ties the game activity with the sphere of leisure more than that of mobility practices, and the defiance expressed towards other kinds of public places favored by the Japanese players displays a concern with preserving players' meetings from contamination by other commercial or institutional interests, which is markedly different.

The meetings at Shizuoka station particularly highlight this Japanese orientation towards articulating game and mobility practices. The 'organizer' usually announces meetings on the three forums mentioned above, and any player is free to join. Those who regularly participate in such gatherings are often able to recognize one another by sight and to identify each other by their game handles and/or forum aliases, when the two differ. However, they do not usually exchange their real names or mobile phone numbers, maintaining a relatively tight boundary between gamerelated sites of communication and their other activities as individuals.



Figure 3. The start of the meeting at Shizuoka station, with the core group of regulars.

In a typical meeting of this type, players are immersed in a public place where many non-playing strangers come and go, and where known and unknown players may make their physical presence acknowledged (e.g. by getting close to the group, sometimes even engaging into a face-to-face conversation, etc.) or not (e.g. by doing *surechigai tsushin* while avoiding getting noticed). They may also communicate by relying on public or semi-public mobile internet resources. We observed and interviewed participants at one such meeting at Shizuoka station (Figure 3) and we also had online discussions with a few of them.

'Brave' engagements and 'timid' encounters at Shizuoka station

In this section we will discuss various forms of encounters with unknown players and the way players present on the site may exploit the layered resources and the seamfulness of the situation in different ways to produce distinctive participation frames. At one end of the continuum is the case depicted in figure 4. An unknown player, accompanied by a friend, has been informed of a meeting on one of the forums on which it has been announced. He walks into the group of players gathered there (it is recognizable as a group of Dragon Quest players because the meeting has been announced for this time and place, and all those standing there have a DS terminal in hand) and addresses them verbally in order to perform *surechigai tsushin* and exchange game resources. In this configuration, two channels of interaction at least (e.g. co-presence and the game itself) have been opened and somewhat aligned, since the physical appearance of the player who has manifested his presence can now be linked to his game handle. On the basis of his physical appearance, he has become recognizable for future co-present encounters as the owner of a particular character, even if his 'real' name remains unknown. When the co-presence of players is managed thus, the incoming person makes his 'visit' a shared encounter between players and the event is accomplished as a seamless whole.



Figure 4. A newcomer 'bravely' addressing the organizer and joining in to exchange maps

At the opposite end of the spectrum, we have the case of a lady in her late thirties who had gone to do some shopping with her husband and young son around Shizuoka station. She was already aware through the forum that a meeting was to take place at the station and took the opportunity of her presence there to connect her game terminal while eating with her family at a nearby fast food restaurant, thereby gaining access, through surechigai tsushin, to the game space of several of the players gathered there. As her unknown character popped up on the screen of some of the players assembled, none of them noticed or discussed it explicitly. When her meal was over, she left her family and got closer to the group, sitting for a few minutes next to the small Shinto monument visible at the left of Figure 4, at which point she became 'visible' to the ethnographers, who, unlike the players, were actively scanning the scene for a suitable candidate to account for the 'apparition' of the unknown character. Then her husband and son joined her and they disappeared into the station together without providing any visible cue that she had participated in the meeting other than the fact that she was holding a game terminal in her hand. She thus displayed another mode of engagement in the meeting, with two separate participation statuses. One the one hand, she behaved as a ratified and active participant in a game encounter, and on the other hand, she displayed a very loose participation status with respect to the co-present encounter. This falls somewhat in between Goffman's categories with respect to the management of co-presence: while she was more engaged than a simple passerby, as demonstrated her particular form of displacement, which took her around the boundaries of

the group of players, she was no more engaged than a bystander, because she did not provide any further visible form of orientation towards the gathering as such. Players have a term to describe players displaying such behavior, which, incidentally, is considered perfectly admissible and legitimate. They call them 'timid' players. 'Timid' players exploit the 'evidential boundaries' of the situation in order to maintain a separation between game and co-present encounters, together with a distinct set of rights and obligations. In a 'timid' encounter, the situation is accomplished as seamful.

The degree to which this may be done is a collaborative accomplishment, whatever the looseness of the relationship between the 'timid' player and the standing group of regulars may be. For the latter, remarking that a new character has popped up on their screen is always a possibility, a kind of 'safe topic' in their ongoing and open state of interaction. Though they often do not mention such events, they occasionally do so. Such 'noticings' turn the surechigai tsushin event with the unknown player into a public matter of discussion within the group. However, they rarely try to look around to spot a person they can link the new character to, unless the character is related to a player they are 'acquainted' with (in the sense of interacting regularly with him/her through one medium or another). This is not just passive indifference, for they often justify themselves for not doing so (c.f. below), but an active indifference, akin to civil inattention, which somehow 'resists' a normative orientation towards acknowledging digital interactions in co-presence. 'Timid' encounters are a collaborative accomplishment which displays a particular format of civil inattention, adapted to, and characteristic of urban places augmented as hybrid public places. However, this does not exhaust the possibilities of exploiting the evidential boundaries of the situation to produce even more layered participation frames.

Though it may happen, such behavior is less observable in France, where unacquainted players getting to talk together besides their "on screen encounters" seems the norm rather than the exception. This makes French gatherings noisy affairs with respect to Japanese ones. This may be due in part to cultural factors but it also depends a lot on the particular ecology achieved when French players meet in a public garden. They appear as a tight bundle of players, sharply separated from ordinary strollers. Within the boundaries of such a gathering, it is therefore 'normal' to assume that any other person in the vicinity will be a fellow players, non-players being the rare exception besides those who may have accompanied a player. This makes the norm of not addressing strangers in urban public places less relevant. It also makes it more difficult to sustain "timid encounters" in French gatherings, for such conduct precisely plays on the possibility of behaving plausibly like a non-playing stranger while being close. So the spatial distribution of players and non-players in the vicinity of gatherings is a crucial factor to understand the kind of interaction order which emerge in such gatherings

Layered 'timid' encounters and fragmented participation frames

By definition, "timid encounters" are elusive. We observed one such event "physically" in Shizuoka, but also found repeated instances of after the fact acknowledgement of "timid encounters" in forums. A typical case is the one in which two players who have occasionally exchanged on a forum make arrangements to perform surechigai tsushin. This 'rendezvous' of sorts, is of a special nature, as we will see, for it does not necessarily involve meeting or talking in person. For now, let us discuss in more detail a typical example in which the participants publicly discuss their encounter on a forum using their mobile internet access. From a co-present perspective, they are strangers who do not know one another's real name, have never met in person, and are unable to recognize one another visually. But from a mobile internet perspective, they are electronic acquaintances: they 'talk' together and know each other's pseudonym, which singularizes them. Finally, within the game, they are strangers all over again, for they have never met in it before and are unaware of the names of the characters they use.

We will now look more closely at part of their electronic conversation, which encompasses their strange kind of 'rendezvous'.

1. Rick (September 04) 18:40: Tonight I am going to Aeon Hamamatsu Ichino at 20:00. Since I have many things to do I will communicate with you via forum or messenging. Won't Sugimaro be there?

2. Baba (Sept 04) 19:31: Great! I will also go to Ichino around 20:30 or 21:00. It would be nice if we could do a surechigai. I think I will stay mostly in the food court. I hope it will work well.

3. Rick (Sept 04) 20:27: Baba-san, It's OK ! I am already having a drink in the food court $(^{\forall})$ /

4. Baba (Sept 04), 21:19: *Rick-san, I've arrived. I'm coming after going around for a while.*

5. Rick (Sept 04), 23:30: Baba-san. Hello. We have probably done surechigai easily. You are 55 happy-san aren't you?

6. Baba (Sept 06), 12:17: Rick-san. Thanks a lot for the other day. I think we probably have been able to do the surechigai. I have seen someone who might have looked like Rick-san, but I was not brave enough to go and greet you. I would like to play again another time.

The arrangements for their encounter start with 'co-location work'. Rick announces he will go soon (in about one hour) to a place known to be a meeting place for players, and that he will be available only through the mobile internet channel, because he has other things to do (Message 1). Baba responds by announcing she will also go to the mall at about the same time (Message 2). She also evokes a possible game encounter in a way that may be heard as a proposal, and then indicates a more precise location in the mall (the food court), thus going one step further in arranging for such a possibility: being together in the mall might not be enough to ensure the possibility of a game encounter, but being co-present in the food court in the mall probably would be, because of the implied proximity. Rick then announces he is currently in the food court (Message 3), to which Baba replies she has arrived in the mall but has things to do before joining him (Message 4), which projects the game encounter in the future. Messages 3 and 4 show how players use mobile internet resources on the move to manage practical arrangements and adjust the tempo and timing of their encounter through mobile messaging.

The next message by Rick (Message 5) takes place two hours later. It starts with a greeting. We may wonder why the greeting, since they were already talking like this way before. This is made retrospectively clear by what immediately follows, i.e. a hypothetical claim that they may have entered each other's screen. So the greeting can be read as oriented towards a change in the mode of presence of Baba, through her likely 'apparition' on the screen of Rick's terminal. Rick then ends the message by an identity check, which tries to verify whether the character who has entered the gameplay is indeed Baba's. This explains retrospectively why he evokes the game encounter with Baba only as a very likely hypothesis: he has no independent way other than Baba's direct confirmation to connect the game character who has appeared with the forum pseudonym 'Baba'. Such identification work is needed to align what happens on the screen with the online conversation.

Message 5 is left unanswered for more than a day, and the issue is only evoked in the post scriptum of Baba's next message, the main body of which discusses something else (Message 6). It first indicates that she has seen, and therefore looked for and noticed, someone who might have been Rick, and then immediately provides an excuse for not engaging in co-present interaction with him (she was not 'brave' enough, she says). Such an excuse is oriented to and made relevant by a more general principle, left implicit here, which states that when two persons who are mutually acquainted are spatially very close, their acknowledgement of the fact through gaze or speech is expected (Licoppe & Inada, 2010). Message 6 therefore shapes retrospectively the encounter as a refined type of 'timid encounter', in which the participants avoid physically acknowledging their mutual co-presence, and therefore elect to remain strangers at that level, while acknowledging their proximity through mobile messaging.

RELEVANCE FOR THE DEVELOPMENT OF UBIQUITOUS COMPUTING AND GAME DESIGN

It has been suggested that the design of technologies to be used in the public place should be sensitive to the potential number of encounters that these technologies might mediate. One should 'design for scalability' (Hindmarsh et al., 2005), and this is true of proximity-based technologies which are resources to prompt encounters between users. This would require that the gameplay and its functionalities be adjusted to the intensity of the flux of encounters between users at a given place and time, i.e. design orientations that are sensitive to the existence of 'hot' places, in which many 'encounters' may occur on a regular basis (as was the case of Tokyo for Dragon Quest 9 users in 2010), and of 'cold' places, in which users rarely 'encounter' other users (such as Paris in 2011).

Our study gives an indication of how this could be done innovatively by exploiting the fact that our sense of place goes way beyond mere location. How we experience locations as places of a certain type is deeply related to the kind of people who may or may not gain access to a given setting and the kind of encounters and interaction order that the local ecology supports. In the Dragon Quest 9 case, we have seen that the types of 'places' or locales in which players met can evolve and are sensitive to : a) the number of players one can and expects to connect with there; b) expectations regarding the likelihood that one might be acquainted to the players gathered there (which contrasts the Akihabara case, in which one expected to meet only unknown players, with the Shizuoka station case, in which a subgroup of 'regulars' were already strongly acquainted and most players had previously conversed in gamerelevant internet forums c) the proportion between players and non-players and the ways those may potentially spatially mix or remain segregated (for instance, 'timid encounters' are a relevant possibility mostly in situations in which players are not segregated from non players).

Proximity game plays have already been made sensitive to the number of connections in a given area, that is roughly to the density of players in a given area (Soderlund, 2010). But such a notion of distributed game play might be enriched by making the game play sensitive to other local features, such as the degree of acquaintance with nearby players. One way to achieve this would be to implement some text mining applications regarding the digital communication infrastructures used by the players in order to make available within the game system information such as the fact that players A and B, 'present' in a given area, have already exchanged messages, and with what frequency. Then one could collect these in order to obtain the distribution of mutual acquaintance between players in a given area and make the game play sensitive to the fact that a given user is in an environment of players he is previously acquainted with or not. The same idea could be extended to the probability of presence of non users by exploiting the Bluetooth and Wi-Fi inter-platform connectivity of terminals; in that case the game play could be made sensitive to the fact that the player is surrounded by players only, or in the midst of a mix of players and non players. This would make the game play more sensitive to features

of hybrid ecologies essential to the way we experience them as places. It would thus lead to hybrid ecologies meshing more tightly digital resources and experiences (the proximity game) and the 'physical world' (i.e. the way we experience particular locales as 'places' in which we are thrown together in, and which we collectively inhabit).

CONCLUSION

Proximity-based games such as Dragon Quest 9 are a particular case of location-sensitive playful practices. When played in urban environments, proximity games produce a particular form of urban space, shaped as a 'hybrid ecology' through the complex kinds of encounter and collaboration they support. Game encounters mix spatial proximity and digital connectivity in a way that involves several 'seams' and 'evidential boundaries', that is, many resources for the management of multiple identities and the construction of layered participation frames. 'Seams' are not an a priori quality of the situation of play but a potentiality that still has to be accomplished practically: players dynamically orient towards the seamlessness or the seamfulness of the situation on a moment-to-moment basis. Finally, the of multiple communication existence and use infrastructures adds degrees of complexity to the forms of engagement into play, as shown with the example of mobile internet communication resources in Japan.

Playing such games in the street raises the question of how such 'playful urban spaces' may also constitute public places, in which participants must openly manage encounters with strangers. In this case, encounters involve two types of unknown persons: urban traffic encounters with non-playing strangers, as in any kind of modern city, and game encounters with (unknown) players. In the latter case, the encounter may preserve the anonymity of the participants, but require that they connect through digital identifiers and pseudonyms. Such forms of connection and interaction therefore unavoidably singularize their participants. Singularization raises issues of potential identification and recognition, and creates a potential tension with respect to the urban traffic encounters in which every participant is supposed to be equivalent to any other, and in which identification is usually avoided. We think this tension is a very general phenomenon, more generally characteristic of the spread of ubiquitous computing in urban spaces and of hybrid ecologies as public settings.

In our case study, game encounters or *surechigai tsushin* make the identification 'in real life' a relevant concern for the players involved, and such a normative orientation provides meaningfulness to some of the participation frames the players orient to. The behavior of 'timid players', who come to experience game encounters while trying to elude visual or verbal recognition, and also the fact that they are characterized as such on the basis of their particular behavior, provides an example of the consequences of such a tension. It also constitutes a kind of complex form of civil inattention that is specifically

adapted to hybrid ecologies in which numerous digital encounters randomly occur, and in which players and non players mingle. Such a form of 'hybrid civil inattention' could therefore become a specific feature of mediated encounters in large and heavily 'augmented' cities with proximity-based mobile resources. The kind of public place and interaction order assembled players produce in each case seems highly sensitive not only to cultures of urban public places, but also to two significant factors: a) the way players and non-players can be expected either to mingle or remain more or less segregated in a given public place b) expectations regarding the likelihood of prior mutual acquaintance between players gathered there.

We think that all this is much more general, not specific to the Dragon Quest 9 case. Through this case study, we get a glimpse of the kind of interaction order that may appears to characterize an augmented city whose denizens are highly connected in a location-sensitive way. Such an interaction order is not as 'democratic' as the public order in the twentieth century megalopolis, in which, from Simmel to Goffman, passers-by are performed as noticeable but equivalent strangers through civil inattention. It does not revert to the city of earlier times, which was a mix of neighborhoods organized along some form of categorical membership, for instance types of trade or regions of origin. Urban places as hybrid ecologies for proximity-sensitivity passer-by appear as the loci of dense fluxes of mobile denizens in which traffic encounters occur simultaneously at several levels, that of anonymous equivalent mobile bodies, and that of suddenly (through the event of their proximity) and categorically paired individuals through their communication in digital networks, singularized by this connection event, allowing multiple forms of encounter and layered participation frames.

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