Let Me Entertain You: Designing for Surveillance and Online Gaming

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ABSTRACT
Multi-player online gaming environments are designed with the intent of providing entertaining experiences to players that not only foster re-playability but also to cultivate an on-going allegiance or loyalty to the game publishers'/developers' brand or various assets (e.g. Master Chief, Grand Theft Auto etc.).

Design elements such as webcams, activity monitoring between players, and online presence cues make possible player practices within online game-based environments that, though surveillance-oriented, become the key ingredients that work to construct entertaining online encounters. Yet when similar features are transposed to other less playcentric spaces (e.g. workplace), whether online or offline, they can be perceived as threatening or unwanted. The surveillance networks created by the online games themselves and associated 'meeting places' [9] (e.g. Facebook) as well as surveillance activities in these digital spaces are vehicles for creating and sustaining entertaining experiences. The presence of surveillance-oriented design features and their subsequent and on-going use by individuals, create a more entrenched level of engagement and intimacy through repetitive contact. .

The aim of this paper is the analysis of various online games and meeting places that comprise a surveillance network in order to identify the various design features and the player activities they give rise to which can constitute various types of surveillance (e.g. participatory, mutual).

Building on the idea of surveillance having an entertainment function [1], I argue that in terms of the expression of a user experience (UX) in these particular digital spaces, surveillance-oriented mechanisms and practices are fundamental to the creation of enduring entertainment experiences which would not be possible without the reliance on the necessity of *exposure* in both places and of individuals.

Author Keywords
online gaming, social networking, surveillance, design factors, entertainment

1. INTRODUCTION

Desktop and laptop computers and their close relations, the gaming console, have emerged as 'entertainment objects' [49] and are changing how entertainment is delivered and consumed. For many, discretionary time traditionally devoted to activities such as watching television or going to the cinema has shifted to internet-based activities such as social networking downloading and watching content and, increasingly, online gaming [13]. Individuals are typically spending twenty-two hours per week in multi-user virtual environments (MUVEs) such as those dedicated to multiplayer online gaming by taking part in socialising, creating, trading, sharing, consuming and competing [52].

Multiplayer online gaming has matured from the text-based system such as multi-user dungeon (MUD) to visually rich 3D environments in which anyplace there may be up to several thousand individuals, often remotely located geographically, convene virtually to collaborate and compete in an avatar-mediated playscape simultaneously. Regardless of whether one is primarily a laptop-based gamer or a Playstation disciple, frequently it is the online multiplayer mode(s) that individuals have a keen interest in first and foremost [35]. It is the distinctiveness and pleasurable challenges served up by a game's online multiplayer option that is one of the key indicators in which a game's long-term entertainment value and replayability is assessed. The entertainment generated for the players constitutes a purely intangible *experiential consumption* [25] made possible in part by the formation of an 'imagined community' [5] that a *participatory entertainment* (PE) [41] form, such as some types of multi-user virtual environments (MUVEs). Online gaming areas, as a type of MUVE, have surveillance-oriented elements and activities. By exploring the role of surveillance through design features, we can reveal the ways in surveillance is becoming a feature of these environments.

Internet-based services that are surveillance-oriented and included automatic assessment are becoming increasingly ubiquitous [26] (e.g. Google Latitude, Google Friend Connect, Dopplr) so that it is becoming less a case of living *under* surveillance than living *with* surveillance. The aim of

Breaking New Ground: Innovation in Games, Play, Practice and Theory. Proceedings of DiGRA 2009

this paper is to not only challenge the usual notions of surveillance but to also suggest that surveillance is instrumental to facilitating entertainment in terms of the formation and consumption of shared experiences during the in-game multiplayer experience and *around* the in-game space. Furthermore, we demonstrate the ways in which players actively cooperate in their own surveillance through their use of existing online services & accessories that can be unified to create a surveillance network.

With the exception of T.L. Taylor's work (2006) that included an exploration of a player-produced modification used as a surveillance tool in-game for the massively multiplayer online game (MMOG) *World of Warcraft* (Blizzard Entertainment, 2008), the relationship between surveillance and online multiplayer gaming has been little explored.

In this paper, we explore the surveillance-oriented design features of online multi-user environments where users congregate so that their activities generate two types of surveillance: *participatory surveillance* [40, 44] and *mutual surveillance* [6, 53]. Participatory surveillance occurs when individuals voluntarily agree to be subject to surveillance activity whilst mutual surveillance is the practice of monitoring that goes in both directions between two or more individuals. First, however, we will introduce some related background work that will serve to acquaint the reader with various conceptions of surveillance by illustrating its varied manifestations in everyday life and the ways in which surveillance underpins entertainment forms including online multiplayer gaming. An initial review of design elements features of four existing services (Raptr, Steam, Xfire, Playstation Home), will be followed by a discussion of the surveillance that arises from those design decisions that enable various properties and practices to emerge that work towards formulating an inter-related user experience that is conducive to online multiplayer play and shared entertainment. The paper will close with our conclusions drawn from this exploration before sharing some suggestions for future work in this area.

2. BACKGROUND

2.1 From Bureaucratic Discipline to Surveillance Pleasures

The word surveillance is the act of keeping watch over a person or place [11]. It is derived from the French word surveiller and is thought to have made its first appearance in France in the early 1800s [8]. The term is generally associated with institutions such as the state [30,31], corporations [22, 33], workplaces [7,34] and prisons monitoring subjects [16] with the aim of having information about individuals and/or groups so as to exert an influence over them and thus gain conformity. This top-down conception of surveillance is best reflected in Foucault's appropriation of Jeremy Bentham's Panopticon prison architecture in which a central watchtower (or database as suggested by Mark Poster (1996)) makes all activity visible to prison officials yet, due to the prison's design, inmates never know precisely when they are being watched. Consequentially they refrain from engaging in questionable behaviour for fear of the possibility of visible disclosure to prison officials [16].

Foucault described surveillance as 'micro-techniques of discipline that target and treat the body as an object to be watched, assessed and manipulated' and this perspective is perhaps best exemplified by Orwellian imagery (*1984*'s telescreens and ever-present reminders that *Big Brother is Watching You*) or the mass surveillance enacted by East Berlin's Stasi [18].

Surveillance is, however, a more multi-faceted notion especially when one considers the other conceptions of surveillance that feature in everyday life. Norris and Armstrong (1999) characterise surveillance as 'a natural activity in human affairs which endows members of society with competency' and this is certainly the case in as children monitor caregivers or other adults to model behaviour. Dandeker (1999) describes the act of surveillance as a commonplace practice wherever humans gather and can be seen with the social-sanctioned snooping associated with environmental monitoring by the Neighbourhood Watch. Subjects, and not only institutions, can be surveillants in the most banal circumstances.

What Orwell foresaw in the narrative of *1984* was the use of technology to more efficiently collect, process, manage and assess personal information without the intervention of actual people watching another [31] for social control and administration. Information Communication Technology (ICT) provides databases and infrastructure in which personal information about subjects is collected, stored, examined and distributed elsewhere is thought by the state to be the optimal way to 'check and monitor behavior, to influence persons and populations and to anticipate and preempt risks' [32]. Without a doubt, ICT has been instrumental in re-imagining how surveillance can be used and expressed. One place where this is evident is in the area of entertainment.

It is through the entertainment industry that we've come to see everyday surveillance enacted and reflected back to us. The entertainment industry has long recognized surveillance as a vehicle for the production of entertainment by offering audiences 'surveillance pleasures' [1].

In films and television, surveillance acts usually revolve around attempts to monitor a person(s) and place(s) so as to collect information towards a particular agenda that is oriented around evoking some type of revelation via non-consensual disclosure. Surveillance activity in films often includes scenes in which surreptitious recording (*The Lives of Others*, 2006; *The Truman Show*, 1998; *A Scanner Darkly*, 2006), long-range lenses (*Rear Window*, 1954;

Body Double, 1984), ICT (*Enemy of the State*, 1998) or bodily implants (*Total Recall*, 1990; *The Matrix*; 1999) are used to follow the activities and personal affairs of characters. Dramatic tension is often created and maintained when the surveilled character(s) uses strategies of concealment to avoid exposure.

2.2 Surveillance-based entertainment

The long-running hidden camera show *Candid Camera* (1948-2004) and Endemol's Big Brother game show and online fare such as JenniCam and Justin.TV typify the assertion that 'observation is not a menace; observation is entertaining' [47].

Surveillance-based entertainment in which these entertainment forms are firmly anchored in surveillance activity and practices in order to produce entertaining experiences is not restricted to the world of television and webcam exhibitionists. Multi-user virtual environments (MUVEs) can also be sources of surveillance-based entertainment.

It is worth noting that when we talk about 'entertainment' in this paper, we mean it encounters that 'offer complex, dynamic and even multi-faceted experiences' that can contain a 'wide array of different experiential responses and expressions' [46]. This means that depending where one is located in the entertainment experience one can find a chapter in a novel hilarious whilst the next chapter is depressing or a video game is simultaneously fun and frustrating- both are expression of entertainment.

When we refer to MUVEs, rather than confine that acronym to its current incarnation as a graphical, persistent 3D world characteristic of massively multiplayer online games (MMOGs) or massively multiplayer online role-playing games (MMORPGs) or non-directed virtual worlds (e.g. Second Life, There) we want recall past 2d text-based environments such as multi-user dungeons (MUDs). Whether 2D or 3D, they all share the ability to host multiple individuals gather simultaneously, communication synchronously and are porous containers [47] for activity.

However, MUVEs are not simply containers but *meeting places* [15] that resemble Oldenburg's (1999) *third places* (e.g. Coffeehouses, Pubs) that serve as a 'hang out' where individuals can come and go as they please, mix with regulars and the mood is playful. MUVEs, as a meeting place enables fellowship to develop and *an imagined community* (Anderson, 1991) to arise.

With this in mind, first we will review scholarship about 2D social networking sites as a mutli-user environment that yields surveillance-based entertainment and then move on to focus on research includes surveillance-based entertainment in the context of 3D online gaming.

Looking at the practice of online social networking, Albrechtslund (2008) maintains that participatory surveillance can actually be 'empowering for the user'. Through users' voluntary involvement, they take on an active role (rather than being the passive recipient of another's gaze) in their participation of the monitoring of others, and revealing their lives to playfully revel in mutual exhibitionism. In this context, the result is a participatory surveillance that grants users admission to an experience that is 'fundamentally social' and 'even playful' [2] so that a byproduct could be the sense of being entertained.

Certainly when speaking of online gaming as a particular class of MUVE, then in this instance the primary purpose is the provision of entertainment. Participation is fundamental to the creation of fun. Multiplayer online gaming is a prime example of *participatory entertainment* (PE) [41] that is dependent upon the multiple, simultaneous real-time actions of its participants in an extremely dynamic environment to produce entertainment.

In her case study *of World of Warcraft*, Taylor (2006) notes the use of a player-produced modification (mod) called CT-Raid Assist (CTRA) to be used in-game. Ostensibly a tool for managing players and resources, this in-game mod is a surveillance-oriented resource that guild leaders employed to efficiently assess information and instructions via monitoring guild members (e.g. identification of players low on health) and events (e.g. note attacks from hostile creatures and mobs) and thus orchestrate and structure the game experience. The use of these surveillance-based tools 'assist in collaborative play' and 'intersect with playfulness' so that being watched (or watching) could be fun [3].

With so little work available regarding surveillance and playful MUVEs, particularly in the context of online gaming, is it appropriate to focus attention on surveillance as it manifests in the game space (and around it) in order to show the ways in which surveillance is conducive to the provision of entertaining experiences. In the next section we briefly outline the approach employed to view features and phenomena in-game and on the periphery.

3. RESEARCH METHODS

Whilst online multiplayer gaming is now enacted in a multitude of ways that include mobile devices (e.g. iPhone, Playstation Portable), we restricted ourselves to focusing on the formats that have proved to be the more frequent methods used to engage in online gaming with others. Hence, the Playstation 3 console, the Microsoft Xbox console and desktop/laptop computers were selected.

Participant observation puts the emphasis on participation and offers the opportunity for in-depth study of a particular group and/or activity. Opportunities for observation and invitations to participate arose often by being in locales where there is an interest in gaming (e.g. local area network (LAN) competitions, games retailers) or through word-of-mouth as once we were welcomed into these groups,

invariably new individuals were introduced and invitations for participation would then follow.

The places of investigation varied over a five month period in which participation and observation took place. From the informality of internet cafes, university campuses and commercial-operated gaming centres to formal invitations into the homes of individuals, opportunities to observe the interiors of screen-based meeting places and in-game play as well as the actions and events occurring outside the screen. This allowed us to be directly involved in our subjects' leisure pursuits to get an insider view [27] and provide us with a plentiful qualitative background in which to carry out our investigation.

4. DESIGNING FOR SURVEILLANCE: A DESIGN REVIEW

Buchanan wrote that design can be defined in the broadest sense as the conception and planning of the artificial [10]. Considering the conception and planning of in-game environments, developers, as digital architects, work to construct a compelling in-game, multiplayer experience often by the incorporation of novel uses of peripheral accessories (e.g. webcams). This is also the case for multi-user settings that reside on the permeable periphery of the actual in-game space. Yet before individuals even reach the in-game, multiplayer setting determined to arrive in a place of entertaining and playful experiences, they must travel across boundaries from elsewhere to participate and to play with others. On either side of these digital borders, surveillance-oriented design elements are built into the setting. We've chosen to do a review of design features to highlight the ways in which these digital environments are surveillance-oriented systems and the implications this can for the users of such systems.

Sony's Playstation Network and Microsoft's Xbox Live Experience have sought to apply a consistent and seamless user experience by adopting an approach reminiscent a walled-garden or gated community in which players circulate amongst other players on the basis of having a platform consisting of an identical system architecture. There are, however, other paths that enable individuals to initiate or join a multiplayer online game that originate ***outside*** the confines of a particular brands' network. The next sections will offer brief descriptions of the tools and settings that can get users in the game. This will be followed by a table in section 4.5 of online services that are on the periphery of the online multiplayer in-game setting that outlines design elements that are surveillance-oriented in nature. Sections 4.6 and 4.7 respectively will examine the use of social media and webcams unrelated to gaming for surveillance activity before closing this section of the paper. What will become clear after a review of various design features, is an effort to design for surveillance so as to encourage and amplify the entertainment experience.

4.1 Xfire

Xfire started life in 2003 and was sold to MTV's parent company Viacom in 2006. The free Xfire desktop client has approximately 10 million users [20] and supports a variety of popular PC games across genres (e.g. *Counterstrike*, *World of Warcraft*). The service describes itself as a tool that 'automatically keeps track of when and where gamers are playing PC games online… and keep track of when and where a gamer's friends are playing' [50]. Among some of the features are: detection of games being played by others, chat in and out of game with friends via voice or text chat), watching a live feed of a player's screen as they are playing a game and the recording of footage of action that had occurred in the games played.

4.2 Steam

Like Xfire, Valve Corporation's Steam was also launched in 2003. Unlike Sony and Microsoft's console in which a disc is required in order to play, the Steam desktop client enables individuals to purchase PC games digitally and to monitor what other players on the network are playing (or have played) and then join in the game A lobby system setting allows players to convene and organize whilst the Steam Community social network can be accessed in-game as an overlay or from the desktop client.

4.3 Raptr

Raptr, founded by former competitive gamer, Dennis Fong, released in 2008, Raptr is free desktop client for PCs and Macs that allows users to track their friends' gaming activities and progress across multiple online gaming networks (e.g. PC, Xbox, Playstation, Wii) that were previously separate and distinct entities. This is particularly useful as the number of multi-platform gamers continues to grow as Raptr makes it almost effortless to show others what one is playing (or has played), one's FRIENDS to arrange a game. . Furthermore, as Raptr is integrated with AOL messenger, MSN messenger, Google Talke, Xfire, ICQ and Facebook Chat, a user is able to track FRIENDS and remain knowledgeable about the presence and activities of others who may not immediately be immersed in a game or using the Raptr client. Playing status can also be broadcast to Twitter, IM client(s), Friendfeed and Facebook so that individuals can opt to share their activity and status to others.

4.4 Playstation Home

Playstation Home started development during the Playstation 2 era when it was originally the lobby interface for *The Getaway: Black Monday* (Sony Computer Entertainment, 2005). Launched in December 2008, the expansive 3D in that users can create custom avatars, gather in public spaces to meet others and engage in a virtual economy to spend real-world money on enhancements to their avatars or their avatar's flat. A virtual theatre where streaming content like trailers and film can be watched or

game spaces featuring arcade classics (e.g. *Pac Man, Galaga, Dig Dug*) and bowling can be played with other avatars. What's interesting is that for those individuals who are not actually in Home virtually and may be in-game or in some other part of the Playstation network, they are notified of the presence of others who are in Home whether this person is previously known to them or not. Sony's former Head of Worldwide Services, Phil Harrison, described Home as a service that that creates, '… Opportunities for social interaction. To allow players to meet and to get to know each other in a low-intensity environment...'[21]. Whilst the extent to which Playstation users integrate Home into their online experiences is still being debated there are currently 7 million registered users [23].

4.5 Surveillance-Oriented Structural Elements of the Service Providers

Architect and academic Christopher Alexander noted that the design of a place will simultaneously encourage certain activities whilst discouraging others [4].

The matrix that gives an overview of the design elements that are surveillance-oriented in nature in terms of that reside on the *periphery* of the in-game environment are in **SECTION 1** whilst **SECTION 2** looks specifically at a form of surveillance that takes place in-game.

SECTION 1: ON THE PERIPHERY	XFIRE	RAPTR	STEAM	PS HOME
Observe and compare games played most				
Reveals ranking of games based (e.g. population of players playing concurrently, number of hours played)	✓	✓	✓	✓
Identifies individual(s) of interest that are currently present online				
Displays graphical representation of presence of online FRIENDS or BUDDIES	✓	✓	✓	✓
Gain access to knowing the presence of the FRIENDS of FRIENDS online currently	✓			
Updates online status and availability of others relayed to Facebook and Twitter		✓		
Tracks individual(s) of interest current virtual whereabouts				
Relays which FRIEND(s) are located in-game	✓			
Disclosure of precisely *where* FRIENDS are currently located in-game		✓		✓
Notification when other player(s) enter// exit game space	✓	✓	✓	✓
Tracks current activit(ies) in real-time				
Notification of FRIEND(s) current game being played	✓	✓	✓	✓
Updates of FRIENDS activity (e.g. game being played, entering/exiting a game, chatting) via newsfeeds solely within the system	✓	✓		
Streams update of player's and FRIENDS activity (e.g. game being played, entering/exiting a game, chatting, watching a film, listening to music) via feeds into social networks and other IM clients		✓		
Displays games currently being played across multiple platforms		✓		
Notification when individual(s) who are not FRIENDS of player materializes in public space(s)				✓
Displays games currently being played across multiple platforms		✓		
Monitors and collects historical data of others to divulge habits and preferences				
Displays FRIENDS past activity (e.g. games played in past day, week, or month; who has been befriended, updating of avatar)	✓	✓	✓	
Permits access to all games played, number of trophies/achievements, comparison of achievements to others	✓	✓	✓	✓
SECTION 2: IN-GAME	**XBOX 360**		**PS£**	
Permits monitoring and recording of player real world activity and reactions via placement in-game				
Webcams enables live streaming of players' real world engagement with in-game events	✓		✓	

Figure 1: Features Matrix

Design-wise, these services share a mixture of characteristics drawn from conventions found in instant

messaging (e.g. visible icons signaling availability and presence, audible notifications) and from social networking services (e.g. broadcasting activities across a network) that are oriented around a system of connectivity based on displaying relationships, sociality and sharing individuals' activities that provides on-going, real-time feedback to its participants.

4.6 Surveillance in Play: Webcams

Both the Sony Playstation and Microsoft Xbox offer, as an additional accessory, webcams which offer innovative ways to interact with games but also to amplify the in-game entertainment experience.

For example, various games have taken advantage of the webcam to enhance the in-game experience. In the driving game *Burnout Paradise* (Criterion Games, 2008) when the player's opposition is driven off the road to digital death and destruction a photo, called a 'mugshot' is relayed to the winning player at the moment of impact. The triumphant player, should they wish, is able to add this snapshot to their trophies.

In the popular game first person zombie shooter, *Left for Dead* (Valve Corporation, 2008), those who opt to turn on their webcams provides live streaming of their range of facial expressions and physical movements with as a screen-in-screen display during in-game play. As players watch and work to fend off hordes of zombies on-screen, each player, in an act of mutual surveillance, are able to simultaneously monitor each other's real world, real-time responses throughout the gaming session. The mutual surveillance that the game's webcam integration provides heightens player sensations and emotional responses and thus offers a distinctive entertainment experience.

4.7. Complicit Play & Third Places

Rather than rely solely on Xbox Live and Playstation Network, individuals are using other means for to stay abreast of the whereabouts and activities of others using a combination of online 'hang outs' where an unexpected arrival in these places or notification of activity can trigger an impromptu online gaming session or the coordination of a future session.

Sometimes an individual, depending upon their circumstances at the time, may opt only to appear in a specific multi-user meeting place at a particular point in time whether it in either an IM client or using a social networking service such as Facebook. The act of being notified visually or aurally of another's online presence (e.g. ☺ Ready for Halo/Cod) their mood (e.g. 😐 I'm bored!!!) or being delivered a notification (e.g. MasterBlaster has joined Call of Duty) are outside the boundaries of Microsoft or Playstation's branded gaming network and the in-game environment.

In spite of this, the individuals who are disclosed information regarding others whereabouts and recent activity in an IM client or Facebook can easily make real-time text-based contact to inquire about the possibility of moving from a 2D multi-user meeting place to a 3D multi-user in-game experience:

> **P1:** Thought you were going out tonight?
>
> **P2:** Not til' 8.
>
> **P1:** Wanna play CoD (*Call of Duty*)?
>
> **P2:** Yeah. I got time for a quick one. Be there [in-game] in 5.

The participatory and mutual surveillance that is enacted by individuals is a vehicle that can allow them to transport themselves through the permeable borders of IM and Facebook and, through a few clicks on hyperlinks, arrive in the 3D multi-user in-game playscape. Whilst IM clients such as Yahoo!, MSN and Facebook are not dedicated to gaming, their surveillance capabilities, through the voluntary disclosure of individuals' online status coupled with synchronous chat facilitate online, multi-player in-game encounters.

4.8 Come Together: Community-Oriented Surveillance

People can't play together and be mutually entertained if they do not know who else is around and what they are doing in a setting. Whilst social presence, the extent to which a medium facilitates knowledge of other people and interpersonal relationships during an interaction [17] forms the basis of online services such as instant messenger and Facebook, whilst services like Steam, Raptr, Xfire and Playstation Home have augmented this with the addition of ever finer detail of information about users.

These systems are designed with the intention of enabling surveillance-oriented activity to occur so as to facilitate effortlessly participation in a shared online entertainment experience. Individuals who use these systems undertake surveillance activity so as to maneuver towards multi-user in-game experiences. None of this would be possible without the ingredient of participation.

These systems are the tools of surveillance whilst the individuals are the agents and practitioners of surveillance as well as the objects of surveillance. In the next section, we will discuss the individual surveillance practices that are conducted during engagement with the aforementioned systems and the centrality of *exposure* for these systems, and in-game entertainment to succeed in delivering a user experience often steeped in surveillance-oriented practices.

5. DISCUSSION

Participation in social networking sites and online gaming services are popular online activities in which individuals engage. When one considers the unfolding of entertainment, the experience(s) occur *somewhere*- be it a cinema, theatre

or in one's mind and the participant is transported elsewhere. There must be 'containers' [47] that serve as borders to the activity(ies) and events. The *container's* actual design give indications to what types of activity(ies) that can occur and offer a place to convene virtually; a *third place* [37] in which to hang out- a *meeting place* [15]. Raptr, XFire, Steam, Playstation Home and Facebook are online containers of activity that have the capacity to be *meeting places*. They are distinguished from in-game *meeting places* in that the emphasis is on players convening with attention focused solely on enacting game play bounded within the specified goals and rules of a particular game. When players meet together in a participatory entertainment setting whether in a cooperative zombie shoot 'em up such as *Left for Dead* (Valve Entertainment, 2008) or raiding in Warcraft, the onus is upon each individual player, through their participation, to contribute to a shared mass entertainment experience. Surveillance is a phenomenon that propels users to fun and entertainment even whilst it also functions as a source of entertainment.

The Design Review in section in section 4 demonstrated the elements present in meeting places in which technology does the monitoring and information aggregation and classification. In the following sections, we will focus on two aspects and how they relate to assisting the individual toward moving to a shared entertainment experience in-game. The first aspect will look at the ways in which individual surveillance practices are a natural consequence of a surveillance network formed from meeting places so that surveillance activity is a is a key component of the user experience. The second is concerned with exploring the notion of *exposure* and the reliance on this quality to engender participatory entertainment.

5.1 Spies Like Us: First We Watch, Then We Play

Whilst *meeting places* enable users to engage in surveillance activity, the configuration of the user's screen space also provides other additional opportunities for surveillance. Xbox and Playstation players in particular were observed to be both passively and actively involved with multiple *meeting places* concurrently. For example, with one or more instant messaging clients open, a user's FRIEND(s) list identifies individuals that are currently present online via the status displayed (e.g. ⊖ Jon is busy, ☺). When this is combined with a browser tab dedicated to Facebook this offers the ability determine if FRIEND(s) may be elsewhere virtually by tracking the presence of FRIENDS who have opted to meet in Facebook instead.

In addition, users are continuously streamed with data from newsfeeds and IM chats that reveal recent occurrences (and mood) so that current activities can be tracked in real-time to relay information about who is inhabiting those places to give an indication of what is unfolding there. Granular gaming-related details are supplied when IM and Facebook are combined with a desktop client such as Raptr that tracks the presence of users across gaming platforms and streaming updates with detailed user information (e.g. KungFuKid has started Left for Dead) to reveal a wealth of current and historical information regarding the individuals and environmental conditions within those meeting places to divulge habits and preferences of individuals.

Like an operative overlooking a radar screen, a user via an aural alert (e.g. incoming IM sound) and/or using their gaze to sweep the desktop surface plastered with assorted visible *meeting places* (e.g. Facebook, IM chat client(s), Raptr, Steam) so as to efficiently monitor and detect environmental changes in those places. Together, they can be used to form a surveillance network that enables the user to remain apprised and for coordination to take place. Thus, the user amasses information from a composite to assess the availability of others and their receptivity for a spontaneous online gaming session or to arrange a session at a pre-arranged time.

The structural configuration of each meeting place and the users' knowledge of the whereabouts and availability of others and *what* they are doing allow users to evaluate: *Who* seems to be in a position to participate in a multiplayer online game and *what* is taking place in-game. There is an expectation during the user experience of these MUVEs that surveillance will occur and is part of the entertainment experience.

The user is the recipient of these surveillance-oriented system(s) and the benefits they confer. However, these systems make requests of their users to encourage participation. These requests, in various ways, revolve around user exposure, the subject of the next section.

5.2 From Exposure to Fun

The on-going surveillance that is generated by the moment-to-moment feedback from users' monitoring of the desktop environment is made a reality because users opt-in to forms of disclosure as guided by the instructions of each meeting places systems requirements for participation. As shown in section 4.5 and 4.6, it becomes evident that these containers of activity, including webcams, are designed with the intent to reveal and disclose the digital trails of activity, virtual presence and preferences of those who use the service(s). In these online meeting places, these forms of *exposure* are welcomed and desired and are a fundamental part of the user experience.

Exposure, often when it is featured on film, is normally something to be avoided. Avoiding discovery, attempting to remain concealed is often a character's aim (e.g. *Rear Window, Body Double*). However, *exposure* is revealed to be a significant component to the instigation of shared online gaming sessions and the enhancement of entertainment (e.g. mutual surveillance in-game via webcam). The emphasis in online multiplayer gaming is drawing users to a communal area *in-game* where a

multitude of players can come together to create entertainment around the parameters set by the game designer. This playful participation would not be possible were it not for individuals willingly submitting themselves to exposed objects for the detection of others.

With the promise of potential fun and the knowledge that no two online multiplayer experiences are alike as incentives, players actively collude in the formulation and maintenance of online surveillance systems. The individual's compliance with each meeting places' system's informational requests and visibility settings are the requisite precursors to participation. The participatory surveillance means that individuals have become their own informant and practitioner that the surveillance infrastructure is reinforced. The structural elements of these online services make participatory surveillance the default option in order for individuals to gain access to the gratifications within the online in-game environment.

Exposure is a tacit outcome of the design features built into these online services. In an office setting, were one's current activities, communications, people they were in contact with, precise whereabouts and activities and whereabouts of colleagues-of-colleagues exposed to others in that setting for on-going monitoring, surely there would be some discomfort if not outrage. However, when these facilities revolve around playful possibilities, then exposure, rather than concealment, is a welcomed notion. Exposure is one of the outcomes of the design strategy that also works to produce an architecture and culture of surveillance.

6. CONCLUSION

The design of these online services create the conditions for the enactment of surveillance activity by individuals. Surveillance-oriented mechanisms and activities are fundamental to the instigation and creation of enduring shared, entertainment experiences in-game. In the playful context of online gaming, *exposure* is the organizing feature of these surveillance systems (and the surveillance networks that they can comprise when used in unison) is essential for the surveillance in these systems to function and for forms of surveillance, such as participatory and mutual surveillance, to be expressed. Surveillance is part and parcel of the user experience of these services.

This paper represents initial work we have done in this area. We foresee future work in this area could be expanded to investigate:

- The ways in which self-surveillance in online meeting places can interacts with lifestreaming activities
- Does the sense of an imagined community' and the unified goal of fun explain why individuals collude in their own surveillance?

By exploring the role of surveillance and online gaming we've endeavored to present an atypical view of surveillance whilst also exposing the extent to which it is an aspect of participatory entertainment settings.

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