# Wii All Play: The Console Game as a Computational Meeting Place

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### **ABSTRACT**

In this paper, we present results from a qualitative empirical study of collocated group console gaming. We focus on motivations for, perceptions of, and practices surrounding the shared use of console games by a variety of established groups of gamers. These groups include both intragenerational groups of youth, adults, and elders as well as intergenerational families. Our analysis highlights the numerous ways in which console games serve as a computational meeting place for a diverse population of gamers.

# **ACM Classification Keywords**

H5.3. [Information Interfaces and Presentation (e.g., HCI)]: Group and Organization Interfaces—Collaborative Computing

### **General Terms**

Human Factors, Design, Theory

# **Author Keywords**

Wii, Xbox360, Playstation, PS2, PS3, Gamecube, Video Games, Console Games, Digital Hearth, Computational Meeting Place

### INTRODUCTION

Gaming is an incontrovertible force in a great many peoples' interactions with computation; 65% of American households, in fact, report playing computer and video games [8]. While gaming is sometimes (and naively) viewed by the public as an isolating activity, it is, in practice, surprisingly social. Fully 59% of American gamers reported playing games in person with others; this is a 16% increase in only the past two years. In fact, of the ten top-selling games of 2007, nine games included modes of gameplay for multiple players [13].

This surge in collaborative gaming has been explored by researchers in human-computer interaction and computer

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supported cooperative work. These researchers have undertaken studies of massively multiplayer online games such as World of Warcraft (WoW) [7] and Star Wars Galaxies [6] as well as multiplayer uses of the Nintendo DS handheld gaming system [17] and physical gaming <sup>1</sup> [12]. And yet there is a dearth of research on *collocated, group console gaming*, more generally. This gap in our understanding of collaborative gaming is surprising given that console games are often designed explicitly for collaborative gaming. Additionally, console gaming is practiced by a significant segment of the population. Industry reports suggest that 38% of American households own a video game console [8] and that revenue in 2007 from console game software alone totaled \$6.6 billion [9].

One of the most striking trends in the console game market is the surge of sales in "family entertainment" games. Sales of this genre of games grew 110% in one year alone, accounting for 17.2% of game sales in 2007 [9]. Schiesel, writing for the New York Times, called this dramatic shift a "sea change" in the gaming industry [13]. This "sea change" in gaming can, at least partially, be attributed to the evolving demographics of gamers, 40% of whom are now female and 26% of whom are now over the age of 50. Researchers have paid careful attention to the changing relationships between girls and games (e.g., [2, 3, 14]). Reporters have also picked up on other interesting demographic shifts, noting the use of gaming in retirement communities [19] and the generation of gamers who now have children of their own who are also gamers [18].

Console gaming has arrived at a crossroads with respect to how the industry can proceed:

Paradoxically, at a moment when technology allows designers to create ever more complex and realistic single-player fantasies, the growth in the now \$18 billion gaming market is in simple, user-friendly experiences that families and friends can enjoy together [13].

A better understanding of the practices surrounding console gaming, particularly the practices of the increasingly diverse population of group console gamers, is critical for

<sup>&</sup>lt;sup>1</sup> Physical gaming is gaming that involves body motion as input, e.g., Dance Dance Revolution. Physical gaming is often but not always a subset of console gaming.

understanding the motivations surrounding and momentum of this "sea change." Gaming has historically also been a driver for technology development in other domains; understanding practices at the leading edge of gaming may give us foresight about trajectories for technology use in other domains, as well.

The focus of existing research on gaming (e.g., [4]) is often on the game, itself: What makes video games fun? Is it the immersiveness of the game world? The challenge of the gameplay? In this research, we challenge the primacy of that question. For groups who gather together to play console games, the question should not be, "What makes video games fun?" but "Who makes video games fun?" And the answer is not in the games, themselves. As we will see, the answer can be found in the people and the sociability that surrounds the gameplay.

In this paper, we describe our study, its method and participants. We present the results of the research, first by establishing some context for understanding group console gaming—what are the motivations for playing console games with other people? Then, we unpack the various ways in which the console game serves as a meeting place for a diverse set of gamers. We situate our findings among two threads of related work: (1) sociability and collaborative gaming and (2) sociability and the digital hearth. We conclude by distilling recommendations for

designing console games as computational meeting places.

#### **METHOD**

We conducted a qualitative empirical study of collocated group console gaming, recruiting 36 participants who belonged to groups that gathered regularly to play console video games. Study participants engaged in four different research activities:

- 1. **Questionnaire**. Participants completed a questionnaire that asked about their previous experiences with various game genres and platforms. Participants also reported basic demographic information such as sex and age.
- 2. **Group gameplay**. Individuals participated in groups of friends or family who regularly gather to play games. These existing groups played the game or games that they typically play for anywhere between thirty minutes and two hours (an hour and fifteen minutes, on average). We observed groups play a variety of games on a variety of gaming platforms. Descriptions of the gaming groups as well as the games that were observed are reported in Table 1.
- 3. **Gaming environment sketch**. Participants sketched their ideal group gaming environment, after the sketching task suggested by Sall and Grinter [12].
- 4. Focus group. Individuals participated in a semi-

Gaming Group	Participant Demographics								77	
	Youth		Adults		Mature Adults		Elders		Platform	Games
	Female	Male	Female	Male	Female	Male	Female	Male	Observed	Observed
Group A Siblings & their Cousin		P1–P3							Wii	Super Smash Bros Brawl Mario Kart Wii
Group B Friends		P4-P6							Wii	Wii Sports—Tennis Wii Sports—Golf
Group C Siblings	P7, P8								Gamecube	Paper Mario
Group D Couple			P9	P10					Wii	Lego Star Wars
Group E Friends				P11, P12					Xbox360	Grand Theft Auto IV Burnout Paradise Halo 3
Group F Couple			P13	P14					Xbox360	Guitar Hero III Rock Band
Group G Residents of a Retirement Community							P15–P17		Wii	Wii Sports—Bowling
Group H Residents of a Retirement Community							P18-P20		Wii	Wii Sports—Bowling
Group I Child & his Parents		P21	P22	P23					Wii PS2	Boom Blox American Idol (Karaoke)
Group J Child & his Parents		P24	P25	P26					Wii	Wii Sports—Tennis Wii Sports—Bowling Dance Dance Revolution Hottest Party Rock Band
Group K Couple & her Mother			P27	P28	P29				PS3	Rock Band
Group L Siblings, their Parents, Uncle & Grandparents		P30, P31	P32	P33, P34	P35	P36			Wii	Wii Sports—Tennis Wii Sports—Baseball Wii Sports—Golf

Table 1. Overview of participant population.

structured focus group with other members of their gaming group. The focus group protocol included questions about the gaming environment sketches, motivations for getting together to play games, and gameplay preferences when gaming in various contexts.

We studied the gameplay of groups in whatever setting they typically gathered to play games; all groups gathered in residential settings—family rooms, recreational basements, or the shared common areas of a retirement community. We conducted the remainder of the study in the same location where participants played.

The results that we present in this paper are derived primarily from a qualitative, inductive analysis of the focus group data (see e.g., [1]). We have additionally drawn on selected data from our observational fieldnotes where it serves to clarify a theme identified in the focus group data analysis and have used some of the data from the questionnaire in order to characterize our participant population. An engagement of the data from the remainder of the study is beyond the scope of this paper.

# **Participants**

Our participants included 36 individuals who were each part of a group that gathered regularly to play console video games. We recruited participants in the context of both inter- and intra- generational gaming groups: three groups of all youth participants, three groups of all adult participants, two groups of all elder participants, and four groups whose participants spanned multiple generations (Table 1). Youth participants ranged in age from 3 to 15; adult participants, from age 26 to 41; mature adult participants, from age 52 to 59; and elder participants, from age 68 to 84.

Although we specifically contacted retirement communities to recruit groups of elder participants, all other groups were recruited via snowball sampling. We did not turn away any groups; the diversity of gaming groups in our study was a naturally-occurring result of the snowball sampling.

In all but three cases, every member of the gaming group present on the day of the observation participated in the full research design. Participants in Group F were joined briefly in their gameplay by a housemate who was just passing through. Participants in Groups G and H were a subset of larger gaming groups that fluctuated in membership from 7 to 28 individuals. While a researcher observed the gameplay of the entire group, the activity coordinator at the retirement community recommended individuals to participate in the remainder of the study based on their health and the schedule of other activities.

In this paper, we refer to our study participants (all of whom play games and enjoy doing so) and individuals with whom they play games as gamers. We have explicitly chosen not to perpetuate other cultural definitions of "gamer" that legitimize only certain kinds of gameplay:

What remains troubling is that within the industry itself, and also within the academic community,

games which have attracted a more gender balanced playing audience, such as *Everquest* and *The Sims*, are frequently cited as deviations from the 'classic game model,' which implicitly works to reinforce the notion that these are not *really* games and their players are not *really* gamers" (authors' original emphasis) [5].

### **MOTIVATIONS FOR GROUP CONSOLE GAMING**

The primary motivation for group console gaming was not the games, themselves, but the social interactions afforded by the collocated gameplay. The most important part of group console gaming was, very simply, "the sociability of it" (P15<sup>2</sup>). Some gamers played because of the "companionship" (P18) that collocated gaming afforded. A number of youth gamers, in particular, preferred gaming in groups because it was less "lonely" (P24).

For some gamers, group console gaming stood in contrast to other kinds of group activities that were not as interactive:

P23: It's more just... being around somebody, you know....
You just want to do things together with people.... A
lot of the things that we do together, in general, tend to
not be necessarily that interactive. Maybe... you go to
a movie together.... [You] are in the same room, but
you're not interacting. At least with the games, you are
interacting.

Other participants noted that certain kinds of social interactions were particularly motivating—such as teamwork, common goals and shared successes.

P13: You interact with people toward a common goal. Like, it's really teamwork.... it's, like, [if] all of you didn't think that [your teammate] could even make it and then they do, it's like, "Whoa, good job!"

While a number of participants emphasized the ability to "support each other" (P25), give "high five[s]" (P32) and say "good job!" (P31), other gamers took advantage of the opportunity for lighthearted banter and good–natured ribbing:

P36: I like to play with other people so I can let them win, and so they can feel good about themselves.

P35: Yeah, whatever!

It is worth emphasizing, in particular, that a number of participants in our study, including several female adults and all of the mature adults and elders, reported that they only played console games in groups—never by themselves. For those individuals, the sociability of group console gaming was the primary motivation for playing any games at all.

<sup>&</sup>lt;sup>2</sup> Quotes are attributed to individual gamers by participant number (see Table 1). Quotes attributable to the interviewing researcher are indicated by an "I."

# THE CONSOLE GAME AS A COMPUTATIONAL MEETING PLACE

The results of our research demonstrate several ways that the console game serves as a *meeting place* for a diverse population of individuals. Console games serve as:

- a meeting place for social interaction,
- a meeting place with porous boundaries,
- a meeting place for gamers with varied levels of expertise,
- a meeting place for gamers with varied preferences for gaming genres & styles of gameplay,
- a meeting place between interpersonal relationships and the competition of gameplay,
- a meeting place between gaming and its stereotypes, and
- a meeting place between adults-as-parents and adults-asgamers

### A Meeting Place for Social Interaction

P11: Everyone's kind of sitting there, everyone's getting along, and it's a common place of interaction.

First and foremost, console games serve as a meeting place around which individuals can gather for the social interaction that is central to group gaming. Console games are, for different gamers, both an incentive and an excuse for getting together with others. Console games are something upon which individuals with different backgrounds and interests are willing to converge for the sake of social interaction.

P11: I think it's good for the interaction. It can bring a lot of people together that may not have the same interests and stuff, you know. It's, like, a commonality that can draw people together.

Console games serve as both an intentional and a serendipitous meeting place for groups of gamers. Some gamers noted that playing console games was a sufficient reason to schedule a get together:

- P14: We'll arrange kind of, like, games nights with our friends
- P13: It'll be the focal point, like, "Come over and play Guitar Hero with us."

Other groups of gamers had regularly scheduled times for gaming. Gamers in Groups G and H gathered to play console games when it was included on the schedule of the retirement community. And every week, the three generations of family members in Group L gathered to share Sunday night dinner and play console games together—"Sunday's family day" (P36).

For some, group gaming was also a serendipitous meeting place:

- P13: Our roommates just started, like, "hey...let's set it up, let's do, like, yeah, a four player."
- P14: So yeah, if it wasn't for that, I wouldn't, you know... each night I would not have played video games...

Most participants recognized that spending time with friends and family was important and that group console gaming was one way to make that social interaction a priority.

P29: Time to share new experiences with friends or family members is such a premium these days. It is good to slow down and do something enjoyable instead of doing something you have to do. Spending time together is probably the most important.

Even individuals who were not as enthusiastic about or as proficient at gaming opted to appropriate console games as a meeting place for the sake of social interaction.

P22: I don't like playing games as much as they do. But it's the most common family interaction that we have. I grew up in the gaming era, too. I'm not very good at it, but they both like doing it, so I play the games.... On my own... the only time I play games is... when I'm really bored. It's more for the interaction.

### A Meeting Place with Porous Boundaries

One youth gamer sketched his ideal gaming space on an airplane. As he talked about this space, he realized that he would need to add a couple of important features: a telephone and a teleporter.

- P4: And I forgot one more thing. There's going to be a telephone right here.
- I: Why do you need a telephone?
- P4: So you can call people up and get more people over.
- I: In your airplane?
- P4: Yes. And then they can teleport over because I have a teleporter. That makes sense.

P4's creative and playful interpretation of the sketching task emphasized the importance of allowing people to come and go fluidly from games. The ease with which gamers should be able to insert themselves into and extract themselves from, "rotate in and out of" (P27), gameplay was a theme that carried across other interviews, as well.

P9: If you have a bunch of people coming in and out, they can hop in whenever, or somebody doesn't want to play this round, somebody else can take over.

In being a meeting place with porous boundaries, gamers' engagement with the game, itself, ranged from central to peripheral. In several gaming groups, particularly the larger ones, gamers regularly rotated in and out of gameplay. While not playing, gamers stayed within audio and visual contact of the game but may have been preparing food in the kitchen, playing cards, retreating to other corners of the room to hold side conversations, or sitting on the sofa and watching those who were playing.

Allowing gamers to insert themselves into and extract themselves from gameplay in a flexible manner was particularly valuable for those gamers who may not have been as familiar with the game currently being played. They could watch other gamers play and jump in when they felt they were ready to play (e.g., Group G).

# A Meeting Place for Gamers with Varied Levels of Expertise

Group console gaming served as a meeting place for gamers with varied levels of expertise. Most gamers we interviewed played console games with existing friends or family members; gaming skill or level of expertise was not the deciding factor when assembling gaming groups.

Often, one member of a group had extensive experience and enthusiasm for gaming and served as an evangelist for console gaming. Individuals who may never have played before sometimes became gamers because of these other, more experienced gamers.

- P10: You probably play [console games] because I play them.
- P9: Yeah.
- P10: Would be my guess.
- P9: Because I never played games before.

These distinctions among expertise levels significantly influenced group gaming practices. Gaming groups gave careful consideration to the selection of an appropriate gaming platform and suitable games for groups with ranges of expertise levels.

# Selecting Gaming Platforms for Groups with Varied Levels of Expertise

P11: I find the Xbox and PlayStation are geared for gamers... whereas the Wii and those things are more geared for people. Their demographic is not even the same thing anymore.

Without exception, every gamer who spoke about selecting a gaming platform that would be appropriate for a breadth of expertise levels cited the input device as the central factor in the decision-making process. Input devices that afforded simple motion were preferred. Input devices with a lot of buttons were generally rejected as having too much of a learning curve and requiring too much "button mashing" for groups of gamers with a breadth of expertise levels.

- P9: Like, the Wii, I could pick it up and I could figure it out in like, two minutes. With other games, like we were at our friend's there, and it was the Xbox, and oh gosh...
- P10: Same game with a different controller and she hated it!
- P9: It was terrible! Just because it was a button mashing thing again...
- P10: And it's really funny that they can make the exact same game, Lego Star Wars, on Wii and on Xbox 360, which has vastly superior graphics capabilities, but it's way more fun to play on the Wii just because of the form factor of the controller. And that's literally all it is.
- P14: Yeah, so if I'm trying to get my parents to play a game... I will only pick, like, the Wii sports games, because it's simple and easy...
- P13: A lot more interactive than, like, a first person shooter would be.
- I: What do you mean, "it's simple"?
- P13: It's not all the buttons.

P14: Yeah, with the Wii, it's just simple motions.

One of the activity coordinators for Group H went so far as to advise the members of that gaming group to bowl with the Wii Remote held upside down so that they would only see the one most relevant button. The strong preference for gestural and physical input devices was also observed during gameplay; all groups but two played games exclusively using Wii Remotes or the specialized physical input devices of rhythm and music games.

# Selecting Games for Groups with Varied Levels of Expertise

P10: It's got enough challenge for me and...

P9: It's easy enough for me.

The most critical factor in selecting a game for a group of gamers with diverse expertise levels was the learning curve involved; games with shallow learning curves were clearly preferred.

- P10: If there's a learning curve for it, it's not interesting to you...
- P9: Like too much of a learning curve.

But games also had to have some complexity and depth for more experienced gamers. One gamer explained that Rock Band was his favorite game to play in groups because it balanced the shallow learning curve for novice gamers with challenges for more expert gamers.

P6: It's like a fun game to play and it's a little hard. It's not that hard to learn at all but still people have some trouble playing it.... And it's got different difficulties 'cause it can either be a really easy game or a really hard game. And you can all play at different levels. So you don't have to play at the same level.

# Adjusting Gameplay Dynamics to Accommodate Groups with Varied Levels of Expertise

- P3: [In] Brawl and Mario Kart, you play against each other, and there's competitiveness.
- I: Are they the same kind of competitiveness?
- P3: In one of them I win, and the other one he wins. So it's a different kind of competitiveness.

In many cases, variations among expertise levels are not as distinct as that between novice and expert. In any given game, different players may have different skill levels. Gamers who owned the console and/or the game used for group gaming tended to be better at that game than those who did not have regular access to the game. Gamers who had real-world experiences that provided them with transferable skill sets also tended to be better at certain games than others. Two gamers, for example, in Group G had played in bowling leagues. Even though they did not have extensive experience with console games, they were the Wii bowling experts and evangelists in their group. One gamer in Group F played acoustic guitar. Even though he played Guitar Hero and Rock Band with others who had extensive gaming expertise, his previous musical experiences gave him an edge in the game and influenced negotiations surrounding gameplay.

These variations in skill level and expertise influenced the tenor and style of gameplay. Because different players were known to have an advantage, gameplay was sometimes less competitive or less serious:

- P13: ...we're not overly competitive because I think he's clearly better than me at the guitar stuff.
- P11: We're not very serious about it usually.... Even if we're playing a competitive game, it's not competitive. Especially because it's not his system so I'm going to probably play the games ten times more than anybody else

Some groups opted for more cooperative modes, games that allowed for different players to play at different skill levels, or gamers intentionally switched up roles to help balance discrepancies among skill levels. These gamers intentionally avoided modes of play that would have emphasized the discrepancies among gamers' skill levels:

P14: When you're playing in a kind of a quick play mode, anyone can do whatever difficulty. But if you want to actually unlock achievements... the person with the lowest kind of level is the one that dictates kind of what you unlock. So if everyone plays, like, at expert level, then you unlock more stuff. But if there is one person—you know, if everyone's at expert but there's one beginner, then, you know, you only unlock beginner things. We usually play the quick play mode, just so that we don't have to... make the choice of, you know... choosing all of the levels that, you know, would unlock [more].

Not one gamer in this study talked about disadvantages associated with the diversity of expertise levels among their gaming group. Some gamers did, however, talk about the advantages of having varied levels of expertise within a gaming group.

P22: Well, in my case, I'm not that very good at it, so I don't see beyond... a certain level. So it's fun, because someone else can get you to the other level. Or you can see the levels that you're about to enter.

Mentoring and learning comes naturally from variations in expertise<sup>3</sup>. For novice gamers, "you're also learning" (P15) from more expert gamers. More expert gamers also enjoyed teaching and mentoring less expert gamers (e.g., Group J).

# A Meeting Place for Gamers with Varied Preferences for Gaming Genres & Styles of Gameplay

P11: Yeah, first person shooters... I'd say that's a really good one to play with multiple people. Or party type games. Because it depends, right... It really depends on the crowd.

Different gamers have different preferences about game genres and styles of gameplay. Gamers were cognizant of these differences and demonstrated flexibility about what games were played and how those games were played.

P14: If we wanted to make sure everyone was involved in a game, we would probably pick Rock Band. But... if I was playing with the rest of the housemates, we would probably play, like, one of those first person shooter games....

P23: With a certain group of friends that I used to have, I'd play the sports games a lot and those were mostly guys who were into sports. With [P22], I tend to play puzzle games a lot more, because she prefers puzzle games...

P22: But then there's the group that wants to sing.

P23: So with them, we like to play the karaoke game.

But every group found genres and styles of group gameplay with which they were most comfortable. Some groups played multiplayer games that supported simultaneous play (e.g., Dance Dance Revolution, Lego Star Wars, or Halo 3). These groups looked for games that played "evenly" and "equally."

P3: They're good multi-player games that people play evenly.

I: What do you mean, "play evenly"?

P3: Like, so you don't take turns.

P9: But [Mario Galaxy] is not necessarily two players; it's one guy runs around and then the other one's just kind of the helper.

P10: Kind of helps.

P9: Whereas [in Lego Star Wars], you're two individuals and you're both chopping stuff.

P10: We're both equal...

Other groups played multiplayer games in which players took turns in tight cycles (e.g., Wii Sports—Bowling) or played the single player mode of games that enabled them to take similarly tight turns (e.g., Burnout Paradise). These groups valued games with a compelling spectator experience.

P12: Grand Theft Auto is... a one person game, but you can switch back and forth and just watch what the other person's going to do and what they do and how they do it and the random shit that they get into and get out of.... back and forth for one mission or one death.

Finally, one group played a one or two player game in which the rest of the group could play along with the "official" players (e.g., American Idol). This group valued games in which audience members could take on active roles in the gaming.

P23: That's what the karaoke games are. There's sort of an entertainment value even if you're not playing.... Even if you're not, you know, actually being the one, you can still sing along or you can listen to other people singing.

Finally, one gamer suggested that styles of group gameplay extended beyond the game console, itself, into the ecology of media—the television shows, trading cards, and more—that surround the console games. Sharing in the gaming experience may mean sharing in other activities related to the games and not necessarily the games, themselves.

<sup>&</sup>lt;sup>3</sup> For a more detailed analysis of the ways in which console gaming can serve as a natural learning environment for children, in particular, see Stevens et al.'s analysis of ingame, in-room, and in-world transfer [16].

P23: Sometimes the activity is not the gaming together, it's that we'll watch his [television] shows with him together. So that's the part that we do together, but then he goes off and plays the games by himself.... But it's still all tied together so it's a little bit more complex than... the different mediums all sort of existing by themselves. These days, you know, they all reference each other and sometimes you participate in part of that together and sometimes... there are things that you would do separately.

# A Meeting Place between Interpersonal Relationships and the Competition of Gameplay

During group console gaming, existing relationships with friends and family intersected with the competitive nature of gameplay. Playing with friends or family, competition was simultaneously more and less preferable. On one hand, playing a multiplayer game against another gamer (as opposed to playing against the computer) was seen as preferable because it was more challenging and compelling

- P14: It's one thing to play against the computer, like Halo or whatever, but... [with] our housemates and stuff, you know, it's challenging.
- I: Is it more challenging against your housemates?
- P14: Yes... [and] it's more competitive, because you know it's a real person making those decisions, rather than just a computer that's been programmed to.

At the same time, however, the additional competitiveness was not always preferable:

P11: Playing against the computer is nice because there's no competition then. If you start playing against other people, it can induce... introduce competition, which can get ugly. Because I've played games where... [the other players] start screaming at you, "You shot me in the back," or, "You did this, you're so—you keep picking on me," or whatever, right? And then it gets really ugly and nobody likes to play... Whereas we try to keep it pretty mellowed out, right?

When playing in groups, some gamers specifically preferred games that didn't foster competitiveness.

- P4: And there's no competition going on if you don't want there to be.
- P5: It's not like, "Oh my God, you've lost! I can't believe you!"
- P23: I prefer games where I don't have to compete necessarily. So I'm probably more aggressive when I'm by myself, because I actually want to get somewhere. Whereas when I'm playing in a group, I try not to be as competitive. I tend to temper my competitiveness with people I actually like.

Other gamers found a middle ground between their interpersonal relationships and the competiveness of gameplay by gravitating towards games in which the entire group could win or lose together—no one gamer would be singled out:

P29: When I am with a group, I don't want to be the one who loses all the time - with Rock Band you all win or

you all lose - unless you play against someone else, then it is competitive. We don't play it that way.

### A Meeting Place between Gaming and Its Stereotypes

For some players, group console gaming served as an acceptable point of balance—allowing them to enjoy gaming without feeling that they were projecting themselves as stereotypical gamers.

- P6: You're getting together with your friends and you're all having fun together.
- P4: I'd say it's just that you're with your friends—just because you get to do it with them instead of just doing it on your own.
- P6: Instead of feeling like you're...
- P4: A loner.
- P6: Yeah.
- P5: Like you're an intense gamer.
- P6: Yeah.

The physical environment in which people set up their game consoles was also used to project a distinction between these gamers and the stereotypes they wished to avoid. Most group gamers wanted to play games in comfortable and aesthetically pleasing spaces in contrast to the dark, stark spaces in which they imagined stereotypical gamers would play. Having a natural light source was important to many gamers for this very reason, even though they acknowledged that they might have to deal with a little more glare on the screen during gameplay.

P9: It's a very comfortable room... so you don't feel weird. Like a friend of ours has his, he calls it the "Nerd Cave." It's like this tiny little room and it's got a huge TV and like a loveseat in it. And that's it... And the room isn't much bigger than that would be. And it's just not comfortable, and you kind of don't' want to be in there long. Because [here], we have natural light coming in....

# A Meeting Place between Adults-as-Parents and Adults-as-Gamers

Every parent of youth gamers in our study held dual roles—as gamer and as parent. Each of these parents had given thought to the relationship between these roles. One parent who described himself as a "hardcore gamer," along with his wife, reflected on the difference between their attitudes toward gaming and the attitudes of their parents, who considered gaming an "evil" (P22). This couple viewed gaming as a means of motivating the educational goals that they felt were important for their son.

P22: For me, I don't mind [P21] playing it because he's actually learning something from it, especially if he's playing role playing. Because it did force him to have to learn how to read.

Another group found a balance between how they wanted to parent their children (without too much exposure to electronics) and the role of gaming in their family. In this family, it was the grandparents who owned the game console and kept it at their house. When asked why they played games where they do, these gamers responded:

P35 [Grandmother]: Because we own the Wii....

P34 [Father]: Because we don't want it at our

house.

P32 [Mother]: That's right.

Other parents who were not previously gamers became so as part of an intentional effort to build bridges between themselves and their son.

P25: I think [P24] likes the electronicness of it.

P24: Anything electronic I would do.

P25: Yeah. You just have to evolve into the new world with the youngsters.... You know, I'm not sure we would play if it wasn't for him. At least I don't think I would. We probably wouldn't have the Wii.... Do you think we'd have the Wii if it wasn't for him?

P26: No.

P25: I don't think so.... It bridges the gap.

P26: Yeah.

P25: From him to us.

#### DISCUSSION

## The Sociability of Collaborative Games

Sociability extracts the serious substance of life leaving only "togetherness," the sheer pleasure of the company of others [15].

Group console gaming is very much valued because of the sheer please of the company of others. This sense of sociability is also present in other collaborative games such as massively multiplayer online games [6, 7, 11] and multiplayer uses of both the Nintendo DS handheld gaming system [17] and physical games [12]. Here, we situate our findings about the sociability of group console gaming within the context of an ongoing discussion about the sociability of these other types of games.

Ducheneaut et al. studied players' grouping patterns in World of Warcraft (WoW) and offered the following characterization of sociability in the game:

One player summarized this situation nicely by saying that WoW's subscribers tend to be "alone together:" They play *surrounded by* others instead of *playing with* them (authors' original emphasis) [7].

P23 echoed the sentiment that collaborative gaming in World of Warcraft felt somewhat "solitary." He specifically contrasted WoW with collocated console gaming which, he felt, involved more social interaction.

P23: ...playing online, you know, you're still sort of isolated and when you're playing against people online, you don't think of them as people... whereas here, you're sort of constantly trying to interact with people and whatnot.

The collocated nature of group console gaming unsurprisingly influences perceptions of sociability when contrasting styles of gaming. Nardi and Harris observed that there are additional resources for sociability in World of Warcraft beyond grouping, however—such as interactions about the game with friends and family that extend into the real world [11]. The informants in Nardi and Harris' study found World of Warcraft to be a much more

sociable gaming experience than Ducheneaut et al's analysis suggested. Some of Nardi and Harris' informants reported being quite pleased when existing friends or family members created characters and started played the game, as well; it gave them something to talk about. For those gamers, World of Warcraft may have served as a computational meeting place for the sake of social interaction.

Another difference among various types of collaborative gaming is the role of the shared display. Szentgyorgyi et al. studied social practices surrounding the use of the Nintendo DS handheld gaming system. This study provides a collocated comparison point to group console gaming concerning the shared display:

Players considered DS multiplayer to be less social [than console games], with three main factors contributing to the difference: the lack of a shared display, the reduced potential for spectators, and the closed nature of the gameplay experience [17].

Although multiplayer interactions with the handheld gaming systems took place in social contexts, Szentgyorgyi et al.'s study found that players' interactions took place within a "private gaming sphere" [17] that may, in fact, be more similar to P23's experiences feeling "solitary" and "isolated" among the multiplayer online world. A more focused study of the role of shared displays on perceptions of sociability would be a compelling direction for future research.

Studies of both physical gaming [12] and massively multiplayer online gaming [7] have suggested that the presence of others in collaborative gaming may provide "an audience, a sense of social presence, and a spectacle" [7]. Our study of group console gaming echoed these findings. Our participants highlighted the importance of having others around just for the "companionship" (P18), of having an audience with whom to share successes, and of being able to enjoy the spectacle of others' "fumbles" (P21) and, more generally, the "random shit that they get into and get out of" (P12).

Finally, studies of massively multiplayer online gaming in Star Wars Galaxies has highlighted the role of gaming as providing compelling third places to which gamers could get away to experience sociability [6]. Our study, in contrast, highlighted the desire not to get away to experience sociability but to take advantage of that sociability at home, where it is more "comfortable" and "relaxing":

P27: It gives me a chance to hang out with others in a home setting rather than going out to a bar or restaurant. It's a more comfortable setting that allows others to feel relaxed and open.

### The Sociability of the Digital Hearth

Cultural histories of the living room are articulated through the changing place of the domestic livingroom hearth. Etymologically, hearth is derived from the Latin for focus, and, over time, the focus of the gaze has shifted from the fireplace to radio, to television and now to games console [10].

The living room where the games console is often placed is a highly "contested" space [10], as different individuals compete for its resources and as the space, itself, is "overloaded" with activities such as "eating, studying, working on the computer, and watching television and films" [12]. More generally, the living room functions as a key site of conflict between the multiple functions of the home:

One of the duties of the middle-class housewife was the maintenance of a balance between the beautifying and social aspects of the home. The living room as a single space represented a particular site of conflict between these often-opposing requirements [10].

Research framed by the construct of the digital hearth paints a portrait of a game console that is ill-at-ease in the living room. Sall and Grinter, in their study of physical gaming in the home, found that these games impose additional "tension" between the beautifying and social functions of the living room related to the "need to make gaming hardware disappear" [12]. The game console, as digital hearth, has been viewed as "an alien machine in relation to narratives of identity associated with domesticity and family togetherness" [10].

Our research paints a different portrait of the game console as a digital hearth. For our participants, the games console did hold a central place in the shared social spaces of the domestic environment. Although a few participants wished for additional storage in their ideal gaming space to house their games and gaming paraphernalia, the rhetoric surrounding the use of console games in living rooms and other social spaces painted a portrait of a game console that was much more "at home" in its environment.

Most of our participants found value in locating the game console in the living rooms and other shared social spaces within the home. Instead of using language about the space being "overloaded," our participants saw gaming as a means of making an existing social space even more flexibly appropriable.

P10: It's not somewhere you have to go to do something. It's just... you're here and you feel like doing it, like, "Hey, you want to play Wii?"

"All right...."

And because of its wireless controllers, it's not like there's any extra setup: pulling the console out, doing this, doing that to get it going.... Gaming is an accentuation to the space, almost. So it adds to the things that we can do in here.

When P26 suggested that his son might enjoy moving the games console into the basement so that he could play more often by himself, his son balked. He wanted to keep the console gaming in the living room so that that there would be people milling around and he would have more "company" (P24).

For most of the participants in this study, the sociability of gaming was so strong that it was inconceivable to imagine gaming in any place other than the shared social spaces of the home. Instead of being in competition with the social function of the space, the beautifying function served to make the social environment in which gaming took place feel all the more comfortable.

# DESIGNING FOR CONSOLE GAMES AS MEETING PLACES

The results of this research suggest that it is not any particular design decision within a game that can be labeled as the source of fun in group console gaming. Rather, the fun in group console gaming stems from the sociability of the friends and family who have gathered together to play the game. To the extent that console games are appropriable by diverse groups of these individuals, the games are able to support the fun that these individuals bring to the meeting place that is the console game. Designing for group console gaming, then, means designing a meeting place for these potentially diverse groups of individuals.

Games designed to provide a meeting place for groups of gamers should undertake some combination of the following:

- Allow gamers to rotate in and out of the gameplay easily;
- Make use of input devices with intuitive mappings (button-based input devices were less well-liked by the gamers in this study than gestural and physical input devices);
- Combine a shallow learning curve for novice gamers with more challenging gameplay for more expert gamers:
- Provide modes of gameplay that allow players with different skill levels to play with or against each other;
- Explore modes of gameplay that alter the game in significant ways for different groups of players so that the owner of the console or the game does not always have an advantage;
- Provide modes of play that downplay competition between players (e.g., fostering non-serious competition or competition between the gaming group as a whole and the computer);
- Appeal to gamers with different gaming preferences within a single game (e.g., by offering compelling gameplay for a gamer who is typically drawn to strategy games while also appealing to other gamers who may be drawn to games with more challenging puzzles or immersive stories);
- Foster audience participation or an otherwise enjoyable audience experience;
- Explore ways of extending the social experience of group console gaming into the larger ecology of shared media.

### CONCLUSION

In this paper, we have presented results from a qualitative empirical study of group console gaming. Our analysis revealed that a primary motivation for group console gaming is the social interaction enabled by collocated group gameplay. The social interaction surrounding gameplay was a larger context from which gamers fluidly inserted and extracted themselves from the games, themselves. We found that console games served as a meeting place for a diverse population of gamers—diverse in terms of age. gender, levels of expertise, and preferences for gameplay. We characterized the ways in which gameplay is influenced by this diversity and highlighted groups' preferences for gameplay that help to accommodate this diversity. Our research found that console games provided gamers with a comfortable meeting place between the maintenance of their interpersonal relationships and the competition of gameplay; between gamers' desire to play games and their reticence to project themselves as a stereotypical gamer; and between adults' roles as gamers and as parents. These findings suggest quite different design opportunities premised on the notion of console games as a meeting place.

The primary message of this research is that as a computational meeting place, console games are a technology around which individuals with varied interests and experiences are willing to converge for the sake of social interaction. Console games can be designed to more explicitly support its role as such a meeting place.

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### **REFERENCES**

- 1. Bernard, H.R. (2000). Social science research methods: Qualitative and quantitative approaches. Thousand Oaks, CA: Sage Publications.
- 2. Bryce, J. & Rutter, J. (2003). Gender dynamics and the social and spatial organization of computer gaming. Leisure Studies 22(1), 1-15.
- 3. Cassell, J. & Jenkins, H. (1998). From Barbie to Mortal Kombat: Gender and computer games. Cambridge, MA: MIT Press.
- 4. Choi, D., Kim, H. & Kim, J. (1999). Toward the construction of fun computer games: Differences in the views of developers and players. *Personal Technologies* 3(3) 92-104
- 5. Dovey, J & Kennedy, H.W. (2006). *Game cultures: Computer games as new media*. New York, NY: Open University Press.
- 6. Ducheneaut, N., Moore, R.J. & Nickell, E. (2007). Virtual "third places": A case study of sociability in massively multiplayer games.
- 7. Ducheneaut, N., Yee, N., Nickell, E. & Moore, R. J. "Alone together?" Exploring the social dynamics of massively multiplayer online games. In *Proceedings of the SIGCHI Conference on Human Factors in*

- Computing Systems. New York, NY: ACM Press, pp. 407-416.
- 8. Entertainment Software Association. (2008). 2008 sales, demographic and usage data: Essential facts about the computer and video game industry. [Online]. Available at: http://www.theesa.com/facts/pdfs/ESA\_EF\_2008. pdf, accessed 17 September 2008.
- 9. Entertainment Software Association. (2008). *Sales & genre data*. [Online]. Available at: http://www.theesa.com/facts/salesandgenre.asp, accessed 17 September 2008.
- 10. Flynn, B. (2003). Geography of the digital hearth. *Information, Communication & Society*, 6(4), 551-576.
- 11. Nardi, B. & Harris, J. (2006). Strangers and friends: Collaborative play in World of Warcraft. In *Proceedings* of the ACM Conference on Computer Supported Cooperative Work. New York, NY: ACM Press, pp. 149-158.
- 12. Sall, A. & Grinter, R.E. (2007). Let's get physical! In, out, and around the gaming circle of physical gaming at home. *Computer Supported Cooperative Work* 16, 199-229.
- 13. Schiesel, S. (1 February 2008). In the list of top-selling games, clear evidence of a sea change. New York Times. [Online]. Available: http://www.nytimes.com/2008/02/01/arts/01game.html. Accessed 17 September 2008.
- 14. Schott, G.R. & Horrell, K.R. (2000). Girl gamers and their relationship with the gaming culture. *Convergence: The International Journal of Research into New Media Technologies*. 6(4), 36-53.
- 15. Simmel, G. & Hughes, E.C. (1949). The sociology of sociability. *The American Journal of Sociology* 55(3), 254-261
- 16. Stevens, R., Satwicz, T. & McCarthy, L. (2008). Ingame, in-room, in-world: Reconnecting video gameplay to the rest of kids' lives. In K. Salen (Ed.) *The ecology of games: Connecting youth, games, and learning*. Cambridge, MA: MIT Press, pp. 41-66.
- 17. Szentgyorgyi, C., Terry, M. & Lank, E (2008). Renegade gaming: Practices surrounding social use of the Nintendo DS handheld gaming system. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. New York, NY: ACM Press, pp. 1463-1472.
- 18. Thompson, C. (2007, April 9). You grew up playing shoot'em-up games. Why can't your kids? *Wired*. [Online]. Available at: http://www.wired.com/gaming/virtualworlds/commentary/games/2007/04/gamesfrontie rs 0409, accessed 27 August 2008.
- 19. Wischnowsky, D. (2007, February 16). Wii bowling knocks over retirement home. *Chicago Tribune*. [Online]. Available at: http://www.chicagotribune.com/news/local/chi-070216nintendo,1,609357.story, accessed 21 May 2008.