

ENVISIONING THE OTHER: A GROUNDED EXPLORATION OF SOCIAL ROLES IN DIGITAL GAME PLAY

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Abstract

To many, digital game play is primarily a social experience, a way of connecting with others. These connections can take several forms depending on the type of game, context and personal relationship. In the literature, however, this complexity has largely been ignored, reducing social relations to simple dichotomies such as “friend or stranger” and “versus- or co-player”. This paper aims to overcome these simplifications and take a step towards understanding the multidimensional nature of social play. With this goal in mind, a first wave of 37 interviews was conducted with gamers with varying experience. Based on grounded theory, the data were used to build a theoretical framework, consisting of four possible roles another person can assume: witness, co-player, companion and tool. Each of these roles was then further analyzed according to known parameters of social play: spatiality, synchronicity, adversarity and longevity, and validated in a second series of 10 in-depth interviews. Based on this, a two-layered framework for social play research was proposed, whereby both social role and broader context were considered. Using this framework can enable future research to gain a more in-depth and refined understanding of social game experience.

Keywords: *social play, game experience, grounded theory, social roles, video games*

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In recent years, studies have shown that the presence of other people and broader social context when playing videogames influences the playing experience (e.g., Ravaja, Saari, Turpeinen, Laarni, Salminen, & Kivikangas, 2005; Mandryk, Inkpen, & Calvert, 2006; Gajadhar, de Kort, & IJsselsteijn, 2008; Kaye, 2016). However, incorporation of the social influence in player experience models, for instance the SCI-model (Ermi & Mayra, 2005) or the GameFlow model (Sweetser & Whyeth, 2005), is still missing, as de Kort and IJsselsteijn (2008) rightfully address. Furthermore, researchers have been asking for models of player experience that incorporate the social context (e.g., de Kort & IJsselsteijn, 2008; Kaye & Bryce, 2012; Deterding, 2015). In the first section of this paper, we will make a short chronological overview of the relevant literature regarding the influence of social settings on player experience, followed by an extraction of the common dimensions in this literature. Lastly, our biggest concern regarding previous research is shown, that too often social play is approached unidimensionally, alongside our proposal of how to tackle it, by means of a multidimensional and two-layered framework.

Relatively early in digital game research, it was shown that the social aspect of multiplayer games makes them compelling and interesting, in ways single player games are not able to, due to the social nature of humans (Costikyan, 1994; Bunten, 1996). The challenge that is being introduced by these types of games was particularly important as it differs from playing against a computer (e.g., Zagal, Nussbaum, & Rosas, 2000). Moreover, competition has taken on a different interpretation, by introducing human opponents (e.g., Williams & Clippinger, 2002; Vorderer, Hartmann, & Klimmt, 2003). What is more, such games are network-based and have different demands in terms of hardware and software than their single player counterparts. In 2002, Pantel and Wolf found that delay in real-time

multiplayer games had an impact on performance and attractiveness, by letting two people sitting next to each other, compete in a racing game.

Since 2000, studies about the influence of the social context on the player experience started to appear. As both player experience and social context are broad, multi-faceted concepts, there is a strong variability amongst these studies. For example, in an experimental study, players reported higher levels of aggressive feelings after playing *Monopoly* against a computer than after playing it against another human player in the same room (Williams & Clippinger, 2002). According to the authors, the context in which the game session takes place can contribute to aggressive feelings, as well as the aggression within the game. The pattern of their results was attributed to the presence of other people, as a form of social control. Competition has been regarded as a key enjoyment factor in social game play (Vorderer et al., 2003). Gamers rated *Tomb Raider* more enjoyable with a competitive element than without (Klimmt, 2001) and personal motivation to compete predicted best why gamers preferred a certain (competitive) game (Vorderer et al., 2003). Wanting to know how gameplay occurs in a natural setting, Carr, Schott, Burn, and Buckingham (2004) collected video footage of a gamer's living room when playing a single player game, whenever the player felt like it. Remarkably, they found that when friends were present and merely watching the game, they became actively involved in the game, by giving verbal advice and showing emotional reactions to the game.

Ravaja et al. (2005) measured the impact of the opponent (computer vs. stranger vs. friend) in a co-located competitive setting on an array of emotional outcomes, measured both subjectively and objectively. Results showed differences between a human and a computer opponent, but also between a friend and a stranger. They regarded the addition of observation by another human as a social-competitive situation in which task performance evaluation potential might be present, and this in turn increased arousal (Ravaja et al., 2005;

Thorsteinsson & James, 1999). Mandryk et al. (2006) compared social contexts in which players competed against a computer or against a friend in the same room and saw significant differences in subjective self-reports and physiological data. Interestingly, when one player was competing against the computer, the other player had to leave the room. Indeed, an influence of an observer on the experience of the player would be expected (Kimble & Rezabek, 1992).

When studying players of *World of Warcraft*, Ducheneaut, Yee, Nickell, & Moore (2006) found that players preferred to play as classes that can be played on their own, without a necessity for other players. Although Massively Multiplayer Online Role-Playing Games (MMORPGs) like *World of Warcraft* are often regarded as social, and this social factor is often stated by players as their motivation to play, players of this genre are “alone together”, as they play *not with* others, but *surrounded by* others. Ducheneaut et al. (2006) stated that other people involved in gameplay have different roles than just direct support and camaraderie, as previously thought. They can also assume the role of an audience, to perceive how well the player performed, and provide social presence, as well as a spectacle.

De Kort and IJsselsteijn (2008) advocate that player experience and engagement is influenced by the social context of gameplay. This social surrounding is broader than just the presence or absence of others, but it includes a certain role for this other, which can be acting, observing, competing, co-operating or co-acting. Dichotomies for persons surrounding gameplay should be avoided and continuums should be proposed instead. Turn-taking vs. real-time competing games also influences the gamer’s interaction, and hence also his or her experience, just as a broad range of game interface characteristics (e.g., size and orientation of the screen) (de Kort & IJsselsteijn, 2008). Player experience and aggression were compared in different competitive social settings with co-located and mediated friends, strangers and computers by Gajadhar et al. (2008) and an effect of familiarity (friend vs. stranger) and

location (co-located vs. mediated) was found, alongside the finding that it was more fun to play against humans than against computers. According to the authors, there are clear social roles in gameplay and these roles influence player experience (Gajadhar et al., 2008).

After a myriad of experimental research into social play, Kaye and Bruce (2012) claimed that real-life game experiences should be investigated qualitatively. Using focus groups with regular gamers, they found that social contexts can enhance the subjective experiences of gaming, with particularly differences between competitive versus collaborative play. They followed up with a retrospective study, comparing solo with social gaming in online and offline settings, with collaborative and competitive game play. Again, player experience differed between solo and social play. However, the other variations in contexts did not yield different outcomes. The lack of a significant impact may be due to the fact that participants had to recall a past experience, instead of playing and experiencing a game (Kaye & Bruce, 2014). Hudson (2015) conducted a similar study as Gajadhar et al. (2008) but worked with a cooperative setting instead of a competitive one. Because the player experience measure, the SPGQ from de Kort, IJsselstein and Poels (2007), was not suited for this cooperative design, we cannot compare these two studies directly. Nevertheless, Hudson (2015) also found that social presence was higher when playing with a human teammate, but there was no influence of the location of the teammate in this study. He also found that players assume that they paid more interest to their teammates' actions than vice versa. The importance of the social context in game play has also been demonstrated by the work of Eklund (2015). In a descriptive survey in Sweden asking about social play, Eklund (2015) found that the other parties involved (family, friends or strangers) influenced the player's engagement. The level of an observer's involvement in game play then was investigated by Maurer, Aslan, Wuchse, Neureiter, and Tscheligi (2015) and showed to have a significant influence on overall game experience.

Table 1

Four Properties of Social Play Settings

Property	Refers to	Related to	Possible example
Spatiality	Real life	Location of the players	In the same room
Longevity	Real life	Duration of the relation	Friends
Adversarity	Game	Role in the game	Opponents
Synchronicity	Real life	Time of play	At the same time

All this demonstrates that game experience consists of a broad range of factors, including but not limited to motivation, frustration, competition, enjoyment and arousal. During this literature review, it became apparent that several properties of the interpersonal relations have been identified as potential moderators of the social playing experience, and that these properties are recurring, but not always under the same name. We aimed to extract returning aspects of different social contexts into four coined terms: spatiality, longevity, adversarity and synchronicity (Table 1).

The first of these properties is the location of the other individual, which we will describe as the *spatiality* of the social play. In game research, there are two common distinctions (co-located or mediated; e.g., de Kort & IJsselsteijn, 2008) but other possibilities have been proposed too, such as in the next room (Gajadhar et al., 2008), or at a distance (Williams & Clippinger, 2002). Spatiality for our aim also includes socio-fugal settings, which are seating and viewing arrangements (Sommer, 1967), as sitting oriented towards each other has more opportunities for eye contact and interpretable facial expressions, than next to each other (de Kort & IJsselsteijn, 2008).

The *longevity* of the relation with the other, has often been referred to as being a friend or a stranger (e.g., Ravaja et al., 2006), but this does not cover the whole range of possible

relations. With this term, the duration of the relationship between the player and the other is described, more specifically whether or not the relationship continues when the game session ends.

Adversarity designates the side the other is on, and whether he or she is an opponent, teammate or a neutral party (Kaye & Bruce, 2012). This will partly depend on the game, as some are cooperative (same side) or competitive (other side), but it can also depend on the relationship with the other, meaning that friends can introduce competitive elements into a cooperative game.

Synchronicity, finally, refers to the temporal aspect of the social play, whereby it is possible to differentiate between players acting concurrently, in turns or delayed, largely dependent on the specific game. While no papers found that compared real-time versus turn-based game play (probably because there is no game that can be played in both temporal modes in exactly the same way), there is ample research about the influence on game experience of a temporal delay in real-time games, making it clear that time is an important factor when investigating game experience (Pantel & Wolf, 2002; Quax, Monsieurs, Lamotte, De Vleeschauwer, & Degrande, 2004). In the current paper, all interactions with other people about a game session are included, exceeding the game played and thus also including the player's testimonials during or after the game. In the latter case, there is an interval between the game session and the socialization, making this a delayed interaction.

The four dimensions (spatiality, longevity, adversarity and synchronicity; see Table 1) are helpful when describing a game setting and investigating game experience, but should not be treated as stand-alone variables. Most of the social play studies make a distinction between computers and humans, but the distinction between humans is rarely made beyond "friend or stranger" or "versus- or co-player". Usually, the influence of only one dimension on game experience is measured at a time, while neglecting possible interactions with other values on

other dimensions, as shown in the literature study above. As reality is more complex than simple dichotomies, this paper aims to demonstrate that there are important differences within each category that cannot be investigated by a single variable approach. To this end, the social roles gamers attribute to other people involved in and/or surrounding digital game play are explored as well as how these roles relate to game experience, by investigating, within each role, the values of the four proposed social play dimensions.

Method and Procedure

In this study, the grounded theory framework (Glaser & Strauss, 1967) was used. In this framework, theory is generated from the data itself and validated by new data, which shapes the theory further. This adapted theory is verified again with additional data and so on, until further data collection is redundant. According to this method, iterative cycles of data collection and analysis are interwoven with each other. In the current study, two waves of interviews with gamers were conducted. For the first wave, 40 people (15 female, 25 male), with a mean age of 28.65 years ($SD = 11.48$ years, modus = 22 years) and with different gaming habits (17 daily, 11 weekly, 7 monthly and 5 yearly or less) were interviewed with the aim of getting a broad view on their experiences with other people while gaming, how they perceive those other people and what role they fulfill according to the player.

The goal of the second wave of interviews was twofold. First, validating the archetypes that emerged after analysis of the first wave by exploring their boundaries. The second goal was to link the discovered archetypes to dimensions of social play commonly used in the gaming literature. For these purposes, 10 regular gamers (8 daily and 2 weekly) were interviewed (6 male), with a mean age of 22.7 years old ($SD = 10.02$). In order to qualify for this study, people were asked to answer questions about their gaming behavior on an online survey, posted on multiple Belgian gaming websites and fora. From the completed surveys, ten gamers were carefully selected to include the full range of game genres, gaming

frequencies and gaming media. These interviews took place at the participants' homes and audio was recorded. All interviews were transcribed and coded in NVivo 10 (QSR International Pty Ltd, 2012). Names in this study were altered to ensure anonymity. When referring to a player in this text, we used the male pronoun because of reasons of simplicity.

The first wave of interviews aimed to get an overview of the different roles attributed by the player to the other person involved in a game session. "Game session" refers to one instance or unit of game play. That is, the event of one uninterrupted period of time, during which the player plays a game. As soon as the player quits the game, the game session is discontinued. Due to the broad range of games, additional demarcations are needed. In some games, especially shooters, there are short periods during which the player is not able to play (e.g., when he dies in-game and waits to be revived). In this case, the player is still involved in the game, as the game developers intended, even if he is not actually playing. Therefore, the gaming session is not ended. In other games, it is also possible to not be playing for a short time, when it is not meant by the rules of the game (e.g., passing the console). Here, the game session is ceased and a new one will begin only when the player receives the controller anew and plays again.

Results

First Interview Wave

Analyzing the first wave of interviews led to uncovering three properties which, through their combination, allow for categorizing the other person: Involvement, Focus, and Meaning Construction. *Involvement* refers to the extent to which the other is able to directly exert influence on the events happening in the game of the player. *Focus* designates whether the focus of the play situation is more on the game or more on the social interaction with the other. *Meaning construction* refers to how the actions of the player can be seen and interpreted by others and to what extent the player is aware of this possibility. If the player

Table 2

Overview of the Four Emerging Roles and Their Properties

Role	Involvement	Focus	Meaning Construction
Witness	Passive	Game	Shared meanings
Co-Player	Active	Game	Shared meanings
Companion	Active/Passive	Sociability	Shared meanings
Tool	Active	Game	No shared meanings

believes his or her actions are seen by others, they become shared. These three properties form the constitutional foundation through which four archetypes, or roles, emerged in the interviews. Table 2 provides an overview of these roles and their determining properties.

A first archetype is *the witness*. The witness plays a passive role and is therefore unable to influence what is happening in the game of the player. Despite this passive involvement, the focus of the interaction is on the game and not on the social situation surrounding it. What is more, meanings and experiences are shared between the player and the witness. Indeed, even if one just watches somebody play, the events happening in the game are shared and their meanings are negotiated between the player and the other, as Mark (male, 25, weekly gamer) illustrates:

“I don’t think a lot of people just watch another person play, but I think it’s the best. [...] I just like to be able to share it with somebody. To say how beautiful it [the game world] is.”

There were several reasons for the existence of a witness. It could be because the witness just enjoyed watching and did not have the urge to play himself. Yet, there were also situations where there were more wanting-to-play persons than controllers. Another possibility is where the player and the other were not in the same room, but the other was still able to observe the

game or evidence that the game was played and this changes the game experience, as illustrated by Peter (male, 21, daily gamer):

“With the iPhone, there’s also a social aspect to it [infinity blade]. You can add friends and they can see which achievements you’ve acquired, just like the PS3. I really like that feature [...] It adds a competitive aspect.”

Indeed, achievements, scoreboards and even video streams, can serve as a medium for a witness, to observe the progress of a player. This indicates that the witness is not bound by temporal or spatial constraints.

A second archetype is *the co-player*. In contrast to the witness, the co-player is actively involved in the game of the player. Hence, he can influence the player and vice versa, and can play either as an opponent or as an accomplice. Similar to the witness, the focus is on the game and meanings and experiences are shared. Furthermore, through the active involvement of the other, not only actions become shared, but also the consequences of those actions, as Adrian (male, 20, daily gamer) illustrates with a racing game (*Gran Turismo*):

“If you win [against a human player], there is more fun and if you lose then, uhm, against the computer, you don’t know him. You can try to drive him off the track but that’s not funny”

In this passage, it becomes obvious that shared meaning construction, something that can only happen between humans, changes the game experience of Adrian. A consequence of combining shared meanings with a focus on the game is that social play can lead to the creation of additional game-related goals. One of our respondents regularly played a football game with his brother. They often played the game at its easiest setting but challenged themselves by trying to win against the computer with a score of at least 10 to 0. The difference between focus on the game or on the sociability of the situation is not always clear-cut however. Another respondent, playing football games with his friends, often uses the

games' rules to make playing more fun by making those who score a goal drink a shot of alcohol each time.

The focus on the sociability of the situation rather than on the game itself, leads to another archetype: that of *the companion*. Meanings are shared between the player and the companion and the other can assume an active or a passive role. Maintaining the social relationship with each other is the main reason of the game session, whilst the game that is played is often of secondary importance. As such, the game is used as a means to be together. Several respondents reported playing with one or more companions during LAN parties or on occasions with party games. For instance, Ross (31, male, daily gamer) says that LAN parties are not just about gaming and that the actions you do in a game do not matter. For him, it is more about being together and making the LAN party a social event. Kurt (22, male, daily gamer) mentions the following about an evening with party games:

“In a party game, you are in a living room with a bunch of friends, having fun. And the game is of secondary importance. It is something social.”

The fourth and final archetype is *the tool*. The tool has a purely functional role, in that the player needs his presence to be able to play the game. The tool is thus actively involved, since he can alter the game of the player. The focus lies on the game and sociability surrounding the situation is completely absent. Although the tool can influence the events in the game of the player, the absence of any sociability prevents that meanings and experiences are shared. As such, the tool is merely used to gain an advantage. This can range from being able to play a certain game to getting special items. The player is aware of the other in the game, but interaction is limited to what is required according to the rules of the game. In the interviews, Peter (21, male, daily gamer) stated that playing *Call of Duty* or *Counterstrike*, it did not matter to him whether he played with real people or not, but when playing *World of*

Warcraft, he has to play with real people, because the game requires it. This is similar to what Joshua (22, male, weekly gamer) says:

“If I am online, there are always strangers online too. You can play with or against them. [...] I don’t have a bond with them. To me, playing against a computer or against that stranger is the same.”

In order to comprehend all the findings about the four archetypes above correctly, three things are important to consider. First, as mentioned before, the roles are attributed to the other by the player in-game. It is therefore not always the way the other would see himself, but only what is perceived through the eyes of the player. Second, the role of the other can change during a game session and these shifts happen frequently, but also over several game sessions. Rob (male, 18, daily gamer) shows how one role can gradually develop into another, at a LAN party:

“In the beginning, everybody is like “I’m gonna beat you”. In the end, it is like “Oh well, you beat me”. [...] In the end, you don’t care anymore, you’ve won and you’ve lost, it doesn’t matter anymore, you just play for fun.”

In this scenario, the people surrounding Rob are co-players at the start as there is fierce competition. This fades over time, however, and by the end of the event they become companions. Third, because these roles are seen through the eyes of the player, properties of the player, of the other, of the game and of the situation, affect the attributed role. Two similar situations can thus elicit a different role to the other, because of a different player. For instance, a player deprived of friends after moving away, plays with a companion to have some social contact and to maintain their friendship, while a different player can play the same game, with a friend as a co-player.

Second Interview Wave

Exploring the four roles. The four identified roles are treated as archetypes, or ideal forms. In practice, categorizing is not always as straightforward. The goals of the second wave of interviews were to confirm and challenge the four archetypes by searching for their boundaries, as instructed by the grounded theory framework. This was done in two ways. First, based on purposeful sampling, respondents were sought that were expected to have experience with one or more archetypes, based on their game preferences. In contrast to the first wave of interviews, questions were specifically aimed at deepening our understanding of the archetypes and their constituting dimensions. Secondly, questions were developed to link our archetypes to recurring variables in social play research, which are adversarity, longevity, spatiality and synchronicity, to see how each one affects game experience within and over archetypes.

Knowing that archetypes do not exist in real life and that the roles are dynamic, as they can change during a game session, caution is in order. Hence it is useful to explore the boundaries between the archetypes. For example, the tool and the companion behave like opposites. For the former, there is a total lack of sociability and an almost exclusive focus on the game. This is in stark contrast to the companion, with whom there is most focus of all the archetypes on the sociability, making the game of secondary importance here.

The tool and the witness also have a clear distinction, mainly in terms of involvement. The tool can change events in the game directly, while the witness cannot. The meaning construction differs too. Meanings are not shared with a tool, while they are when playing with a witness watching the game.

The difference between the witness and the co-player is straightforward, and the differing dimension is again the involvement. If there is a direct influence of the other in the game session of the player, the other is a co-player; if not, a witness, all other things being

equal. The events in the game cannot ever be changed by the witness himself, but he or she can have an indirect influence, by cheering or giving advice. To illustrate this boundary, an example in which the role of the other shifts from witness to co-player, is described by Jeff (male, 17, daily gamer):

“When I’m stuck in a certain fight and he knows how to pass, because he already did it a few times, he can tell me which attack I should use, but I don’t know how to use that attack. Then he takes my PSP and shows me.”

In the beginning of the fragment, the other is a witness and merely watching the game. By giving advice, the involvement explores the boundaries of what is still to be considered as passive, yet it can still be considered so as the influence on the actions in the game remains indirect. The moment the other takes the PSP, he becomes actively involved and therefore a co-player.

A more blurred distinction exists between the co-player and the tool. The focus and involvement are similar, but their role in constructing meaning to the player’s actions differs. In most interviews, there is mention of how playing with a friend enriches the experience compared to playing with AI or a stranger. However, a friend does not automatically assume the role of co-player nor does a stranger always equal a tool. It is important to note that the other can evolve from tool to co-player over the course of multiple and/or extended gaming sessions, as illustrated by Kenny (male, 13, weekly gamer), when playing *Call of Duty* online:

“Although I added a friend after talking to him, a guy from England, he had his microphone on and was making silly noises. I put mine on and start to make silly noises myself. [...] We started talking and he said “I’m in your closet”, [...] and I said “Haha, he’s in my closet”. [...] We played together, by saying stuff like “Go upstairs”, or “hide in a corner” or “he’s over there”. Then you can work together and this creates a bond. [...] Afterwards, I’ve sent him a friend request.”

At first, before they started to communicate, the other person is a tool. Kenny has no emotional connection with him and ‘uses’ him to play the game. By working together, this role slowly changes into that of a co-player, with whom Kenny shares meanings, which in turn changes his game experience.

The last two distinctions that will be discussed are also not clear-cut and demarcate the companion versus the witness and the companion versus the co-player. The defining property for the companion is the focus on the sociability of the situation. It is the only archetype that does not have its focus on the game and thus this is the defining criterion for the companion. Meanings are shared with a companion, as well as with a witness and a co-player, but the consequences of the actions of the player are only shared with a co-player. Even though in theory, active companions receive a consequence in the game, this is of secondary importance and they give less weight to it. Gamers playing with a companion care less than co-players about the events going on in the game itself, including their consequences. In Jeff’s (17, male, daily gamer) words: *“You can hardly call it a competition”* and *“We do not play to win, we play to game and to be together.”*

Both the passive companion and the witness do not have a direct influence on the events in the game of the player. In case of an active companion, the influence is direct, as is the influence of a co-player. Therefore, focus should be brought into account as well. If the player primarily wants to play the game, he will engage with a co-player, otherwise the other will be a companion. Social events with games are prone to having companions, for example an evening at somebody’s place where a party game is played. In the case of Jennifer (female, 22, daily gamer), at New Year’s Eve, she had some friends over, that brought their Wii. Past midnight, they all played on it. The primary goal of the evening was celebrating the new year, something that is considered a social event. This gathering would have happened, regardless

of the Wii. Playing with the companion typically gives less weight to winning or losing than playing with the co-player, as Rob (male, 18, daily gamer) describes:

“I experience competition a lot less while playing on the Wii [with others]. I have the feeling of “this is for fun, for having pleasure, it doesn’t matter if I win or not, I have some exercise” more, when playing on the Wii.”

Both the passively involved companion and the witness see the actions of the player and share their meanings, but are not actually involved in the game of the player, apart from indirect influence, as stated earlier. The other assumes the role of witness if the player believes the common interest is in the game itself. If the player thinks the other is present for their social interaction, the archetype of the companion is imposed. The border between a companion and a witness is explored by Kyle (male, 23, daily gamer):

“If one of my friends are online, I ask him how or what he’s doing. He’s usually playing a different game than me, but through the chat, we can talk about both games.”

This fragment has indicators of both the companion and the witness. On the one hand, Kyle asks his friend about his well-being, but on the other hand, they talk about the game they are playing. Additional information would be needed in order to classify the role of Kyle’s friend appropriately here.

Playing with another person assuming a different role, can not only change the meaning construction of the player’s actions, but the whole game experience. Shared meanings can lead to a shared and thus different experience because of the social nature the game session now has, compared to a game session without shared meanings. The role of other people in a gaming session matters to the experience of that session for the player. As a consequence, the roles described above, are important to understand player experience. The commonly researched social play dimensions have their limitations if used freestandingly.

There were respondents who mentioned that for them, it does not matter if they play with or against a friend, but that it did matter if they are playing against a friend or a stranger. This shows that adversity on its own, is not enough. Combining these regularly used dimensions with the archetypes yields a broader and at the same time more thorough view into the experience of the player, and thus describes a more complete picture.

In the following section, the four archetypes will be discussed in terms of the four identified dimensions from the literature that are known to affect game experience. The aim is to observe if and how game experience is influenced by each of these four dimensions (spatiality, synchronicity, adversity, longevity), within each archetype, and if there is a difference in game experience, over archetypes, when looking at one dimension at a time.

Variations in game research dimensions. When describing the archetypes, it was mentioned that there is an abundance of situations in which a witness can exist. These multiple settings result in a large variability of the witness in terms of the social play dimensions: all values of each dimension are possible with the witness. The witness can be in the same room as the player, but he does not have to be. He can watch the player's game live, but it can as well be delayed. A witness is usually neutral, because he is not involved in the game, but as stated earlier, cheering for or against the player can occur. The duration of the relationship varied in the interviews, but witnesses who do not know the player at all were rare. Nevertheless, it happens that somebody watches a gamer's live streaming channel, he can then be regarded as a witness if the gamer notices him, as opposed to a walkthrough video on YouTube, where is no viewer information available to the gamer.

The co-player can find himself in the same room as the player, or at any different location. Our respondents talked about engaging with a co-player in both co-located and online social play, with a slightly higher frequency for online play. The gaming session is often played together, thus concurrently. This was almost always the case in the interviews,

but playing at the same time is not a necessity, as shown by Amy (female, 50, daily gamer), who plays *Wordfeud*, a word game similar to Scrabble, on her tablet:

“You play in turns. The person I’m playing against now hasn’t played yet. It’s possible that she sees it [my move] in half an hour and that she’ll play. It is likely that I’ll only check this evening and play my turn. It is possible that you can put 3 or 4 words after each other down on the board, if you and the other are both playing at the same time. It is also possible that a game lasts a week, or two, until it is finished.”

The co-player can be a teammate or an opponent, both occurred at roughly the same percentage. In most of our interviews, the co-player was somebody our interviewees knew, usually a friend. However, there were also players that regarded strangers as co-players, as Joey (male, 23, daily gamer) describes, talking about a game of *Warcraft* online. He and his whole alliance fight together against the other fraction. He says the following about the other people in his alliance:

“Even though they are strangers, it [the fight] is something that binds. In Warcraft, you have to play together in some aspects anyway and then I sometimes get to know other people.”

It is apparent in the previous example that the bonding occurs before Joey gets to know the other player. When bonding, the meaning construction is shared. Therefore, there exist strangers that are seen as co-players. However, in all of the interviews, testimonies about regarding a stranger as a co-player, included some form of getting to know this stranger eventually. As a consequence, it is expected that they will be playing together again in the future, just like when a player would see his friend as a co-player, but this need not always be the case. It is very likely that although Joey bonds with a couple of alliance members, he will not befriend them all. These people border on the archetype of the tool and that of the co-player. This statement of Joey also showed that the attributed roles are subject to the player’s

personality traits. A fair number of interviewees regarded strangers on their team as tools, not as co-players.

The companion is in most cases in the same location as the player, although in some instances they are spatially separated, as in the case of Kyle (male, 23, daily gamer):

“If I’m playing a game at home and somebody else is playing a different game, you can talk [...] through the Xbox, even when you’re at the homepage [of Xbox]. You can do other stuff sitting in your couch and still be able to communicate while the other plays a different game.”

In this example, Kyle and the companion are interacting concurrently, but turn-based games can be played with a companion, for instance a poker game. The stance of Kyle’s companion is likely to be neutral, since they are not in the same game. It is possible that the companion encourages Kyle verbally or laughs when he hears Kyle fail, making this companion pro and contra Kyle, respectively. This was reported in other interviews too. Active companions are said to be playing with the player as well as against the player, but this does not actually matter a lot, since the game itself and its consequences are of secondary importance. Kyle knows the companion and it is expected that they will play together again in the future, as is the case for most companions. However, this is not a necessity, for example in a group of friends, where someone brought along a new friend.

The tool rarely has the same spatial location as the player, but it is not impossible. The player and the tool usually play at the same time (e.g., in a shooter game), but again, this is not necessary, as in the case of Sarah (female, 21, daily gamer). When she plays *Candy Crush Saga*, she asks for an extra life from her sister or mother, but that is the only interaction with others she has in the game, which makes the focus evident on the game, even though she has a real, lengthy relationship with her sister and mother. There is usually a period of time between this request and the answer, making it asynchronous. The side which the tool is on can vary as

in both competitive and collaborative games other players can be needed to be able to play the game. The relation between the player and the tool is in most cases no longer than the gaming session, but can be, as in the example of Sarah.

Discussion

The current study wanted to explore the attributed roles of other people involved in the game of the player by means of interviews. From these interviews, three distinguishing properties arose, that through their combination, allow for categorizing these roles. Four archetypical roles were found: the witness, the co-player, the companion and the tool. Within each archetype, practically all values of social play research dimensions (spatiality, synchronicity, adversarity and longevity) are existent. This large variability within each archetype shows that there is not one 'true' setting per archetype. Each social play dimension has been proven to affect game experience in previous studies and their variability has implications for the game experience. It is not a wild guess to assume that within each archetype, changing a value on a certain dimension will influence the game experience. Furthermore, these dimensions on their own sometimes lack subtlety or context and each value encloses a wide array of shades. Comparing for instance co- and versus-play, does not take into account that the other player can be a co-player, tool or companion. This is important since each archetype can provide a different game experience. Indeed, the presence of other people does not only change intensity, it also changes the meaning of the game experience variables themselves. For example, competition is experienced *differently* with a co-player than with a companion, as seen in several of the testimonies above. Thus, game experience is not only influenced by the social play dimensions, but also by the broader role of the other person in the game of the player.

The current paper hopes to offer a framework that allows for taking these nuances into account. More specifically, our framework consists of two layers. The first layer holds the

four archetypes. Within each archetype, there is a second layer present, containing the social play research dimensions. This framework enables more nuanced comparisons between similar gaming situations and makes it possible to discover subtle differences in game experience. Research on the social aspect of play should reckon with the role of other people involved in the player's game, by adopting this framework, to gain a broader insight in the game experience of the player.

Next to enabling future research to more insights into the study of social play, the current paper also has its limitations. First of all, the interviews conducted did not handle variables of game experience directly. Therefore, this paper has no solid proof that the roles in themselves have a different influence on all or even on some variables of game experience. The aim here was only to explore whether or not the involvement of other people could be categorized. A future study could look into specific aspects of game experience, for example how spatiality affects game enjoyment when playing with each of the four archetypes. That way, it would be known if all of the social play dimensions have the same influence on all aspects of game experience, within each archetype. A second limitation of this study is that properties of the player and other are overlooked, for instance personality, gender and age. This was outside the scope, but is a non-negligible part of the categorization and player experience (Williams & Clippinger, 2002; Vermeulen, Núñez Castellar, & Van Looy, 2014; Eklund, 2015). A follow-up study could research this, including not just traits of the player and other people, but also of the game and of the situation.

In summary, different roles for people involved in social digital game play are found to matter for the game experience of the player, above and beyond variables found in the literature. Therefore, a two-layered framework is offered, that enables researchers to categorize the role of these other people, and to look into these social play research variables to see how each one affects game experience within a certain role. Future research could look

into the specific aspects of game experience and into personal traits of the player and other people involved in social play to see if and how they impact game experience.

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