A Matter of Closeness: Player-Avatar Relationships as Degree of Including Avatars in the Self

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Abstract. The relationship between players and their avatars was found to be critical to game use and effects. Past scholarship has, thus, explored the various player-avatar relationships (PARs) that can emerge during gaming. We argue that the Inclusion-of-Other-in-the-Self principle from the social-psychological Self-Expansion Model provides a fruitful theoretical perspective to systematize and explain the structure of the diverse PAR types. Based on the model, we define a PAR as inclusion of the avatar into the player's self. The more characteristics of the avatar are included, the more a player adopts the perspective of and feels close to the avatar. We draw on in-depth interviews with 32 players from Germany and the U.S. to explore how PARs can be systematized based on the Self-Expansion Model. Consistent with the model, we found that the heterogeneity of PARs can be organized by a distance/closeness continuum. Five types of PARs were extracted from the data, ranging from functional relationships to weak or strong (para)social relationships to selective or complete identification. We discuss how this typology and the Self-Expansion Model can advance game research.

Keywords: Video games · Avatars · Identification · Parasocial relationships

1 Introduction

Avatars are essential elements of most modern video games [1]. As representations of players in the game [2], they constitute a central means by which users influence the state of a game [1]. Moreover, avatars allow players to represent and experiment with their identity [3, 4] and can serve as rich narrative devices [5]. Consequently, players' relationships with their avatars were found to be critical to video game use and effects, affecting inter alia players' motivations [4, 6], their style of playing (e.g., pro- vs. antisocial gaming [7]), entertainment experiences [8] and outcomes such as aggression [9].

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Given the centrality of player-avatar relationships (PARs), game scholars extensively studied what types of PARs emerge during gaming; inter alia to guide future game development [e.g., 10]. As video game players usually control their avatars, the relationship between them has often been described as identification [11]—a psychological 'merger' between player and avatar [12, 13]. However, research has also shown that players sometimes perceive avatars as separate social beings [6, 14]. Consequently, PARs can emerge that mirror parasocial relationships between users and characters in linear media [15, 16] or even social relationships between 'real' people [1, 6].

Considerable progress has been made in organizing this variety of possible PARs [e.g., 1, 6, 17, 18]. However, it remains a challenge to systematize and explain the structure of the diverse PAR types from a cohesive theoretical standpoint. We argue that the Inclusion-of-Other-in-the-Self idea from the Self-Expansion Model [19–21] provides such a unified theoretical perspective that can explain a rich variation of PARs. Results of in-depth interviews with 32 players demonstrate the utility of this theoretical account to systematize PARs.

2 Theoretical Approaches to Player-Avatar Relationships

2.1 Status Quo

Based on prior conceptualizations, PARs can broadly be defined as involvement with the media character [22] and be described as players' cognitive, affective, behavioral and motivational engagement with their avatars [23]. This involvement can take a wide variety of different forms [1]. One attempt to organize this variation is the differentiation between dyadic and monadic understandings [12].

Dyadic approaches such as parasocial relationships [24] or character liking [25] describe media users as observers of media characters. Relationships to characters occur when users develop interest or emotions towards a character [25, 26], but the character is perceived as a (seemingly) autonomous entity different from the user. *Monadic concepts*, in contrast, assume that "through interactivity […] video games (partly) override the distance between media user and media character" [12]: As players control their avatar, they temporarily feel *to be* the avatar [11, 13, 27]. For example, the monadic notion of identification proposed by Klimmt and colleagues [12] suggests that players temporarily integrate parts of the avatar's identity in their own self-concept, which may be metaphorized as a melting of player and avatar during play [4, 28].

Valuable progress beyond this juxtaposition was achieved by Banks [6, 17] and Banks and Bowman [1, 14, 18, 29]. They identified four archetypes of PARs: Accordingly, avatars can be perceived (1) as mere objects, (2) as virtual extensions of the players ("avatar-as-me" [6]), (3) as symbiotes, used to create new personas, or (4) as distinct entities that allow 'real' social interactions [6, 17]. An important insight from this research is that players sometimes perceive their avatars as authentic social others, resulting in PARs that represent 'real' social relationships. Moreover, this research showed that the possible range of PARs also includes modes that do not match a conventional understanding of 'relationship' at all, as players may view their avatars as non-social, functional game elements (i.e., objects that help them to win the game) [30].

Banks and Bowman also showed that the PAR archetypes can be organized as a continuum of sociality, ranging from non-social (i.e., avatar as object) to fully social relationships (i.e., avatar as distinct social agent) [1, 6, 14]. A number of ludic and social qualities were identified that vary across the four archetypes [6, 14, 18, 29]. These qualities include anthropomorphic autonomy (i.e., perceiving the avatars as authentic social entities), emotional closeness, critical concern regarding the game's authenticity (i.e., evaluating the internal consistency and coherence of the game world), and sense of control over the avatar [1, 18, 29].

In sum, game researchers have identified a variety of different PAR types. However, explaining and systematizing the various PAR forms from a cohesive theoretical standpoint remains challenging. For example, both monadic and dyadic relationship concepts assume that players adopt the avatars' perspective, but attribute this experience to different mechanisms (i.e., psychological melting in monadic [12] and empathy in dyadic relationships [26]). Moreover, the present state of research hardly explains how the relationship between a player and an avatar transitions over time from one PAR type to another. How, for instance, can empathy in dyadic PARs turn into full perspective taking (i.e., identification)? We argue that viewing PARs from the perspective of the Inclusion-of-Other-in-the-Self principle [19–21] can resolve these open questions.

2.2 The Inclusion-of-Other-In-The-Self Principle

The Inclusion-of-Other-in-the-Self principle has been suggested in the Self-Expansion Model [19–21]. This model aims to explain experiences and behaviors in close social relationships [19]. Put simply, the model proposes that human beings have a fundamental self-expansion motivation—a drive to increase their resources, perspectives, and identities [19, 20]. One way to satisfy this motivation is to form close relationships because in such relationships people include the resources, perspectives, and identities of others in their selves (Inclusion-of-Other-in-the-Self principle) [19–21]. Hence, in a close relationship, the cognitive construction of the self and the other overlaps [19]. For example, various studies showed that people treat the other's resources and outcomes (i.e., failures and successes) like their own, have problems cognitively differentiating between themselves and the other, and extend self-related biases to the other [19, 20]. Against this background, Aron and colleagues [31] argue that the '*closeness'* of a relationship represents the degree to which the other is included in the self. The stronger one's self overlaps with the self of the other, the closer the relationship is perceived.

2.3 PAR as Inclusion of the Avatar in the Self

We suggest that understanding players' involvement with their avatars from the perspective of the Inclusion-of-Other-in-the-Self principle can bridge the different PAR concepts and contributes to answer the questions raised above. A PAR can be understood as inclusion of the avatar in the player's self. The stronger this inclusion, the closer the relationship should be experienced [31]. This notion corresponds well with *monadic* PAR concepts [11]. Most notably, Klimmt and colleagues [12] suggested that during identification players' self-concept is temporarily altered as users *include* characteristics of their avatars' identity in their self-concept. Further consistent with the

principle [31], identification was often theorized to be selective: The amount of avatar characteristics that are included in the self can vary substantially [12].

The principle also seems well suited to explain *dyadic PARs* such as parasocial or fully social relationships [6, 15], as the Self-Expansion Model was originally developed to describe social relationships in which people remain separate entities [19]. But even in dyadic relationships people seem to include the resources and perspective of the other in the self and share the other's emotions [19, 20]. The principle can thus explain how empathy for game avatars emerges in dyadic PARs. Finally, it can also explain how PARs evolve and shift over time: The more avatar characteristics are integrated in the player's self, the more a PAR should evolve from a dyadic to a monadic form.

In line with these assumptions, Shedlosky-Shoemaker et al. [32] found that people indeed include fictional characters in their selves while using linear media. Other research has suggested that players also include avatars in their selves while gaming, and this process is stronger the more players are emotionally attached, feel similar to and embodied in avatars [33]. While these results are promising, the systematization of PARs along the degree of perceived closeness—the experiential quality of including other in the self [31]—requires further investigation. Specifically, we argue that closeness increases from dyadic to monadic relationships as people include avatars to a stronger degree in their selves. However, others argued that closeness should be the highest in dyadic, fully social relationships [1, 18]. Moreover, it is unknown how perceiving an avatar as a mere object fits into the closeness continuum. Hence, in the present contribution, we aim to explore how PARs can be systemized along the quality of closeness. We ask:

- RQ: How can players' relationships with their game avatars be systematized along the characteristic of 'closeness', defined as the inclusion of the avatar in the self?

3 Method

Qualitative in-depth interviews with 32 players (see table A in the electronic supplementary material) from Germany (n = 19) and the United States (n = 13) were conducted. Interviewers were trained communication students, and the respondents were recruited in their peer group (German participants) as well as in a university class and a recreational center (U.S. participants). To maximize diversity, we recruited participants of different age (17–34 years), gender (5 female participants) and self-ascribed gamer identity (casual gamer: n = 11; regular gamer: n = 4; heavy gamer: n = 7; hardcore gamer: n = 7; n/s: n = 3).

The semi-structured interviews were based on a flexible guideline that allowed maintaining an open and dialogue-like situation. Players were asked inter alia about the process of selection and customization of a video game avatar. Moreover, the interview guideline addressed experiential traces of PARs. The questions dealt with how participants interact with avatars and experience relationships with them in general but also focused on monadic and dyadic relationships in particular. The interviews were conducted face-to-face or, as an exception, via videoconference and lasted between 14 and 51 min. All interviews were audio-recorded and fully transcribed.

A qualitative content analysis [34] was conducted involving three steps. (1) At first, all passages portraying experiences of PARs were identified. Coding was guided by a rather broad definition of PARs ("involvement with an avatar"; see Sect. 2.1). (2) In the next step, we followed a semi-deductive approach to classify the types of PARs portrayed in these passages. Initial codes were based on the theoretically derived distinction between functional ("absence of involvement with an avatar" [6]), dyadic ("involvement with an avatar separated from the player") or monadic relations ("involvement with an avatar including a (partly) merge of identities"). This rather broad categorization of PAR types was inductively refined during multiple codings of the full material. (3) Finally, the characteristics of the identified PAR types were analyzed to explore their differences. Codes were generated inductively. A particular focus was on the perceived closeness of the relationships and on experiential traces of including the avatar in the self. All steps were conducted separately by two researchers, and differences were discussed to improve intersubjectivity of interpretations.

4 Results

4.1 A Distance-Closeness Continuum

Respondents described several characteristics of the relationship with their avatars. Among them, the closeness to the avatar was mentioned most often. Closeness was usually described as feeling related to (e.g., R 04, 22, 31), connected with (e.g., R 06, 21, 23, 24, 25, 29, 30, 31), being attached to or emotionally involved with the avatar (e.g., R 25, 27, 32). Even respondents who denied having a relationship with their avatar referred to (a lack of) closeness to describe their experience (e.g., R 01, 14). For example, respondent 14 answered the question if he had experienced a relationship with an avatar: "*Not at all, actually I would say I'm quite distanced from the avatar that I play*". Thus, in line with the Inclusion-of-Other-in-the-Self principle [31], specific degrees of player-avatar closeness emerged as central quality of PARs.

Many PARs that we categorized as dyadic relationships were experienced as rather close (e.g., R 36: "*[The avatars] are really quite close. Yeah, you can empathize with them*"). However, in descriptions that were categorized as monadic relationships, the bond between player and avatar seemed to be even closer (e.g., R 06, 25, 27), as the avatar was not experienced as a separate individual (e.g., R 25: "*I don't view them as another person, I view them as an extension of myself*"). In contrast to this closeness, some participants underlined their distance to their avatars by talking about the relationship in a functional way (e.g., R 01, 04, 22, 23). A statement by respondent no. 29 on the interchangeability of avatars illustrates this: "*I didn't feel very attached to my own character especially since I was in the mind-set of 'Okay, I'm going to make a different profile after I am done with this'*". Several participants reported changes in the quality of their PAR in the course of play. For example, respondent no. 28 explained that the formation of a PAR involves multiple steps in which the relation is becoming closer, including getting to know the avatar and developing an affection for her/him/it.

The results are consistent with previous research that found substantial differences between PAR experiences [1, 6, 18]. Moreover, the findings correspond to the Inclusion-of-Other-in-the-Self principle [31] by highlighting that gamers may go through relationship experiences from very high interpersonal distance to very high closeness to their avatar, and degrees of distance/closeness may evolve over time. Finally, monadic PARs were characterized as being closer than dyadic PARs. Thus, it seems reasonable to systematize the diversity of PARs on a continuum among their inherent level of player-avatar closeness.

4.2 In-Depth Findings: Five Types of PARs and Related Experiences

In-depth coding served to expand the continuum of closeness into a model of five types of PARs.

Functional PAR: Some players reported to have no emotional link to the controlled avatars, but rather perceived them as a "*playing piece*" (R 01). For example, one participant stated that he sometimes lets his avatar die just for fun (R 01). Other gamers compared their treatment of their avatars to playing cards (R 18) or chess (R 03), thus emphasizing the "tool" aspect over a (para)social experience. Moreover, this form of PAR is governed by an achievement orientation. Players' stance towards their avatars is "*just to control them*" (R 24), to use them effectively for achieving in-game goals. Thus, the functional PAR corresponds to past findings revealing players' instrumental, non-social perspective on avatars [6, 30]. No evidence was found that players integrate avatars' resources, perspectives, or identities in their self in a functional PAR.

Empathy-based Dyadic PAR: The second type of PAR that emerged from the analysis is based on empathy. Several respondents said they perceive their avatars as independent entities but become emotionally involved by witnessing what happens to them in the game (R 04: "*You most often have knowledge of the emotional life of the protagonist, and hence they are very close*"). Based on the Self-Expansion Model [19], this process implies including the avatar's perspective in the player's self. In line with the model [19, 20], participants reported to experience the avatar's outcomes as their own to some degree and mirror his/her/its emotions. Specifically, compassion (e.g., R 08, 09) or empathy (e.g., R 01, 04, 05, 06, 07) were frequently mentioned. Moreover, due to the emotional bond, players' treatment of their avatars is determined by positive actions like "*cheering*" (R 05) or caring for them (R 20: "*It's like I kind of want to be protective of him*"). Besides, during instances of failure, players hold the avatar (but not necessarily themselves) responsible (e.g., R 27). In sum, it seems that players indeed include their avatars' perspectives in their selves in this type of PAR, but avatars and players remain sufficiently separate entities so that players still remain observers.

Intensive Dyadic PAR: In some interviews, a pattern of dyadic PARs emerged that could be described as a strong emotional bond or even intimacy (e.g., being "*on fire*" for the avatar, R 30). In this type, the avatar is experienced as a close other—like a good friend (e.g., R 04, 32), which resembles parasocial or fully social relationships [6, 26]. This close interpersonal connection can last beyond the gaming episode. For example, respondent no. 10 declared: "*And at the end, when it's all over, you think,*

now I want to know what he [the avatar] does after the game", a description suggesting similarity to parasocial break-ups [35]. The emotional bond seems to originate from avatars' strong appeal to the players. Respondents reported to appreciate the avatars for certain characteristics such as being a "*hero saving the world*" (R 21) or for being a "*nice guy*" (R 01). This attraction seems to motivate players to maintain a coherent positive image of the avatar. Participants mentioned that they try to behave like the avatars would do, although it would not correspond to their normal gaming behavior (e.g., R 01, 31). Just like in theatrical role-play, they try not to damage the authenticity and appeal of the avatars by acting in an inappropriate way (e.g., R 6, 16, 26). Thus, it seems, that in this type of PAR, players include the avatar's perspective and identity to an even closer degree in their self than in the empathy-based PAR.

Selective Identification: In statements related to the fourth type of PAR found in the analysis, participants reported that the boundaries between their selves and the avatars begin to blur as they identify with characteristics of the avatars that are similar to their own (R 6, 17, 30, 31). Moreover, they mentioned idealized character traits or abilities (e.g., the "*ability to do martial arts*" R 24) as dimensions on which they preferred to identify (e.g. R 2, 3, 5, 19, 24). This also includes evil character traits, as long as they are perceived attractive (R 13). Such reports resonate well with concepts of identification [11, 12] and are empirical manifestations of including an avatar's characteristics in the self. For example, respondent no. 26, thinking of avatars he feels related to, mentioned that "*having humor, having like adventure, having charm (…) is the kind of person you would want to hang out with in real life. And (…) you are controlling them and actually being them*". To facilitate this experience, players have reported that they sometimes design the avatar to reflect their own selves. Compared to the intensive dyad PAR, participants who identify on a selective level reported less frequently to orientate their in-game behavior on the appreciated characteristics of the avatar in a sense of acting ("*what he would do*"; R 31). They rather stated to follow their own intentions (R 30: "*what-I-feel-is-the-right decision*"; also: R 06, 10, 21, 31). Thus, players absorb attributes of the avatars and/or adjust their controlling of the avatar so that the avatar mirrors attributes of the player ("avatar-as-me" [6]). Hence, the selective identification type represents the transition from dyadic to monadic PARs [12]. Moreover and extending the Inclusion-of-Other-in-the-Self principle [19–21], it seems that during video game identification players sometimes include (or project) their own self 'in the avatar'.

Shift of Identity: Reports related to the closest PAR type that emerged from the analysis describe a (temporary) shift of identity. The feeling of 'being' the avatar (e.g., R 02, 06, 13. 19, 28, 31) with all her/his/its goals and perspectives (e.g., R 21, 23, 26) was described for example by respondent no. 28: "*his daughter is on a ship […] you are supposed to save her. And I got really heated like: '[…] Get the hell away from my daughter!'*". In this extreme type of PAR, participants reported to feel even closer than in selective identification, most likely because their temporary self-concept rests on avatar attributes rather than on their own selves (R 26: "*I really was becoming the character*"). Hence, this PAR can be described as total inclusion of the avatar in the player's self. As a result, the gamers reported a strong responsibility for in-game actions and related consequences (e.g., R 06, 10, 12, 21). In a combat game context, this means that "*blood [is] on the player's hands*" (R 10). This also implies that through identity shifts, game avatars allow

players experiencing entirely new situations firsthand (e.g., R 31: moral dilemmas) or explore possible selves (e.g., R 31: 'being' a sports star; also: R 21, 25). Such experiences can even impact players' life outside virtual worlds (e.g., R 21: "*'Link' kind of made me more courageous*"). Hence, this closest form of PARs seems to allow players the most to enlarge their identities—to expand their selves [19, 20].

5 Discussion

The present study reapproaches the diversity and complexity of video game player-avatar relationships (PARs). Our respondents described their PARs in ways that mirror different accounts of monadic, dyadic and functional PARs that have been proposed in the literature [1, 6, 11–13, 15, 17, 18, 29, 30].

As a key contribution, the study demonstrates that the diversity of PAR types can be explained based on the Inclusion-of-Other-in-the-Self principle [19–21]. In line with this idea [31], varying degrees of perceived 'closeness' to the avatar emerged as central quality of PARs in the interviews. Moreover, it was found that functional, dyadic and monadic PARs could be organized on a continuum from high player-avatar distance to high player-avatar closeness (see Sect. 4.1). In-depth coding revealed further experiential and behavioral traces of players' inclusion of the avatar in their selves. In the *functional* PAR players separate themselves completely from the avatars. In contrast, in dyadic relationships (*empathic* or *intense dyadic PAR*) they incorporate the avatars' perspectives and identities into their selves and, thus, treat the avatars' outcomes as their own, leading to intense empathic responses. These are precisely the experiences that have frequently been described in research on the Self-Expansion Model [19, 20].

In video games, however, the adoption of an avatar's characteristics, perspectives, and identities can go even further to the point of partial (*selective identification*) or complete identification of the player with the avatar (*shift of identities*). This temporal alteration of players' self-concept [12], thus, extends the intensity of including others in the self, usually found in social relationships in the material world [19, 20]. Metaphorically speaking, player's self and the avatar totally overlap in an intense monadic PAR (*shift of identities*). Interestingly, participants' statements illustrated that these merger experiences with the avatar can begin either on the end of the player or on the end of the avatar. In some cases, players seem to be impressed by the idealized attributes of an avatar and import such desirable attributes into their temporary self-perception—this marks the mode of identification explicated by Klimmt et al. [12] and others [4, 13, 28] and mirrors the Inclusion-of-Other-in-the-Self idea [19–21]. In other cases, however, the merger of identities process starts with the players, particularly their intention to design avatars in a way that mirrors their own salient characteristics such as appearance or morality. In contrast to identification via change of the player's self-concept, this could be described as identification via avatar creation, as digital 'cloning' of the player. The latter would converge with notions of similarity identification or homophily, whereas the former corresponds to notions of wishful identification [11]. Both subtypes of monadic PARs should hence be investigated further and may lead to new insights into playing motivations, avatar customization [3, 30] and gaming effects.

To answer our RQ, Fig. 1 illustrates how the identified PAR types can be systematized along the characteristic of 'closeness', defined as the inclusion of the avatar in the player's self. Based on the Inclusion-of-Other-in-the-Self (IOS) Scale [36], the degree of overlap between players and avatars is symbolized by more or less overlapping pairs of circles. This distance/closeness continuum could at first sight be understood as the degree of involvement [23] with avatars. However, very high involvement in the sense of avatars being highly relevant to players was found for both dyadic and monadic PARs, so distance versus closeness is not necessarily the same as involvement. Rather the PAR experiences found in the in-depth analysis (see Sect. 4.2) suggest that the continuum indeed represents how strongly the avatars' perspectives and identities are included in players' self. Moderate inclusion will result in dyadic PARs, but these may still come with great emotional involvement just as monadic PARs. Hence, it is reasonable to differentiate the closeness from the involvement dimension.

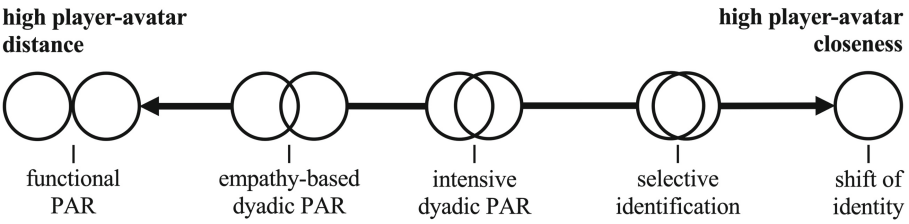

Fig. 1. Systematization of PAR types based on the metaphor of the IOS scale [36]

Future research is needed to further investigate the findings reported here. At first, our study should be replicated with an even more diverse sample (e.g., more female players). In addition, it should be examined whether the identified continuum of PAR types is genre independent. As an initial exploration, we categorized which games participants in this study referred to when talking about the five PARs (see Table B in the electronic supplementary material). We found that participants experienced the five PARs in almost every genre. Thus, the continuum seems rather genre independent, but more research on this subject is needed.

Moreover, the applicability of the Self-Expansion model [19–21] to PARs should be further investigated. First, a quantitative survey in which players are asked to recall a recently controlled avatar seems useful. Based on the IOS Scale [36] and other established measures of player-avatar interactions [4, 18], the relationship between closeness and PAR types could be further investigated. Second, longitudinal studies, such as those already conducted in the context of the Self-Expansion Model [19], seem valuable to investigate the development of PARs over time. Third, experimental studies in which the relationship between avatars and players is manipulated seem promising as well.

In addition, future research could examine the transferability of findings on the Self-Expansion Model to PARs. Specifically, various predictors of including others in the self have been identified [19]. Studying those in the context of games might help scholars explain the formation of PARs and guide game development [10]. Another promising approach for future research is to study how close PARs help to satisfy players' self-expansion motivation. According to the Self-Expansion Model, human beings want to

grow as a person, and including others in the self is one way to accomplish this [19–21]. Our results suggest that intensely close PARs (i.e., *shift of identities*) are well suited for self-expansion. Thus, investigating the self-expansion effects of PARs may provide insights into how video games can facilitate growth and self-realization—effects that increasingly attract the attention of games researchers [37]. In sum, we believe that incorporating the perspective of the Self-Expansion Model to avatars contributes to explaining the centrality of player-avatar relationships for game use and effects.

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