

The Player's Parasocial Interaction with Digital Entities

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ABSTRACT

This paper looks into how modern digital game theory uses the theory of parasocial interaction and parasocial relationships to describe the relationship between the player and digital entities such as bots, the avatar, the player character and other players' digital representations. First, the original definition of parasocial interaction by Horton and Wohl from 1956 was defined and compared to the various uses of the theory in the field of digital games theories. In the following analysis it was established that it is possible to enter into a parasocial relationship with many different digital entities if they live up to the requirements for a constructed persona as established by Horton and Wohl. However, parasocial interaction in relation to the player's own digital representation might only be experienced in a digital game context when the player experiences himself as being separate from the character of the avatar.

Categories and Subject Descriptors

K.8 [Computing Milieux]: Personal Computing – Games.

General Terms

Theory

Keywords

Parasocial Interaction, parasocial relationship, avatar, character, player, computer game, media characters, digital entities

1. INTRODUCTION

The term *parasocial interaction* has been applied to the field of digital games research by various researchers in numerous ways. The complicated task of describing the relationship between a real life human player and a digital entity has inspired digital game researchers to look in the context of other media theories in order to establish tools and theories that might help in understanding the medium of digital games. The definitions and perspectives of parasocial interaction and parasocial relationships however originally belongs to the medium of television, and as other theories originating from a different medium, the question remains whether the theory can be applied to the area of digital games in a general sense. Indeed the theory of parasocial interaction and its application to the field of digital game studies differ from one researcher to another. This paper therefore seeks to look into the original definition of the term, hold it up against its different applications to the field of digital games, and conclusively try to establish how the term can be applied to the different digital entities that the player might interact with, while adhering to its original definition.

Before going into the different applications of the theory to digital games however, the following section summarizes the original

definition of parasocial interaction as defined by Horton and Wohl.

2. DEFINITION

In 1956, the term parasocial interaction was introduced by sociologists Donald Horton and Richard Wohl to describe interaction taking place in an interpersonal relationship between two parts; an audience and a performer living out a personality for an audience. Central to the concept of a parasocial relationship is that it is:

...one-sided, nondialectical, controlled by the performer, and not susceptible of mutual development [...] These "personalities", usually, are not prominent in any of the social spheres beyond the media. They exist for their audiences only in the para-social relation. Lacking an appropriate name for these performers, we shall call them personae. [Horton and Wohl 1956].

Opposite traditional theater's clear distinction between the actor and his fictional role, the performer thus exists as a continuous interplay between the performer's fictional and actual persona. Horton and Wohl originally contributed the term to a television persona, such as a host on a TV show, who through behavioral manipulation can be used to encourage the audience to e.g. buy a particular product. This is done by presenting the product for the audience through a static, engaging and trustworthy persona that can serve as a fixed point in the lives of the audience:

"The persona offers, above all, a continuing relationship. His appearance is a regular and dependable event, to be counted on, planned for, and integrated into the routines of daily life [...] Thus his character and pattern of action remain basically unchanged in a world of otherwise disturbing change. The persona is ordinarily predictable, and gives his adherents no unpleasant surprises". [Horton and Wohl 1956]

The parasocial relationship that is established with the audience is stated to be due to the fact that the persona can "*claim and achieve an intimacy with what are literally crowds of strangers*". The actor "*makes available nuances of appearance and gesture to which ordinary social perception is cued*" while he "*faces the spectator, uses the mode of direct address [and] talks as if he were conversing personally and privately*". Thus the audience experiences a one-on-one interaction with the performer, and gets to know and bond with the persona through direct observation and interpretation of his appearance, his gestures, his voice, his conversation and conduct in various situations. But a parasocial relationship is not reserved for the TV persona and his audience only. Horton and Wohl states that the term might be extended to cover personae in other media and even personae that are not necessarily enacted by physical human actors:

They are alternately public platforms and theatres, extending the para-social relationship now to leading people of the world of

affairs, now to fictional characters, sometimes even to puppets anthropomorphically transformed into "personalities," and, finally, to theatrical stars who appear in their capacities as real celebrities. [Horton and Wohl 1956].

Thus the performer behind the persona might be a single person, but also an organization or even an entirely fictional character. The persona is emphasized as the pivotal point in the parasocial relationship because "the relationship between persona and audience is one-sided and cannot be developed mutually, very nearly the whole burden of creating a plausible imitation of intimacy is thrown on the persona and on the show of which he is the pivot". The audience is however also emphasized for their contribution to the relationship, as they are "expected to accept the situation defined by the program format as credible, and to concede as "natural" the rules and conventions governing the actions performed and the values realized". The continued association between a persona and an audience accumulates a history between the two parts, a shared pool of past experiences that functions as an additional dimension of sense-making for the experienced performance. The parasocial relationship may consolidate so deeply and seem so real that the audience may ignore the boundaries of the fictional persona:

Given the prolonged intimacy of para-social relations with the persona, accompanied by the assurance that beyond the illusion there is a real person, it is not surprising that many members of the audience become dissatisfied and attempt to establish actual contact with him [Horton and Wohl, 1956].

The relationship thus reaches beyond the stage of the persona, beyond the imagined world that the spectator and persona shares.

3. LITERATURE REVIEW

One of the earliest works that comes near the concept of the term parasocial interaction within digital culture can be found in the research of [Nass and Moon 2000]. While they do not mention the actual term in their article *Machines and Mindlessness*, Nass and Moon's research is used as one of the foundations for several other articles referred in this paper. The theme of the paper is closely related to parasocial interaction, as it relates how users of digital programs and machines attribute digital entities with human-like qualities. They state that "individuals mindlessly apply social rules and expectations to computers" and that "individuals overuse human social categories, applying gender stereotypes to computers and ethnically identifying with computer agents". This happens to such a degree that the players' behavior towards the digital entities is affected as well, as the players are seen exhibiting "social behaviors such as politeness and reciprocity toward computers" [Nass and Moon 2000]. In 2003 Klimmt, Hartmann, Schramm and Vorderer applies the actual term of parasocial interaction to digital entities as they in the perspective of parasocial relationships examine how media users perceive their own avatars as interaction partners. They conclude that media users psychologically interact with characters appearing on-screen, and theorize that parasocial interaction is developed by frequent exposure to the persona [Klimmt et al. 2003], similar to how a relationship is created and maintained by a television persona and her audience through time, as they grow into the parasocial relationship by sharing a common history. This research is later used by Chung, deBuys and Nam in 2007, who analyze how attitude, empathy, presence, and parasocial interaction changes in a group of female non-gamers that is presented to either a pre-generated avatar or to one that the test

participants have created themselves. With the two forms of player representations as a basis, Chung states the following hypothesis:

If people are more exposed to their avatars by creating their own, it was supposed that the avatar creation group would have a greater sense of para-social interaction. Therefore, we hypothesized that: Gamers who create their own avatar will have a greater sense of para-social interaction than gamers who receive an avatar by default. [Chung et al. 2007].

The research done did however not support the hypothesis stated, as the players' 15 minutes exposure to the game avatar was deemed too short. Instead Chung suggests that "para-social interaction is discovered through repeated exposure in a relatively long term situation" [Chung et al. 2007]. The research of Chung et al. was also used as an example by one of the co-authors in his own article about the application of the player's own face to the avatar [deBuys, 2007]. In this deBuys states that it is possible for a player to have a parasocial relationship with a player character with an already established identity:

Parasocial interaction is a relevant concept when dealing with an avatar with a somewhat previously established identity. Though the user controls the avatar taking on the perspective of the character for the purpose of gameplay, plot advancement, etc., there remains a separation due to the independent identity of the character. It is through this separation that parasocial interaction can occur. [deBuys 2007].

The idea of a separation between the player and the player's representation in a digital game as a precursor to parasocial interaction is shared by [Konijn, 2008] who states that the term parasocial interaction can apply to personae in new interactive media settings, as long as they are "perceived as sufficiently authentic and distant" [Konijn 2008]. Opposite these are [Lewis, Weber and Bowman 2008], who shortly discuss how the parasocial relationship between the player and the avatar in a digital game seems to be of a much more direct, bodily nature, compared to that of a TV character and her audience. They state that:

In interactive video games, there is no parasocial interaction with a fictitious character, no felt connection per se, but an actual, tangible connection between the gamer and a fully functional, completely controllable avatar [Lewis et al. 2008].

This view on the relationship between the player and his digital representation as a close, direct connection between the two is to some extent shared by [Jin and Park 2009], who look into how new virtual environments affects "self-presence", the sense of inhabiting and identifying with one's own virtual representation. They state that the media user's experience in a virtual environment is of a more personal nature and this affects their parasocial relationships when interacting with digital entities such as websites and robots. The virtual environments can be participated in through the avatar, through which the player can:

"observe the embodied manifestation of the self and its visually presented actions. Encountering their para-authentic self, players can form a parasocial relationship with their own avatars" [Jin and Park, 2009].

Thus parasocial interaction is described as a player's interpersonal involvement with his avatar and the extent to which the player perceive himself as interacting with the avatar. This form of parasocial relationship with the player's own avatar is taken up by [Hai-Jew 2009] as well, and named "self-love". This concept is

one out of two sides of “parasocial immersion” in relation to learning in virtual environments that refers to “*the one-way relationships people may form with anthropomorphic automated ‘bots and avatars’*” [Hai-Jew 2009]. She refers to parasocial relationships as “*one-way relationships with a media character or avatar representation, without a true human connection*” [Hai-Jew 2009] and claims that the concept of parasocial relationships can be divided into two usages; self-love and other-love:

“The social presences of human-embodied avatars, in individuals and groups, and their communications-heavy interactivity, have encouraged the development of parasocial relationships in several forms: self-love of people for their own avatars [which they may build up with a range of attractive features and digital powers], and other-love for others’ online personae.” [Hai-Jew 2009].

Self-love is described as a “*self-reflexive concept—a kind of self-love of one’s digital representation*” [Hai-Jew 2009], while other-love describes the relationship between a player and other players’ online personae. This division of parasocial interaction into several concepts also recurs in the work of [Bowers and Lakhmani 2011] who analyzes avatar personalization as a means to maximize player investment in serious games. Using [Jin and Park 2009] as a dominating basis for their definition of parasocial relationships, the interaction taking place between a player and the digital entities of a virtual world is described as encompassing several forms, which are all interpreted as having human-like qualities by players:

While users can form parasocial relationships with their own avatars, they can also form social bonds with the digital figures that populate a virtual world, be they human-controlled or otherwise. When users see an avatar, be it their own, someone else’s, or even one controlled by a computer, they interpret it as they would a human. [...] In the virtual environment, these people form social relationships to other people’s avatars and they form a parasocial relationship with their own avatar. Because these relationships are emphasized, these users show a higher level of self-presence [Bowers and Lakhmani 2011].

The phenomena of other-love is also analyzed by [Taylor 2011], who during a research on emotional involvement with online communication presented test participants with an online questionnaire, in which a number of questions were presented by an avatar. He stated that “*Seeing a visual representation of a human figure or face may give readers a stronger sense that they are communicating with a person*” and that “*research has demonstrated that individuals often develop emotional involvement with virtual others, even in the absence of any opportunity for real-time interaction*” [Taylor 2011]. He compares the interaction to parasocial interaction, stating that “*Inasmuch as avatars provide a concrete image around which to imagine a virtual other, those avatars may contribute to the perception of realism, and thereby facilitate the establishment of an emotional response or link akin in some ways to PSI [Parasocial Interaction]*” [Taylor 2011].

4. DISCUSSION

The theory of parasocial interaction was originally developed by Horton and Wohl to describe a media relationship based on a television personae. The theory, as with other theories within the field of television and film, is therefore not necessarily applicable to the field of digital games. But as Horton and Wohl include

platforms such as “*alternate public platforms and theatre*” in their theory, and as organizations and fictional characters can take on the role of the performer, one might argue that a digital game with digital entities can indeed be subjected to the theory of parasocial interaction. There is an actual audience in the form of the players of the digital game, and these are subjected to information-exchanging personae in the form of the digital entities inhabiting the digital game world. But while digital games as a media might live up to the preconditions for experiencing parasocial interaction, the question remains whether all digital game entities actually follow the requirements for being a persona and thus being able to enter into a parasocial relationship with a player.

In a digital game world there might be several types of digital entities whose concepts and mechanisms need to be taken into consideration when discussing applying the term of parasocial interaction to the field of digital games. First and foremost the game world is inhabited by digital entities that the player might interact with defined beforehand by a designer: bots. Secondly there is the player’s own representation in the form of his avatar or player character. Lastly the player might meet other players’ representations in a digital multiplayer world. In order to analyze whether these different digital entities can form a parasocial relationship with the player, I will hold them up against the guidelines for a persona as defined by Horton and Wohl, who describe a parasocial relationship as:

- Being one-sided, specifically the relationship is established and maintained by the performer. The audience should be passive, but do have to accept the parasocial relationship and its development.
- Not being susceptible of mutual development, as the audience cannot change the parasocial interaction, only participate in it. If an audience is not satisfied with the parasocial relationship he can only withdraw from it, in the same way that a theater guest would not be able to influence a performance that he did not find satisfying, only leave the theater.
- Consisting of an audience and a persona controlled by a performer.
- Being nondialectical in the sense that the audience accepts the persona and the parasocial relationship and interaction without examining competing ideas, perspectives or arguments related to the persona and the relationship.

These requirements will through the following sections be applied to the various digital entities and player representations that potentially could be a part of a parasocial relationship.

4.1 Bots as Digital Entities

A large amount of digital games uses bots as digital entities to provide the player with e.g. guidance with regards to playing the game, to create and support a narrative or to create an incentive for the player to perform a certain task. In other games the player might have the possibility to initiate a conversation with the digital entity by interacting with her. These conversations can take place through text or dialogue options with multiple answers that are part of a preprogrammed dialogue tree, but while the player may get the impression that the conversation involves him and the digital persona, the persona can only follow the static dialogue tree defined by a programmer. Thus, the interaction taking place between a player and a bot can as such be compared to the one-

sided, static conversation that a performer with a predefined manuscript expresses to her audience through her TV persona. A good example of such a digital persona is the character GLaDOS from the digital game Portal [Valve 2007]. In the game, the player is subjected to lengthy monologues from the passive-aggressive, witty, narcissistic, and sinister computer GLaDOS, who only wishes the player dead. The player has no means of answering back or in other way interacting with GLaDOS. The actions and comments made by GLaDOS are fixed by a script, and thus the relationship between GLaDOS and the player cannot be developed mutually. Instead the player takes on the role as the passive listener as he traverses through the game levels, uncovering the increasing psychotic personality of the only intelligent and human-like entity keeping him company throughout the game. While a digital persona such as GLaDOS “acts” on her stage that is the digital world, there is as such no direct connection to a single real life performer behind the persona. Instead the performer behind the digital persona consists of several people responsible for various aspects of the digital persona, such as game designers, artists, voice actors, models and programmers. But this kind of complex digital persona might not be so far from the television host’s persona, which is likewise created and supported by stylists, designers and writers. Or the way that a fictional cartoon character in a commercial for a product is created by illustrators, voice actors and writers. At least in the case of GLaDOS, the presence of a persona is very distinct as she is referred to by many players as an entity with personality and depth:

“Even when she’s mocking your progress through the Aperture Science testing facilities, the ferocious wit streaming from her sentient machine brain kept us in stitches. We only killed her because we had to.” [Killingsworth 2009]

Conclusively, many of the players playing the Portal series had a positive response to GLaDOS and she was celebrated as the sixth best Video Game Characters of the Decade (2000-2009) [Killingsworth 2009]. The GLaDOS persona was also used extensively in the marketing of the successor Portal 2. As such, GLaDOS is an excellent example of a digital entity that not only lives up to the requirements set by Horton and Wohl, but who also engages in actual parasocial relationships with her audience, the players of the Portal series.

The possibility of having a parasocial relationship with a digital entity is especially evident in the cases where some game characters succeed in establishing a relationship with a player that is so deep and heartfelt that the player wishes to break the boundaries between the digital and physical world in order to pursue the relationship. Thus, some players express love for a digital entity, some going as far as to marry her. In 2009, the groom “Sal 9000” married the character “Nene” from the Nintendo DS game “Love Plus.” [Lah 2009]. In an article, the relationship between the player Sal and the digital character Nene is described as slowly developing into a genuine love-affair:

“The courtship began in September when he started playing the game, in which players nurture a deeper relationship through game play. Sal started carrying Nene around the streets of Tokyo and taking her to Disneyland and to a beach resort in Guam” [Lah 2009]

At some point while playing, the player Sal started focusing on the character of the digital entity, instead of her digital nature, as he states that *“I love this character. Not a machine”* [Lah 2009]. The marriage is a good example of the realism of parasocial interaction also described by Horton and Wohl.

4.2 The Avatar and the Player Character

Besides digital entities consisting of a more or less complex AI and a designed appearance, the player himself uses a representation in the game world. In the literature review researchers such as Chung et al., Jin and Park, Hai-Jew and Bowers and Lakhmani state that it is possible for a player to have a parasocial relationship with his own player character or avatar, while deBuys and Konjin state that it is only possible if the avatar is perceived as another, distant character. Opposite these are Lewis et al. who argue that the connection between a player and his avatar is tangible, not fictive and distant, and thus there can be no parasocial interaction. The many theories presented are in some cases conflicting with each other, and the overall impression of the relationship between the player and his representation in a game is inconsistent and unorganized. This is possibly because there so far have been no systematization of the player representation in relation to parasocial interaction. In order to make it clear when a parasocial relationship might be established between a player and his representation in a game, a clear distinction between the different roles and mechanisms of the representation must be made. As deBuys along with other researchers states the player representation might be divided into two aspects; the avatar and an actual character, I will use his definition and distinguish between a player avatar and a player character. In this section I will try to set up conditions for distinguishing between the two, and briefly go into their differences, in order to lay down the boundaries between when a player representation is and is not a persona, and therefore is capable of taking part in parasocial interaction.

4.2.1 The Avatar

The word avatar in its original context in Sanskrit refers to a *“manifestation of an immortal being on earth”*, but the word is in modern days more often used in a digital context to describe the player’s representation in the digital world [Waggoner, 2009]. In his dissertation [Klevjer 2007] states that the avatar is different from the player character in that it is mainly described as a tool for the player, a means for interacting with the digital world as *“the avatar combines the principle of the perceptual prosthesis with the principles of fictional agency and fictional embodiment.”* [Klevjer 2007]. A good example of player representation that fits the description of the avatar is the protagonist in the game Skyrim [Bethesda Game Studios 2012]. In the beginning of the game the race, name, appearance, voice and skills of the avatar is defined by the player, who steps into the body of the protagonist, the famed Dragonborn, a legendary and rare person able to absorb slain dragons’ souls and use them as special powers. And that is what little character is established in the start of the game. But apart from that, the player is free to roam the game world, behaving as he pleases. In such an example, where it is the player that uses the body as his own extension into the virtual game world, the concepts of parasocial interaction and relationships are hard to apply. It is first of all difficult to see how the player can take on the role of a passive member of an audience to his own avatar, as he basically *is* the avatar. One might argue then that the player is taking on the role of the performer, expressing himself as a persona through the avatar, but that on the other hand leaves the player without an audience. If the player is the performer, he is no longer the audience and vice versa. The player might perform as a persona to other players in a digital multiplayer environment, and enter into parasocial relationships with them, but that also excludes him as an audience. This trouble with the missing audience also complicates how the relationship can be described

as being one-sided, as there is no other person to make up the other side of the relationship. There is only the player. With regards to a relationship with an avatar, the concept of the relationship being susceptible of mutual development and being nondialectical is troublesome as well. In e.g. the case of Skyrim's Dragonborn, the relationship between his avatar is defined by himself, and is therefore neither able to develop beyond the player himself or nondialectical, as the player knows what will happen, why he reacts the way he does etc. Thus, when the player representation is in the form of an avatar, it is not possible to experience parasocial interaction between the player and the digital entity.

4.2.2 The Player Character

Opposite, or maybe beside the avatar, is the player character. By analyzing the word "player character" it becomes clear that it consists of two concepts: The player and a character, or an already defined persona that the player controls. While the avatar is nothing more than a representation, a steering mechanism that allows the player to steer around the game world, the player character on the other hand describes something that has characteristics. Klevjer describes the notion of "character" as being different from the avatar as follows:

"A character is an independent subject, someone who can act, and who can be related to as a human person or some sort of animated being with goals and intentions. As players, we may in a certain sense be able to act, think and feel 'vicariously', as it were, via the acts of a character, but [...] this is a relationship of identification, not a prosthetic extension of agency and perception." [Klevjer 2007]

Thus, the player might use a player character to steer the game world, but the player character is defined by someone other than the player to have certain opinions, features and a story. As already discussed in section 4.1, the player character is, as other digital entities, defined not by a single performer, but rather by several performers responsible for small parts of the character. The player character has a persona that is separate from the player and this is what distinguishes it from the avatar. In this relationship, the player is the audience and that makes it possible for him to enter into a parasocial relationship with the player character.

Many distinct player characters such as e.g. Guybrush Threepwood of Monkey Island [Lucasfilm Games 1990] is a great example of a digital representation of the player that is both distant from the player and pre-defined by someone else than the player. Some might however argue that the player is not represented in the game through the character of Guybrush, but rather through the mouse cursor, often represented by a bodiless hand, which is used to click on the game screen to make the character perform a desired task. Other player characters as e.g. Shepard from the Mass Effect series [BioWare 2007] can be very similar to an avatar in that the player inhabits the body, but even then the character of Shepard still has as strong persona that is separate from the player. One could argue that the player in some cases actually have the ability to influence the player character by e.g. choosing conversation topics or deciding what the player character should do, and that the relationship therefore is not truly one-sided. But even if the player is presented with different choices that to some degree enables him to control the narrative and progress of the game, the choices are incorporated into the game by game designers, and adjusted to the player character so that no matter what choice the player chooses it will still seem as

a valid, personal choice, true to the persona of the character. In that sense, the relationship is nondialectical as well, as the player has no other choice than to accept the persona of the player character, or not play at all. He can do nothing to change the behavior or opinions of the persona, as they are pre-scripted and static.

4.3 Player Representations

Lastly, there might be digital entities that are neither controlled by bots nor by the player himself. In digital multiplayer environments such as MMORPGS or digital worlds such as Second Life [2003 Linden Research, Inc], the player might encounter other real life players' digital representation and interact with them. The important detail when it comes to parasocial interaction between other players' representations is whether the player interacts with and establishes relationships with another player behind the screen or another player's fictional representation online. And this choice is entirely up to the other player. The other player can choose to present herself by her own name, simply using her avatar as a mean to play the game. In that case, the player interacts with an actual person, not a persona, and thus no parasocial interaction is taking place. But the other player might also take on a persona that is different from her actual self to use in the virtual world. She might customize her player representation to express certain characteristics, or even a different gender and ethnicity. In the case of e.g. a legendary guild leader that through a carefully developed persona role-plays with other players on a forum or interacts with low-ranking players, the relationship is controlled by the guild leader. She gives out orders to other guild members, writes passionate incitements before a raid and can as such be seen as a local celebrity. In either case, the player can either choose to accept the other player's persona and engage in a relationship with her, or not play with her. Player representations therefore might serve as a basis for a parasocial relationship, if the other player chooses to act out a persona through her representation.

5. CONCLUSION

Even if the theory of parasocial interaction was originally used to describe the medium of television, Horton and Wohl states that it might be usable in other media. This is to some degree true for digital games. There are different instances where the theory of parasocial interaction might be used to describe the relationship between a player and a digital entity, dependent on whether it is controlled by a bot or a player. First and foremost, a player might form a parasocial relationship to a digital entity controlled by a bot, or even another player's digital representations as he would to a TV persona, as these digital entities lives up to the guidelines of parasocial interaction. It is when the discussing turns to the relationship between the player and his own player representation that the boundaries for parasocial interaction get complicated. I will argue that it is possible to establish a parasocial relationship with a player's own representation in a digital game in cases where the player character is separate from the player to such a degree that the player character has a distinct persona. However, there are several other cases when the player representation is inhabited and defined by the player to. In such cases, the player cannot take on the role of the audience. Instead, he might take on the role of the performer himself, but is then lacking an audience. Thus the interaction taking place between the player and the avatar does not follow Horton and Wohl's guidelines for a parasocial relationship, and therefore the interaction and

relationship is of another nature than parasocial. Conclusively I find that the theory of parasocial interaction fits several digital entities in digital games as can be seen in table 1, but can as such not be applied to the area in a general sense.

Table 1: The requirements of parasocial relationships and how they apply to the different digital entities

	Digital Entities	Avatar	Player Character	Representations
One-sided	x	-	(x)	(x)
Non-dialectical	x	-	x	(x)
Performer	(x)	-	(x)	x
Non-mutual development	x	-	x	(x)

The question of parasocial interaction between the player and digital entities raises some interesting thoughts on both the relationship between man and digital entities and agents, but also on the extremely complex relationship between the player and his own representation. However the field of exploring players' relationship with their player representations has not yet been fully explored and it might prove to be more deep and faceted than what has been established here.

As with many other theories intended for film or literature, applying the theory of parasocial interaction to the field of digital games is not a simple transfer from one medium to another. Digital game worlds are different from other media; just as the mechanisms of literature are different from a film. And while theories and research from other areas of media can uncover and systematize valuable knowledge in the field of digital games, it is evident that one needs to distinguish between games as potentially being mechanically different.

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