12 My pixels or my friends? Game characters as a lens for understanding user avatars in social networks

Abstract: In various interactive digital media, users create representations for themselves – be they images, texts, or interactive characters – that are used to mark the user’s identity, function, role, or position in the social landscape. These representations, or avatars, can exist separate from the user who created them. As such, they can be crafted, performed, experimented with, and reflected upon. In this separation, users may experience their own avatars, engaging them more or less as ‘me’ or ‘not-me’ as a function of user and avatar agencies. To better understand these dynamics, in this chapter we draw from current perspectives on a particular type of user-avatar pair – video game players and their graphic in-game characters – to theoretically and empirically contextualize the range of relationships users may have with their digital representations in a variety of social networking platforms, and how those relationships may differently influence social interactions online. Tracing the trajectory of the earliest audience-character scholarship from 1920s scholarship (the parasocial perspective) to emerging findings that gamers sometimes engage their avatars as autonomous social agents, we argue for a relational continuum that demonstrates the full range of non-social, parasocial and fully social relationships that communication technology users can have with their digital avatars.

12.1 Introduction

Snot: “Steve, you are the king of Dragonscuffle”
Steve: “Peasant! I am not Steve.”
Snot: “Forgive me, oh, great and powerful Agathor!”
Steve: “As punishment for your insolence, you must now carry my Backpack of Holding”
[later]
Jeff: “Don’t you feel like you’re kind of missing out on your actual life?”
Steve: “See, the problem is that in the “real world,” things often suck. But when I’m Agathor … there is no pain, no wedges, no heartache, only … victory.

In the above dialogue – from the US animated comedy “American Dad” – best friends Steve and Snot debate the influence of Steve’s video game supremacy (as the user behind Agathor, the most powerful warrior in the fictitious Kingdom of Krathnor) on his relative supremacy in their hometown of Langley Falls, Virginia. When questioned
later by a mutual friend, Steven explains that Agathor is a far more powerful and successful person that he could ever hope to be (several scenes in the episode “Dungeons and Wagons” show flocks of in-game characters gathering around Agathor to celebrate his many battle victories), and spends the balance of the episode attempting to exert his in-game popularity into the “real world”, with predictably hilarious results.

In the same way that Steve crafted and performed a warrior persona in his digital world as a way of experimenting with social desirability (and reflecting upon the effectiveness of this in his out-of-game interactions with Snot), social networking users often create idealized representations of themselves as a part of their daily social interactions (cf. Walther, 1996). As these interactions reach seeming ubiquity and deeper intimacy, the nature and function of users’ digital presences plays an increasingly important role in social networking. From profile images and screen names to more complex digital bodies, these representations – or avatars – mediate these interactions and by design permit users to craft purposeful identities in digital spaces.

‘Avatar’ is a derivative of the Sanskrit avatara, which translates into the word ‘descent’ (Sheth, 2002). In Hindu culture, descent was a reference to the incarnation of a deity coming down to Earth to fulfill some purpose (Holzwarth, Janiszewski, & Neumann, 2006), just as users engage digital in social networks to fulfill particular purposes. Most closely associated with the innumerable embodiments of the Hindu god Vishnu (Sheth, 2002), each taken to accomplish specific tasks, users may shift from representation to representation as the digital environment, social network, and task-at-hand require. Indeed, as these representations are crafted, used, and reflected upon, users connect with their avatars in many different ways. In this chapter, we explore the relationship between a particular user-avatar pair – gamers and their graphic in-game characters – and how these relationships differently influence social interactions in play. The technological notion of avatars can be traced to the mid-1980s when F. Randall Farmer and Chip Morningstar (both software developers at Lucasfilms) needed a term to refer to controllable, humanoid, animated figures in the multiplayer online game Habitat (Britt, 2008). In the social science literature, an avatar may be a static picture or image that a person uses to represent the self in a social networking setting (Kang & Yang, 2006). Sometimes, an avatar is a primary character in a video game that is controlled by a video game player (Downs & Oliver, 2009; Jin & Park, 2009). In other cases, an avatar is the embodiment of an individual into a virtual space through the use of virtual technologies (Biocca, 1997; Fox & Bailenson, 2009), or an avatar could be a reference to an animated, artificially-intelligent bot that assists a person through some process in an online environment (Holzwarth, Janiszewski, & Neumann, 2006). Lessig (2000) broadly explains that avatars are the graphical representations and embodiments of our virtual characters, existing on screen in a variety of different modalities but serving as our primary conduit for experiencing a given virtual world. Avatars can be more than the pixels on-screen,
however, sometimes construed to represent the personality that one associates with their avatar’s form and function (Jordan, 1999).

Because avatars (broadly defined) are the primary vehicle by which users experience digital environments and their constitutive social networks, they tend to be considered as tools – devices that human users engage to mediate online activities. Yet, such a singular focus might obfuscate deeper questions about the player-avatar relationship. How do humans experience avatars? How do avatars ‘experience’ humans? Is there a meaningful relationship between both? How might these phenomenal experiences impact how we study media psychology? In approaching these questions, we draw from current perspectives on how video gamers relate with their avatars to theoretically and empirically demonstrate the range of relationships users may have with their digital representations in other mediated contexts.

12.2 A (Brief) History of On-Screen Relationships

Since the earliest days of media studies, researchers have sought to understand how media audiences connect with on-screen characters. In the late 1920s, Frances Payne Bolton funded some of the earliest studies on children’s identification with movie characters (Lowery & DeFleur, 1995), finding children to learn from and imitate many of their favorite actors and their on-screen personae. The infamous Seduction of the Innocent studies of Wertram (1955) examined similar associations between juvenile delinquents and behaviors learned by imitating salacious comic book characters. Forward some 20 years, and a primary reason given for the critical and economic success of the racially charged 1970s sitcom All in the Family was the portrayal of “America’s Favorite Bigot” Archie Bunker -- Norman Lear’s approach at demonstrating the absurdity of bigotry. The caricature was loved by progressives for representing the ignorance of racism while at the same time loved by conservatives who heavily identified with the character’s critiques of modern-day society (Vidmar & Rokeach, 1974), highlighting individual differences in responses to on-screen personalities. Indeed in each of these scenarios, we see the gestation of Horton and Wohl's parasocial relationship (PRS) hypothesis (Horton & Wohl, 1956): media audiences enjoy and seek out faux relationships with media characters -- even if these relationships are one-way, non-dialectical, and often of far greater importance to the audience member than the on-screen character.

PSRs are known to be key in understanding the uses and effects of entertainment media. For example, in affective disposition theory (ADT, Zillmann & Cantor, 1977; Raney, 2004) the key factor in the appeal and enjoyment of an entertainment product is the dispositions held towards main characters, such as a liked protagonist and disliked antagonist. However, these PSRs have always existed behind a fourth wall (Stevenson, 1995) -- an invisible barrier between the audience and the mediated world that allows each to exist without cognitive, affective, or behavioral interference from
the other. That is, media audiences are able to safely engage in PSRs with their favorite (and hated) media characters by passively witnessing their actions, suspending their disbelief about the narrative (Coleridge, 1960; Boecking & Wirth, 2005), and suspending moral judgments made in those narratives (Shafer, 2009; Raney, 2011) in order to ensure an enjoyable experience.

However, the introduction of interactivity -- the ability of an audience member to alter the form and content of the on-screen product (Steuer, 1992) -- has forced us to reconsider the very foundation of the PSR. Entering a mediated environment via an avatar and interacting with that avatar and other avatars effectively breaks down the fourth wall, removing the separation of the off-screen and on-screen persona and shifting the role of passive audience member to one of an active user. Moreover, the great majority of interactive media – such as video games and more popular social media platforms (e.g., Facebook and Twitter) – require the user to create the very “characters” (or avatars) that occupy the digital environment, potentially allowing for a much greater range of relational possibilities between the user (the active audience member) and the avatars on-screen.

12.3 Interactivity and the Active Audience

Because the key marker of interactivity is the extent to which one can influence form and content of on-screen media content (Steuer, 1992), one can challenge the extent to which the assumption of the one-way, non-dialectical nature of audience-character relationships might hold true with newer media. For example, Bowman (2013) argues that the widespread use of social media by professional athletes has given sports fans unparalleled access to sports celebrities, continuing the tradition of using media to bring fans closer to the on-field (and off-field) action and providing spaces of discourse to engage fans on a one-to-one level. In this way, sports fans have evolved from being passive audiences members to full-fledged agents in the production of sports as a media product. Similarly, pop star Lady Gaga interacts intimately with her fans as a “Mother Monster” persona in digital spaces like Twitter, interactions that facilitate the active co-construction of fan and celebrity identities (Banks, 2010). Such effects have been found with interactive social television technologies (Ducheneaut, Moore, Oehlberg, Thornton, & Nickell, 2008; Cesar & Geerts, 2011) – in which traditional television sets are augmented with social media and other networked technologies to allow users to connect with each other and, ostensibly, with the on-screen content.

In no other environment is this passive-to-active shift clearer than in digital worlds. In such environments, media users are co-creators of the on-screen content - be it the numerous personal profiles and accounts that populate social media platforms (each representing a unique social agent) to the user-created avatars that comprise the populations of virtual worlds such as Second Life and Azeroth (the universe of World of Warcraft lore). As “members of the cast,” users are expected - and sometimes
Interactivity and the Active Audience

12.3.1 Interactivity and Player Experiences

Players’ active participation in virtual worlds unfolds through information exchanges between the player and the avatar as they jointly engage a digital gameworld. In short, the player and avatar are introduced through the game interface, the player acts upon the avatar by conveying information, and the avatar acts upon the player by conveying information in return. Through such feedback loops, acts of play emerge (Gee, 2005) as a meaningful relationship is made.

The types of information exchanged by players and avatars depend on how the unique agencies of each coalesce in responses to scenarios encountered in the gameworld. These scenarios are generally multimodal, including verbally communicated world narratives, videos that advance discrete plots, gesturing characters that populate the world, navigable environments, and ambient sounds and music. Games also present tasks or decision scenarios that, as logic structures, may be considered a mode in themselves—a semiotic resource (Kress, 2010), with a grammar distinct from image, text, and sound. For example, in order to progress in Portal players must work through spatial puzzles, and in World of Warcraft players must often collect items, kill monsters, or deliver messages as instructed by game characters. Often, the abilities of a player alone are not enough to accomplish a task. Rather, the abilities of both player and avatar are required, such as a player’s problem-solving skills and the avatar’s ability to make manifest a portal or shoot a monster in the gameworld. These abilities must coalesce to accomplish the task, requiring each agent to communicate with the other (Banks, 2013). In this way, game tasks drive interactivity. It is these calls to action that shift the audience-as-consumer and medium-as-producer scenario to one of collaborative production between the player and the avatar. We propose that Steuer’s definition of interactivity should be extended: interactivity is not merely the way that the player may influence gameworld content, but how the player influences the avatar, how the avatar influences the player, and how the player and avatar together influence the gameworld content. In other words, we must consider with more rigor the meaning of the prefix “inter-” as a reciprocal exchange of information rather than a unidirectional one.

These information exchanges and joint influence on gameworld content can be best understood as constituting a cyborgic system in which an organic agent (the player) and an inorganic agent (the avatar) are intimately linked. Cyborg theories (e.g., Haraway, 1991a, 1991b; Wiener, 1948) posit that in such systems, humans and technologies communicate according to unique agencies (e.g., a game’s visualization...
of a world and a player’s exploration of it), and mechanisms internal to the system (e.g., feedback loops between a game’s rule system and a player’s willingness to follow it or break it) allow information to be received, stored, and processed by both elements (Wiener, 1948). Within these systems, experiences co-produced by players and avatars vary according to unique interactions among player effectivities (e.g., motivations, subjectivities, skills, preferences), avatar effectivities (e.g., abilities, permissions, access to resources) and technological affordances (Gibson, 1977; Greeno, 1994; see Sundar, 2008, about games specifically). Through this interactive co-production, players may experiment with new identities (Grodal, 2000), appreciate a compelling narrative (Bowman, Rogers & Sherrick, 2013; Oliver et al, 2013), compete for achievements and status (Sherry, Lucas, Greenberg & Lachlan, 2006; Yee, 2006), escape from stress and repair moods (Bowman, 2012; 2013), spend time with friends (Ducheneaut & Moore, 2004), and a host of other experiences. In these ways, players’ experiences with avatars are not so different than experiences players may have with other humans - two people may roleplay, listen to a story, compete, relax, and socialize. Reeves and Nass (1996) argue that we treat our technologies as we treat humans. It may be that when technologies respond to us in human-like ways, we can only understand these information exchanges according to accessible metaphors for human interaction (Bogost, 2012). Among various types of video game content, the feature most prone to such humanization is the avatar - a digital body that represents a player in a gameworld.

12.4 The Experience of the Player-Avatar Relationship

A player-avatar relationship (PAR) may be understood simply as the material and semiotic connection between a human gamer and the digital body representing that gamer in the gameworld. This connection varies according to the unique interactions between the two agents and the meaning those interactions have in their respective physical and digital worlds. Traditionally, a human-human relationship is a valenced connection between two people where each influences the other (Berscheid & Pelau, 1983; Harvey & Pauwels, 2009). If we consider the player and avatar as engaged in information exchanges through which joint action is made possible, the connection between the two agents satisfies this definition of a relationship, even from the first moment a player creates an avatar or a game assigns an avatar to a player (Reid, 1996).

PARs are generally understood to exist in the mind of the player as so-called headcanons – player-created narratives that help make sense of the gameworld outside of (but copacetic with) the formal world narrative. Others argue that PARs are liminal – existing in the space between the digital and physical bodies. Often, this threshold is thought to be the game interface itself (Boudreau, 2012; Gee, 2005), but it can also be understood as the line between “the world we think of as external and real
and the thoughts in our mind that we take for fantasies. When we are in a threshold state [we are] filled with the real sensations and emotions for imaginary objects” (Murray, 1997, p. 292). Of particular importance across each of these perspectives is the notion that PARs are held as legitimate and important parts of gameplay experiences: PARS contribute to cognitive, affective, and behavioral outcomes of play as the avatar is created, as player influences the avatar, as the avatar influences the player, and as experience and meaning are co-produced.

Traditionally, conceptual approaches toward to studying relationships between audiences and mediated characters have been examined from a ‘me versus not-me’ perspective (see Klimmt, Hefner, & Vorderer, 2009 for review). That is to say that “media users perceive a social distinction between themselves (the observers) and the media characters” (Klimmt et al., 2001, p. 352). Klimmt et al. (2009) proposed that this dyadic paradigm might not be accurate in the context of video game play, citing that interactivity plays a role in closing the perceived distance between the individual and the avatar, or “self” and “other” – suggesting a monadic relationship akin to the psychological merging of the player and character known as character attachment (CA; Lewis, Weber, & Bowman, 2008). However, Klimmt and colleagues’ line of argumentation does not consider the reconceptualization of interactivity offered in this chapter – in particular, it assumes that (a) the player is actively merging towards the avatar in the gameworld and (b) the avatar is a passive object to be merged with rather than a possible partner in gameplay. For example, Downs (2010) proposed a model of player-avatar relationships rooted in the logic of the Hegelian Dialectic, arguing that we can understand PARS as a function of three notions: thesis, antithesis, and synthesis (James, 2007). According to Hegel’s logic thesis is a single intellectual proposition. The antithesis, then, is a conflicting idea or a negation of the original proposition. The dissonance between thesis and antithesis is resolved through synthesis – the incorporation and reinterpretation of the two into an entirely new proposition (Beiser, 1993). Applied to PARs, this model holds that players and avatars can be thought of as separate forces that are compelled into interaction through gameplay. When a player picks up a game controller, each entity acts on the other, and this interaction forms and evolves into myriad relational outcomes. The synthesis is at once part player and part avatar, but different than both. Such a perspective dictates that in order to understand the relationship, we have to take it for more than the sum of its parts: we must understand both social actors as well as their inter-relation.

12.4.1 Explaining the Player-Avatar Relationship

Digital games have avatars that, in some way, represent the player in the gameworld and translate the player’s intention into that world. In this intrinsically dialectic relationship, players and avatars relate to one another in various ways. These
relationships between these digital and physical agents begin at the moment they are introduced through the game interface and evolve through play over time.

These introductions can unfold in various ways depending on the characteristics of the game and the motivations of the player. Sometimes the avatar is assigned by the game, as with Mega Man’s sole playable character of the same name. Sometimes, a limited number of choices are presented, as when players can choose from headline characters Mario or Luigi as playable characters in Super Mario Brothers. The greatest freedom in avatar choice is presented in games that permit varying degrees of both character selection and customization, such as selecting among predesigned facial and body features (such as piercings and skin patterns in World of Warcraft) or crafting highly customized bodies through control over many features (such as forehead height and eye color in The Elder Scrolls). In some games, however, avatars are not bodies in the traditional sense. For example, in Tetris, players’ intentions are made manifest in the game by momentary control over configurations of blocks. Similarly, player’s intentions in real-time strategy games (such as the sci-fi war simulator StarCraft) manifest in the manipulation of various combat resources, but the narrative is experienced through the assumption of multiple nameless characters over the course of the game narrative. In Trine and Botanicula, players may switch among a number of different characters, each with unique abilities, and Trine permits multiple players to share those avatars. In these ways, the meeting of player and avatar challenge traditional notions of ‘one player, one avatar’ embodiment in games (Yee, Ellis, & Ducheneaut, 2009).

For video games in which players can customize the way their avatars look and how they participate in the gameworld, customization most often happens before player “meets” the avatar as a formal entity in the world. Depending on a games’ character customization system, players may choose an avatar’s race, gender (usually from the male or female binary), combat class or role, backstory and personality features, social or functional alliances, and aesthetic features. Sometimes these customizations will influence how gameplay progresses, such as Guild Wars 2, in which character design includes making decisions about avatar race and personality that influence how the game narrative unfolds. Avatar design decisions are known to be related to various motivations, such as identity performance (Martey & Consalvo, 2011), creative expressions and roleplay (Neustaedter & Fedorovskaya, 2009), individual and group combat strategies (Fron, Fullerton, Morie, & Pearce, 2008), social norms (Merola & Peña, 2010), and aesthetic preferences (Kafai, Fields, & Cook, 2007).

Avatar customization and other relationship decisions are often related to players’ motivations for entering the game in the first place (Banks, 2013). As digital games evolved - from the earliest text-based online roleplaying games to contemporary immersive graphical environments - so have perspectives on motivations for play. At a more general level, Sherry et al. (2006) adopted a uses and gratifications theory perspective (Blumler & Katz, 1974) in specifying more general reasons for video game play, including the prominent roles of challenge, competition, escape and fantasy.
Bartle (1996) suggested that there are four types of players who engage in text-based games: “socializers” who enjoy interacting with other players, “achievers” who work toward game-related goals, “explorers” who aim to discover the gameworld and challenge its boundaries, and “killers” who try to distress other players or interfere with play. These motivations can be understood as a function of whether the player focuses on acting (as with killers and achievers) versus interacting (socializers and explorers) and on the gameworld (achievers and explorers) versus other players (killers and socializers). These play motivations were explored in relation to massively multiplayer online games (MMOs). Yee (2006) found that 10 discrete play motivations fell into three main motivational categories: achievement (advancement, mechanical mastery, competition), social (socializing/chatting, relationships, teamwork), and immersion (discovery, roleplaying, customization, escapism).

These play motivations have been shown to drive PARs, and as motivations shift the relationships may shift (Banks, 2013). Players who focus on achievement and competition tend to relate to their avatars as objects or mere tools to master game tasks. Those motivated to socialize and work in teams tend to relate to their avatars as identity expressions and extensions of players’ senses of self. When players are motivated by immersion and escapism, they tend to relate to their avatars as autonomous social entities that exist independently from the player. Additionally, other motivations were discovered: some players are drawn to the game as a safe place for playing out personal problems and negotiating or practicing possible identities; players with these motivations tend to engage avatars in symbiotic relations, where the player and avatar are experienced as cooperatively contributing to play experiences. For example, a player beginning the MMO World of Warcraft may be driven by social factors. The player’s friends belong to a particular faction (a group of allied players) so she creates and engages an avatar in that faction, seeing the avatar as a simple representation that allows her to play socially. However, motivations may shift as players gain experience in the game, and the relationship between player and avatar may become more or less intense (Banks, 2013), and perceptions of liminal or joint identities may fade over time (Martinez, 2011). The player may find that completing quests with her friends is boring, but roleplaying is much more fulfilling because it allows her to ‘escape’ everyday pressures; through this escapism the player-avatar relationship becomes richer. Conversely, the player may find that hardcore raiding is highly fulfilling because it satisfies a penchant for achievement, and as she focuses on honing skill and downing bosses, the player may begin to see the avatar as more of a tool for combat rather than an expressive character. In these ways, the player-avatar relationship may shift over time, based on how the player acts upon the avatar and how the avatar acts upon the player.
12.4.2 The Player and the Avatar: Who Impacts Whom?

The different PARs can have qualitatively different impacts on gamers as well as on their virtual experiences. Moreover, the relationships themselves are likely impacted by how gamers see the virtual world (or characters in the virtual world) as well as the player’s motives for visiting the virtual space to begin with. We can understand these effects by understanding both how players influence their avatars and how avatars influence the player themselves.

12.4.2.1 Player Agencies

Popular and scholarly literature attends to the ways that video games are uniquely suited to identity experimentation, broadly, and in terms of gender, race, and personality (e.g., Grodal, 2000; Nakamura, 2000). From this perspective, players approach virtual worlds as a space to ‘try out’ different identities, from constructing an aggressive and daunting warrior-class monster to experience feelings of dominance and power to forming smaller, docile, healer-class elves to construct identities associated with compassion and care. Although played out in digital environments, these simulated experiences trigger physical-world reactions from users as our minds do not readily distinguish between physical and digital stimuli (Grodal, 2000; Reeves & Nass, 2006). In this way, players can be seen “putting on” different personae and taking the lessons learned from the interactions between these personae and other characters (including other player personae) back into their non-gaming lives (Banks, 2013).

A few studies have shown that individual differences – such as personality traits – can have a significant impact on how avatars are engaged. Dunn and Guadagno (2012) found that trait introverts – particularly those who self-reported high levels of neuroticism – were more likely to craft attractive avatars. The same study also found that individuals more open to new experiences were found to choose avatars with skin tones different than their own. Huh and Bowman (2008) found that excessive MMO play was highly correlated with extraversion, suggesting that extraverted gamers turn to virtual worlds in an effort to engage, via their avatar, innumerable social connections possible in these expansive spaces unrestricted by space-time constraints. Similar work on social networks suggests that a major factor in their appeal is the communication possibilities afforded by the platforms, such as enhanced access, social stature, and community resources (Wellmann, Quan-Haase, Witte & Hampton, 2001). Belisle and Bodur (2010) suggested that the relationship between player and avatar personalities is particularly useful for extracting information about social networking users, such as in a marketing context.
12.4.2.2 Avatar Agencies

At the simplest level, avatars exert agency – the capacity to act – over the player by the nature of their coding (Lessig, 2000). If “code is law” as Lessig titles his work, then an avatar’s programming technologically affords and constrains the ways it may impact the player – the code governs the types of information it may convey. A large, muscular avatar with a bladed weapon communicates an aggressive warrior-type and likely dictates a more aggressive and violent style of play, while a diminutive, slender avatar with an arsenal of bows and arrows communicates a more passive ranger-type and likely dictates a style of play that is more stealth and secretive. Put simply, avatars present themselves to players as they are programmed, and for players to take up avatars according to these “laws” is a condition of play.

We might also expect avatars to hold agency over players as relational partners of a co-dependent social relationship. For example, from a character attachment perspective (Lewis et al., 2008) data has shown that intense levels of attachment are associated with increased time spent playing video games as well as with self-reported video game addiction. Although not given as an initial interpretation of these findings, one might suggest that the highly intimate nature of CA brings about a situation in which gameplay becomes a relational maintenance strategy – simply put, one must spend increasingly amounts of time with their avatar in order to sustain high levels of CA (Lewis et al., 2008). Such an interpretation suggests that the avatar by its nature demands to be interacted and played with in order for the relationship to be a satisfactory one, just as one relational partner craves and demands attention from another in forming social ties (Granovetter, 1973) and romantic relationships (Darity, 2008). Extending CA research further, Bowman, Schultheiss, and Schumann (2012) found that gamers with lower levels of suspension of disbelief and perceived responsibility for their avatar’s actions and well-being were more likely to engage in anti-social gameplay (such grief gaming, pursuing more battles with other players, and generally playing alone rather than in groups or guilds). The same study found that players with a heightened sense of control over their avatars were more likely to engage in pro-social gameplay (such as serving as healers and coordinating gameplay within guilds). In both cases, we see evidence that the nature of the relationship between the player and the avatar (albeit as reported by the player) holds influence over the virtual experience itself.

Finally, there is emerging evidence that suggests that avatars can have direct impact on players beyond their programming or the relational mechanics themselves; that is, avatars can have agency independently of a given player. Avatars can have a profound impact on players by transferring their socially constructed personae to the player themselves, an influence called the Proteus Effect (Yee & Bailenson, 2007). From this perspective, players are thought to take on perceived attributes of their avatars outside of the gameworld, such as showing increased aggressive and confident behaviors after having played a tall avatar rather than a short one (Yee & Bailenson, 2007) or showing greater need for social affiliation after engaging more socially-
desirable avatars, such as identifying with medical professionals after playing as a healer character (Peña et al., 2009). Note that the notion of governing code (Lessig, 2000) is distinct from the Proteus effect in that the former is a collection of functional affordances and constraints (a sort of avatar-DNA) that regulates the human users’ behavior by defining what the user can and cannot do with the avatar during play, and the latter is a priming effect in which exposure and response to the avatar’s aesthetic influences the user’s subsequent behavior inside or outside the game. Taken together, these studies suggest that as players establish relationships with their avatars, the digital body may in a sense act on the player through its mechanics and aesthetics and so impact players’ experiences.

12.5 The Subjective Experience of the PAR

In virtual worlds, the relationship between the human (physical) and avatar (digital) agent is significant both for the agents and for the broader situation of play. Indeed, as players and avatars exchange information in cyborgic feedback loops, meaning emerges as a relational effect (Akrich & Latour, 1992; Latour, 2005).

Perhaps the most self-evident of these relationships are the ways that the player-avatar relationship is meaningful for the player. Sometimes, the relationship is a source of personal power, as when abused or disenfranchised women create and engage strong, beautiful female avatars and feel greater autonomy and agency when playing with them. PARs can also be meaningful when the relationship serves as a vehicle for learning about themselves and resolving dissonance, as when players are able to practice performances of non-normative identities or when drawing on game narratives as metaphors for everyday challenges. PARs appear to be particularly meaningful for players who engage avatars as social companions, appreciating narratives, achievements, and interactions as a “we” rather than as an “I.”

It is possible that PARs are also meaningful for the avatar. At its simplest, the active PAR permits the avatar to continue to manifest in the gameworld every time the player logs into the game. The relationship influences how the avatar evolves statistically, aesthetically, narratively, and socially. It is also possible that the PAR may mean something to the avatar as a subjective, independent agent. Although it may seem counterintuitive that a nonhuman agent could find significance in a relationship, object-oriented perspectives contend that meaning exists outside of humans’ perceptions of them (see Harman, 2002). However, because humans cannot grasp what it means to experience the world independent of the human experience, we explain nonhuman objects’ existence according to human metaphors (Bogost, 2012) and apply those metaphors to the gameworld and its denizens (Martey & Stromer-Galley, 2007). Although we cannot comprehend how an avatar experiences a PAR, the notion that an avatar may encounter stimuli and respond to them and be materially influenced by the encounter is a useful theoretical frame. By attending
to the ways that the avatar and its constitutive components evolve functionally, narratively, and socially through play. One way to do this is through the player’s active construction of headcanons about their relationship with their avatars – stories that include speculations about how the player-avatar relationship matters to the avatar, including avatar’s aesthetic, social, and ethical perspectives (Banks, 2013). These human metaphors and derivative stories – are embedded in and influenced by every day, physical-world expectations and norms. Likewise, most contemporary games are built around these norms, and in particular norms and expectations for embodiment. Specifically, if an avatar takes the general form of a human body, it should look human, act human, have the same experience in the gameworld as humans do in the physical world, and that embodiment is similarly congruous – one player can control just one avatar body (Yee, Ellis, & Ducheneaut, 2009). When technologies such as avatars adhere to these expectations, we tend to treat them as we would treat human beings (Reeves & Nass, 2005), and in the same way that we narratively frame our relationships with other people, we craft narratives to explain how the player and avatar exist in relation to one another and in relation to digital and physical worlds in which the agents are embedded (Banks, 2013). These metaphor-driven narratives are how the meaning of PARs are experienced and recalled, as has been demonstrated using linguistic analysis techniques to understand the social continuum of the PAR by analyzing the different attachment styles manifest in players’ recollections of their favorite avatars in World of Warcraft (Banks & Bowman, 2013).

12.5.1 Meaning as a Relational Effect

The specific meaning that emerges from a PAR depends on the degrees to which it similar to human social relationships, particularly in terms of three relational dynamics: self-differentiation, emotional intimacy, and perceived agency (Banks, 2013). First, PARs vary in the degree of self-differentiation, or how the avatar is experienced as distinctly autonomous and separate from the player. Such distinction is required for an authentic relationship as it maximizes the sensation of empathy, or genuine concern, for the social other (Bowen, 1978). Second, PARs vary in the level of emotional intimacy, or the perception of closeness that results in feelings of care, affirmation, value, and belonging (Sinclair & Dowdy, 2005). Players’ experiences of emotional intimacy with an avatar may be expressed through emotional language, senses of having shared experiences, and deep appreciation for the relationship rather than hedonic enjoyment of its strategic benefits. Finally, PARs vary in the perceived agency of the player and the avatar – who is thought to be “in charge” of gameplay activities – both morally and functionally. Moral agency is the ability to consider the consequences of one’s actions and to take responsibility for those actions (Kohlberg, 1958) and functional agency is the self-directive ability to enact intention (Bandura,
1989) of the moral agent. Sometimes the player is experienced as morally and/or functionally in charge of play, and sometimes the avatar is thought to be in charge.

The importance of this tripartite understanding of PARs was found in an in-depth phenomenological study of World of Warcraft players and their relationships with favorite avatars, Banks (2013) found that patterns among the three relational features of self-differentiation, emotional intimacy, and perceived agency. PARs with low self-differentiation (where the avatar was experienced as an extension of or part of the player) also featured low emotional intimacy and high player agencies – these PARs resembled user-tool relationships rather than social relationships. Conversely, PARs with high self-differentiation (where the avatar was seen as a separate entity) featured high emotional intimacy and high avatar agencies – these PARs resembled authentic social relationships. As such, PARs can be understood according to a continuum of increasing socialness, where the relational feature of perceived avatar agency sometimes moves the relationship beyond parasocial to fully social.

These lower and higher levels of socialness are associated with different gameplay motivations (Banks, 2013), revealing four primary types of PARs, each with different meaning-making functions that can be identified according to avatars’ roles (Banks, 2014): objects, extensions of Self, symbiotes, and separate social agents.

Table 12.1. A typology of Player-Avatar Relationships (PAR), from Banks and Bowman (2013)

<table>
<thead>
<tr>
<th>Identification (I am that avatar)</th>
<th>Avatar as Object</th>
<th>Avatar as Me</th>
<th>Avatar as Symbiote</th>
<th>Avatar as Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (My avatar is a digital form.)</td>
<td>High (My avatar is me in digital form.)</td>
<td>Mid (My avatar is a part of me.)</td>
<td>Low (My avatar is its own being.)</td>
<td></td>
</tr>
<tr>
<td>Suspension of Disbelief (Accepts Digital World as a Real One)</td>
<td>Low (The environment is a space of competition.)</td>
<td>Mid (I appropriate the world to fit my own view of it.)</td>
<td>Mid (I am able to visit my avatar’s world.)</td>
<td>High (My avatar lives in a digital world with its own norms.)</td>
</tr>
<tr>
<td>Sense of Control (Physical)</td>
<td>High (My avatar is a tool for mastery of in-game challenges.)</td>
<td>Mid (My avatar is my social surrogate to accomplish my social play goals.)</td>
<td>Mid (My avatar and I use each other to accomplish negotiated goals.)</td>
<td>Low (I am a tool for my avatar; it tells me how to control it to accomplish its goals.)</td>
</tr>
<tr>
<td>Sense of Care &amp; Responsibility (Affective)</td>
<td>Low (My avatar has no needs.)</td>
<td>Mid (My avatar is me – it needs what I need.)</td>
<td>Mid (My avatar and I know each other’s needs.)</td>
<td>High (I help my avatar get the things it needs in his/her world.)</td>
</tr>
</tbody>
</table>

In some relationships, the avatar serves merely as a strategic object – a tool. These “object relationships,” are characterized by low self-differentiation, low emotional intimacy, and high player agency. They are associated with play motivations of intense competition and combat play. These relationships are generally detached
and strategic, and these players effectively and enjoyably play the game without much consideration of the digital body as a body per se. This PAR type aligns with literature characterizing avatars as tools (Linderoth, 2005) and bundles of resources (Castronova, 2005). When the avatar is taken merely as a tool, meaning is made according to the tool’s effectiveness and the resulting success or failure in its use.

In others, the avatar is a reification of a player’s sense of identity in the gamespace, and often are created to embody the roles, appearance, and interactions that the player wishes to extend into the digital world. These “Me relationships” feature low self-differentiation, low to moderate emotional intimacy, and high player agency. Me relationships are associated with highly social play and gaming as a daily activity or ritual in which players work toward goals set forth by the game and goals they make for themselves. These relationships’ characteristic of lower emotional intimacy can be attributed to players’ strong identification with avatars – if players see an avatar as being an extension of themselves, then the avatar is not an “other” to care for or to share experience with. Me relationships did feature mild expressions of care, but these convey affection for how the item “is Me,” as one might express care for a favorite t-shirt, a loved car, or a childhood toy. This relationship type is similar to characterizing avatars as surrogates in social interaction (Gee, 2006), vehicles for gameplay (Carr, 2002), and carefully crafted player identities (Turkle, 1997). When the avatar is taken as an extension of the self, meaning is made according to the immediacy of gameworld experiences as the player feels comfortable acting “in” and “through” the avatar as a second, representative skin.

Still other PARs feature the avatar as a partner in identity. Such “symbiote relationships” are characterized by shifting self-differentiation, moderate to high emotional intimacy, and mixed player and avatar agencies (both are “in charge” of play). Players in these PARs emphasized play motivations of working through challenges and solving problems. In particular, symbiote relationships often focused on negotiating identities by designing, testing, and practicing possible selves (see Markus & Nurius, 1987) in the gameworld through the avatar before the player translates those selves into everyday life. While this relationship type aligns, in part, with literature characterizing avatars as masks (Galanxi & Nah, 2007) and costumes (Merola & Peña, 2010), it extends these metaphors by adding a type of identity exchange between player and avatar. That is, not only does the player wear the avatar as a mask or costume, but the avatar is seen as drawing on player characteristics as it existed in the game space, and both player and avatar were engaged in processes of negotiating and becoming more alike. As such, when the avatar acts in symbiosis with the player, meaning emerges according to the way embodiments, actions, and identities are relevant in the narratives of both the gameworld and the everyday physical world.

Finally, some PARs involve experiencing the avatar as a distinct moral agent with its own governing systems, life history, and trajectory, and as embodying independent existence within the gamespace. These “other relationships” are authentically social,
featuring high self-differentiation, high emotional intimacy, and high avatar agency. Avatar agency is so high, in fact, that some players see themselves as a tool for achieving the avatar’s goals, rather than the player’s own objectives. Players in these PARs were motivated to play by the opportunities to escape everyday life and become immersed in the gameworld as a separate but very real space. Although this relationship type is reminiscent of literature characterizing avatars as narratives (Webb, 2001), it goes beyond narrative: avatar-as-other relationships rely on the experience of the avatar as a real amalgam of body, personality, behaviors, subjectivity, and supporting narrative about which new narratives emerge over time. When the avatar is engaged as an autonomous social agent, meaning is made as the player and avatar enter and participate in the game as partners, according to the benefits enjoyed by each agent in their respective worlds.

In each of these PAR types, play motivations contribute to how the player and avatar are connected, and then meaning-making unfolds as a function of the socialness of the relationship (Banks, 2013). Self-differentiation is seen as the key driver of differences among the PARs, as it underlies the meaning that an avatar holds for a player and aids in the relational narrative by which the player constructs, enacts, and is influenced by the lived gameplay experience.

12.6 Pixels or People? Implications for Understanding User-Avatar Relationships in Social Networks

As the corporeal world becomes increasingly enmeshed with the digital, it is important that we understand the many different relationships that exist between humans and their technologies. In terms of virtual worlds, one particularly salient relationship is that between the human user and the digital avatar. Prevailing thought seems to implicate the user as the singular dominant force in any given virtual world – the human as a player exerting his or her agency over the avatar in pursuit of myriad goals. Yet, emerging theory and research (such as that presented in this chapter) urges us to consider the user and the avatar as unique and distinct social entities, each with the potential to influence and be influenced by the other. In the study of virtual worlds, we suggest that the social interactions between a user and his or her avatar are just as integral to a given social environment as are the social interactions between one user and another. Users engage their avatars in tandem with (and often in advance of) engagement with the digital world, and these partnerships can substantially impact the experiences a player has with a given environment.
12.6.1 Extending PARs to social networking avatars

To this point, much of our discussion has centered on avatars in video games. Of course, as we alluded to in the introduction of the chapter, avatars exist in a variety of different digital contexts. Regarding social networks, we can consider one’s Facebook profile or their Twitter logo and handle to be avatars, as each serves as a self-representation for a given user in a given social space (cf. Kang & Yang, 2006). In this way, we should expect the same PAR types found in video game play to exist to some degree in various social networking platforms. For example, user of the job-searching engine LinkedIn might approach their profiles with an “avatar as object” – viewing their online CV and basic professional information as part of a larger network of professionals with a singular employment goal in mind. Facebook, as a platform that places great emphasis on social relationships (Keitzmann, Hermkens, McCarthy & Silvestre, 2011), might be particularly useful for technology users desiring an “avatar as me” orientation – treating their persistent Facebook profiles as digital extensions of the self. Conversely, Facebook users, in particularly excessive users, often invest so much time into cultivating their online profiles that those very profiles tend to take on an agency of their own, leading to compulsive usage patterns as the user attempts to satisfy the perceived needs of their Facebook avatar, even if this results in negative consequences to the user (Andreassen, Torsheim, Brunborg, & Pallesen, 2012).

12.6.2 Anti-Social PAR Effects

As can be found in the history of media psychology research, media and technology scholars are quick to take up the study of the potential deleterious effects of usage on individual thoughts, feelings, and actions. Below, we focus on a set of common concerns in media psychology research: excessive usage, aggression, and moral disengagement.

12.6.2.1 Excessive usage
The rise in popularity of persistent virtual worlds such as World of Warcraft and Second Life have ushered in legitimate discussions about excessive and problematic gameplay – including discussions about the potential addictive pull of these environments. Anecdotal evidence reports several cases of gamers engaging in marathon gaming sessions, some lasting three or four days without a break for basic physiological needs (i.e. sleep, food, or restroom breaks) resulting in hospitalizations or even death from renal failure (BBC News, 2005). Less extreme effects such as those used to diagnose gaming addiction include failing grades in school, job performance, and lying about one’s time spent playing. Indeed, most of the criteria used to diagnose gaming addiction are borrowed from the Internet Addiction Disorder scale (IAD, Young
However, these diagnoses tend to broadly implicate virtual worlds as the substance or process one can be addicted to, rather than examining the processes and experiences within the virtual worlds that one is addicted to. Depending on PAR type (that is, depending on the player’s relationship with their avatar) the addiction might be to the virtual world itself, challenge and reward systems, social interactions within a social network, visual or audial aesthetics, or even to the social connection with one’s avatar. While each of these would likely result in increased time spent engaging the virtual world, one can recognize prima facie that how one approaches their avatar might have a substantial impact on which of these dimensions that users find particularly intoxicating. For example, a World of Warcraft player engaging in an “avatar as object” relationship with their game avatar might be drawn to challenge and reward structures, just as a Facebook user might view his profile as a tool for fostering social desirability vis-à-vis receiving likes and comments from their friends (cf. Burke, Kraut, & Marlow, 2011). Banks (2013) found that gamers engaging the “avatar as other” experienced anxiety while maintaining separation between their off-line and on-line worlds, a concept similar to Marwick and Boyd’s (2010) discussion of social context collapse, wherein social networking users strive to situate their status updates within (and restricted to) the proper audiences. In both cases, anxieties stemming from “avatar as other” users’ need to persistently cultivate their on-line other self might lead to excessive usage of a given platform in an effort to ameliorate those anxieties.

12.6.2.2 Aggression

Another prominent area of research in media psychology is that of aggression – the potential for virtual aggressive experiences to result in actual aggressive thoughts, actions and feelings in the corporeal world. Research into the Proteus effect (Yee & Bailenson, 2007; Pena, Hancock, & Merola, 2009) suggest that avatars can influence players by providing them with a replicable social identity for both in-world and out-of-world actions. We suggest that the degree to which a player sees the avatar as undifferentiated from themselves (i.e., as a tool or as an extension) is positively correlated with the potential for players to be impacted by their avatars. For example, players engaging anti-social, aggressive, and combative avatars might be more likely to engage in similar behaviors themselves as they (a) ascribe agency to themselves, (b) enact aggressive and combative behaviors as they are condoned in-game, and (c) practice a similar aggressive and combative agency in their out-of-game confrontations. Conversely, a player seeing an avatar as a distinct social agent would be more likely to distinguish an anti-social, aggressive avatar as distinct from themselves and so (a) ascribe agency to the avatar, (b) enact aggressive behaviors consistent with that avatar’s persona in the gameworld, but (c) not translate those behaviors into non-game activities when the avatar is absent. Research into the general aggression model (Anderson & Bushman, 2002) generally supports the notion that reinforcing spirals of violence paired with successful outcome in mediated scenarios can carry over to
non-mediated ones, and we suggest that the potential for this effect varies greatly as a function of PAR. In addition, a new form of social aggression might also emerge in virtual worlds by which players attempt to protect their self-differentiated avatars from physical, social, or emotional harm from other players or avatars – similar to a mother bear protecting her cubs from perceived dangers. Again, the degree to which one self-differentiates from their avatar should be positively correlated with their motivation to engage in such protective behaviors. In terms of other social media applications, we might apply PAR typologies to better understand instances of flaming or cyber-bullying. For example, users adopting an “avatar as tool” approach might be more willing to engage in such aggressive behaviors if they (a) see those behaviors as the behavioral norm of a given online group and (b) see their avatar as a tool for currying favor within said group. Recent work by Roesner (2014) found that aggressive group norms were a far stronger predictor of aggressive commentary than individual avatar anonymity.

12.6.2.3 Moral disengagement
A third area of anti-social effects research that could be informed by a more complete understanding of PARs is the notion of morality and moral disengagement. Recent work has demonstrated the stability of real-world moral intuitions on observed in-game moral decisions (Joeckel, Bowman, & Dogurel, 2012; Boyan & Grizzard, 2014), suggesting that a player’s moral code does not vary from physical to digital worlds. However, competing evidence suggests that gamers knowingly engage in anti-social acts in virtual worlds, ascribing their witnessed actions to being “mere fantasy” or as justified by the game’s narrative – thoughts and feelings often associated with moral disengagement processes (Hartmann & Vorderer, 2010). However, moral disengagement processes are often the result of players working to “protect” their enjoyment of a narrative, such as movie audiences extending moral latitude to the questionable actions of a favorite protagonist in order to maintain their positive dispositions toward the character (Shafer, 2009). Here, the necessity of such a process is only present when one sees the virtual world and the avatars that inhabit it as legitimate social agents. For example, in “avatar as object” PARs, players derive enjoyment of video games simply as the achievement of game challenges, often absent of any narrative context. For these players, gameplay is neither moral nor immoral but rather amoral – as supported by Joeckel et al. (2012). Regarding social networks, Rafferty and Vander Ven (2014) reported entertainment value among the motivations given for cyber-bullying by college-aged victims, suggesting that the perpetrators of the activity seemed almost detached from the legitimate psychological harm that the practice might result in.
12.6.3 Pro-Social PAR Effects

Related to the discussion of excessive and problematic gameplay, it is important to recognize that time spent in virtual worlds and with avatars that inhabit those legitimate social spaces is not always deleterious to players’ well-being. Indeed, PARs are quickly emerging as an integrated part of many people’s everyday lived experiences – increasing the amount of time one spends with avatars to levels considered excessive by some. At worst, these relationships are becoming normative and, at best, they have demonstrated therapeutic benefits to the player; as such, we should not be so quick to discount them as toxic.

12.6.3.1 Identity exploration

Scholars (Grodal, 2000; Turkle, 1995) have discussed the notion of identity exploration in digital environments – the act of one exploring their possible selves (see Markus & Nurius, 1986) and practicing potential desired selves. While we arguably have always had some degree of control in exploring new identities through relationships, affinities, and roles, scholars such as Gergen (2000) have argued that digital technologies – including immersive worlds with divergent norms – have presented us with a multitude of spaces with which we are encouraged to take on various identities. Although Gergen argues that this constant face work results in a tragically fragmented and relativized sense of self, we argue with others (e.g., Turkle, 2007; Zurcherer, 1977) that the potential for one to explore several identities is key to realizing authentic identities. In this way, PAR types play a key role in the construction of identity engaged in by users through and with their avatars (Banks, 2013).

12.6.3.2 Parasocial contact

Another potential benefit of PARs can be found in theories of parasocial contact. As far back as 1954, Allport argued that for many media users, exposure to divergent cultures and races was often confined to media portrayals such as news and entertainment programming. He reasoned that these mediated portrayals had a significant impact on our perceptions of other cultures and races, demonstrating that positive portrayals resulted in more positive dispositions (and vice versa). Extending this to virtual worlds, we suggest that the social encounters one has with their own avatar as well as other avatars and players can have a similar impact – particularly given that virtual worlds (as well as the users and avatars that inhabit those worlds) are becoming increasingly diverse with respect to culture and ethnicity as they are not restricted to space-time boundaries. Such opportunities for diverse parasocial contact – or perhaps, authentic social contact - are exponentially greater when we consider the weak-tie nature of many social networking platforms that often connect users...
based on shared interests and other psychographic variables rather than more visible and socially salient demographic ones (Hampton, Goulet, Rainie & Purcell, 2011).

12.6.3.3 Social issues
Another area of study that can be informed by considering PARs in virtual worlds is that of serious games, or games designed with an educational or social consciousness element to them. Much of the current perspective on serious games suggests that the most effective way to teach serious lessons is to place the player “in the shoes” of an avatar, experiencing that avatar’s world – and the trials and tribulations programmed into that space – first-hand. However, we might suggest that this “avatar as Me” relationship perspective might actually limit the ability for genuine learning to take place as such forced perspective-taking might not allow for one to overcome their own perceptive biases in order to genuinely embrace and encounter the serious message of a game. Bowen (1978) argues that a key to fostering genuine empathy is not perspective-taking, per se, as one cannot by definition feel empathy for themselves. Rather, empathy is maximized when one recognizes another as a distinct social agent with whom they share an intimate social connection. This self-differentiation is less about being “in their shoes” (which results in an individual considering how they themselves would feel in a novel situation) but rather being “with someone in their own shoes” (which results in an individual considering how their friend or loved one feels in a novel situation). By extension, this self-differentiation – maximized in the “avatar as other” PAR and minimized in the “avatar as Me” PAR – is integral to fostering meaningful learning via its ability to maximize the empathy one feels for a distinct social actor; indeed, this meaningful empathy would not be restricted to serious games as has been observed by players of games such as Heavy Rain and Spec Ops: The Line that use avatar-directed empathy (rather than self-reflected emotions) as the driving force behind their narratives. The rise in Facebook activism around causes not normally salient to distant audiences – such as the Egyptian uprisings of 2011 reaching Western audiences via social networks (Iskander, 2011) – suggests an opportunity for future research. Indeed, designers of social messages who wish to engage communication technology users might benefit from understanding the unique role of self-differentiation inherent to the different PAR typologies.

12.7 Conclusion

As interactions with the features, aesthetics, and functions of technology becomes more like interactions with humans, it is important to examine how our relationships with technology – specifically, the avatars that we craft, perform, experiment with and reflect upon – moderate our online experiences. Sociologists Thomas and Thomas (1928) once stated that “If men define situations as real, they are real in
their consequences” (p. 571), and we might argue that whether or not we come to an agreement as to the legitimacy of the user-avatar relationship as an objectively genuine one, many of us experience them as real, and this reality should inform the manner by which we study the phenomenon.

**Mediography**

All in the Family (1971-1979). Developed by Norman Lear; CBS.
Botanicula (2012). Designed by Jaromir Plachty; Amanita Design.
Heavy Rain (2010). Written and directed by David Cage; Quantic Dream.
Guild Wars 2 (2012). Written by Ree Soesbee, Jeff Grubb, Bobby Stein; NCsoft.
Spec Ops: The Line (2012). Written by Walt Williams, Richard Pearsey, designed by Cory Davis; 2K Games.
Trine (2009). Written by Joel Kinnunen; Directed by Lauri Hyvaerinen; Nobilis.
World of Warcraft (2004). Designed by Rob Pardo, Jeff Kaplan, Tom Chilton; Blizzard Entertainment.

**References**

References


