How Players Value their Characters in World of Warcraft

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ABSTRACT

Characters in games such as World of Warcraft allow players to act in the game world and to interact with others. Game characters and avatars are a mediated form of self-representation for the player, but some research suggests that players also view characters in other ways that have to do with the kinds of value that the characters provide. To better understand the ways that players value their characters in an online environment, we carried out a semi-structured interview study of twenty World of Warcraft players. From our data we identify ten kinds of value that characters can provide – including utility, investment, communication, memory, enjoyment, and representations of relationships, as well as value as an opportunity for experience, creativity, sociability, and self-expression. The analytical lens of value provides a new understanding of the ways that players appreciate characters in online multi-user worlds. Our results can help developers understand and enhance an element of multi-player games that contributes greatly to player experience and satisfaction.

Author Keywords
Avatars; characters; World of Warcraft; character value.

ACM Classification Keywords
H.5.3. Group and Organization Interfaces: CSCW

INTRODUCTION
Game characters in massively multiplayer online (MMO) games provide many things to human players. In addition to being the agent through which the player acts in the game world, a character (also called an avatar) allows people to interact with other characters and players. The agency and immersion of these characters make a strong connection to the player: as Castronova states, "the avatar mediates our self in the virtual world, we inhabit it, we drive it, and we receive all of our sensory information about the world from its standpoint" ([5], p. 3).

As a result, characters and other forms of online embodiment have long been studied in terms of identity and representations of self. Researchers have looked at a many

topics within this area, including the representation of different aspects of a player's identity [3], identity exploration [37], deception [10], gender roles and 'gender-bending' [44], ethnicity and race in avatar construction [40], role-play [25], community identity formation [12], and the presentation of ideal selves through characters [1].

In addition to observations that are strongly related to identity, several studies of MMOs have shown that players view their characters in other ways as well. For example, researchers have noted that characters can be created primarily for utility reasons [23], and that customizations are often strongly based on the needs of the character's game role [36]. Players can also use characters as an opportunity for aesthetic creativity, even without a strong identity connection (i.e., "doll play" [16]). Studies have also noted that characters can be created expressly as a means to explore game content [18] or to play with other people [23]. In some cases, players talk about their characters in terms that suggest a greater distance – for example, as if they were possessions [43], or chess pieces [15].

These results suggest that there are several ways that players view their characters, and several ways that characters can provide value, even in situations where identity or self-representation are also involved. This may be particularly true in games such as World of Warcraft (WoW), which allows people to create several characters on one account (i.e., 'Mains' and 'Alts'). Despite the number of these observations, however, researchers have not focused on, or thoroughly explicated, the kinds of value that characters can provide to players.

Character value can be an important factor in a player's gameplay experience, and therefore in the overall success of a game. To better understand the range of these value relationships, we carried out a field study in which we conducted observations and in-depth interviews with ten WoW players, and follow-up interviews with an additional ten players.

From our data and from a review of existing observational studies, we identified ten common types of value that WoW characters can provide to players:

- *Utility*: some characters are valuable because of what they can do – that is, what tasks they can accomplish and what goals they can achieve for the player;
- *Investment*: some characters are valuable because they represent a player's time, effort, and achievements;

- *Communication*: some characters have value because of what their appearance communicates to a social group;
- *Memory*: some character are collections of the player's memories, recording a player's activities in the game;
- *Enjoyment*: some characters are valuable because they are simply fun to play;
- *Representation of relationships*: some characters are meaningful because they represent relationships with other players or groups;
- *New experience*: some characters are valuable because of the new experiences that they enable;
- *Creativity*: some characters are platforms on which the player can create aesthetically-pleasing forms;
- *Sociability*: some characters are valuable because they allow the player to engage in activities with friends;
- *Self-expression*: some characters are valuable because they allow a player to express a wide variety of personal attributes or beliefs.

Our work brings together a wide range of ways that players can value characters in WoW, and shows how considerations of value can enrich existing understanding of player-character relationships. Our work provides a complementary view to ongoing considerations of identity, and shows how some notions of value are strongly related to self-representation. The value categories that we identify can help game developers understand what makes characters worth having – an important element of player experience that contributes greatly to the value and success of online game environments.

BACKGROUND AND RELATED WORK

World of Warcraft and Characters in WoW
WoW is a massively multiplayer online role-playing game (MMORPG) introduced in 2004; it is the world's leading MMORPG, with more than 8 million subscribers in 2013 [42]. In WoW, human players create one or more *characters* and play the game through these avatars, exploring the game world, completing quests, or fighting monsters. Characters can be one of several races (e.g., Human, Night Elf, Orc, or Tauren) from two warring factions (Alliance or Horde). Many other aspects of a character's appearance can be customized, including sex, hairstyle, and clothing. Players also choose a character's class (e.g., Paladin, Priest, or Rogue), which determines the character's role (damage dealer, tank, or healer) [42].

Part of the gameplay in WoW involves developing the abilities, attributes, and powers of a character, represented by the character's 'level.' Progressing through the many character levels (90 as of 2013) requires considerable time and many different in-game activities (e.g., carrying out quests, killing monsters, or practicing crafting skills). Whereas some online environments severely limit the number of characters that a player can create, WoW allows ten characters per server, with a total of 50 characters per user account. Most players do create multiple characters,

dividing these into one 'Main', which is the character that the players focuses on (or plays most often), and several 'Alts', which are usually played less frequently.

WoW has been the subject of significant research from an ethnographic perspective (e.g., [25,18]). In addition, several investigations have explored WoW practices within the context of HCI. Researchers have explored topics such as player demographics [46], motivations for playing [47], player behaviors [48], the integration of real-world currency [8], gaming culture [21], creative expression through machinima [29], and learning [24].

Because of the social interaction that is inherent within WoW, there has also been significant research from a CSCW perspective on collaborative practices within WoW [23, 39], including social dynamics in the game [11,12] how players enact intimate experiences within WoW [28], how real-life friends and family play together [33], and how collaboration changes when players are co-located [21].

Identity and Self-Representation in Online Games
The concept of identity in virtual worlds has been studied extensively since Turkle's work in the early 1990s [37]. Despite this breadth, however, identity is not a well-agreed-upon concept; a definition from Pavlenko and Blackledge [30] that is useful for our work suggests that identities are a kind of opportunity: they are "social, discursive, and narrative options offered by a particular society in a specific time and place to which individuals and groups appeal in an attempt to self-name, to self-characterize, and to claim social spaces and social prerogatives" (p.19, in [27]).

In addition, several theorists state that identity is not a single construct. For example, Tajfal and Turner argue that there are two broad classes of identity: social identity, which defines self in terms of groups; and personal identity, which defines self in terms of idiosyncratic traits and characteristics [34]. Even within these classes, however, there can be many identities. Omoniyi [27] proposes a hierarchy of identities, in which a person's social identity is constructed within a particular context, and may change from context to context; furthermore, multiple identities may be articulated in a given context (27, p. 2).

Theorists also propose that people actively construct representations of their self and identity for themselves and for other people, and since the self that we project has consequences for how others react, we try to control the self that we present. Many researchers build on the notions of self-representation proposed by Goffman [19], who likens this process of impression management to theatre, where people play different roles for different audiences.

Avatars and characters in online games are obvious mechanisms for self-representation because of the close connection between the player and the character. Concepts of agency (i.e., that the character enacts the player's actions in the game) and immersion (i.e., that the player receives sensory information about the game world through the

character) allow both a projection of self and an emotional attachment to the character [31].

Numerous studies have explored the ways in which online representations interact with identity (e.g., [2,3,10,12,37]). Researchers have recognized that the relationships between players and characters are complex: people can have multiple accounts, and accounts can be shared, so the relationship between people and their online identities can be many to many [10]. In addition, some people expose a real-world identity, while others hide their information, provide fake information, or even impersonate others [10,37]. Bessière et al. showed that players who experience a wide gap between "who they are" and "who they want to be" build avatars to represent an ideal version of themselves [2]. Similarly, most players in Second Life create avatars that reflect aspects of themselves, although different players represent different aspects [26]. Blinka et al. [3] found that adolescents identified more with their avatars than adults, although age was not a factor in the strong interconnection between the player and the avatar.

Within these explorations of identity, and also in other studies of MMOs, researchers have also observed several other aspects of the ways that players view their characters (e.g., [15,16,22,35]). These observations indicate that players can think of characters in several ways simultaneously (e.g., using different conceptual 'frames' as discussed by Fine [15]), and that players can think about characters in value terms as well as in identity terms, based on factors such as the character's utility or aesthetics. In our categorization of value types below, we review these previous studies in more detail; but first, we consider the theoretical basis for an exploration of the idea of value.

Theories of Value
Many fields of research have considered the underpinnings of the concept of value, and the question of why objects and actions have value. Adler [1] wrote that "concepts of value can be reduced to about four basic types": value as an absolute (arising from 'eternal ideas'), value as a property of an object, value as a social construction originating in needs or desires, and value as equated with action (p. 272). Adler states that many theorists align with one of these types, although there are many examples where more than one type is relevant to a situation or object [1]. Theories of value are also often tied to ideas of evaluation and comparison, in that people need ways of judging worth in different contexts. For example, Boltanski and Thévenot [4] describe six 'economies of worth' (civic, market, inspired, fame, industrial, and domestic), which provide "systematic and coherent principles of evaluation" that operate in different social contexts. In these spheres, the principles allow arguments and behaviour to be evaluated and compared (although problems arise when people appeal to different spheres).

Many theorists allow differentiation between philosophical value (i.e., 'values'), which relate to importance or 'goodness' in terms of a belief or ethical system, and which guide how people should act and behave; and economic value, in which worth is dependent on relative factors such as context, rarity, or the goals of the individual [41]. We are concerned primarily with this latter kind of value, although it is also clear that philosophic conceptions of value often influence economic ones (i.e., 'values' often affect 'value').

Economic theories use the concept of exchange to define value – that is, the value of an object is equivalent to the price that a person is willing to pay for it (leading also to the idea of value as a relationship between the quality received and the particular price paid for an object [32]). Economists classify value as either intrinsic (i.e., the value of an object is contained only within the object itself, such as in the labour theory of value [6]), or subjective (i.e., value is determined by the consumer rather than the object's properties or production processes).

One basis of intrinsic value is the difficulty of creating or obtaining an object – for example, as reflected in the low probability of discovering a gemstone in the wild, the labour involved in extracting the gem from a mine, and the effort required to turn a rough specimen into a cut stone.

For subjective value theories, monetary value typically reflects other aspects of the object's worth, such as its utility in saving labour (e.g., a bicycle can reduce transportation time), or the enjoyment or satisfaction that a person can obtain from it. Enjoyment value can be either direct (e.g., sensory appreciation of a painting or a gourmet meal) or indirect, in which the object enables participation in enjoyable activities rather than being enjoyable itself (e.g., a bicycle might allow the owner to engage in the excitement of bike racing with friends) [41]. We note that 'subjective value' here is not entirely internal to the person, since part of the value that a person may place on something is at least partly based on the person's relationships to other people and on community notions of value (in addition, any exchange-based idea of value requires that that there be multiple people involved).

The idea of subjective value begins to decouple the idea of value from a monetary structure – a divide widened by concepts such as 'sentimental value' where monetary value is no longer important at all. As Richins suggests, in many cases "economic value cannot fully capture the actual value of many of the objects owned by consumers" [32, p. 504]. This division has been discussed as the difference between 'value in use' versus 'value in exchange' [41], and in our work we focus primarily on the idea of value in use.

Richins and other theorists suggest that the subjective value of an object is derived from its *meaning* to the object's owner [32], and meaning can be either public or private. *Public* meaning acts as communication within a social system, in which the publically-accepted value associated with an object communicates something about the owner of the object. For example, certain brands of clothing or cars

can 'make statements' about a person's status, role, or interests. The meaning of these statements is highly specific to a social group. *Private* meaning involves memories and representations of other relationships or events, and builds over time – "meaning, and hence value, derives from repeated interactions with a possession" [32, p. 506].

Public and private meaning can take several forms, often in a representational sense:

- Objects can be representations of interpersonal ties (e.g., diamond earrings given on a wedding anniversary);
- Objects may be a representation of a person's past or their personal history (e.g., 'sentimental value');
- Objects can be an expression of personal values or religious beliefs, or of ethnic or national identity;
- Objects can be a representation of a person's competence, mastery, or achievement;
- Objects can differentiate oneself from others.

Although it can be difficult to separate the communicative aspects of meaning from personal aspects, it is clear that each form adds value in certain contexts. We used these ideas of value from economics and consumer research to guide our study of WoW character value. It is also important to note that public and private meaning in an object or possession can clearly involve identity as well – for example, in the idea of 'somatic displacement' discussed by Holopainen and Meyers, in which people can project themselves into objects (e.g., a car or a doll) [20].

Previous research has also considered the role of value in motivation. Expectancy-value theory [38], for example, states that people make choices about actions and behaviours based on their beliefs about the likelihood of success and the expected value to be gained. This theory can be used in a gaming context to understand why people play in different ways (see discussion section below).

Finally, we note that considering characters as valuable objects does not mean that players do not also maintain other views (e.g., based on identity). Players can maintain multiple views of characters, and different characters can be seen differently as contexts and times change.

CHARACTER VALUE STUDY: METHODOLOGY

We examined the idea of character value with twenty WoW players. We carried out data collection in two separate sessions. The first session (10 players, three female) involved direct observation of play sessions followed by an in-depth interview. The second session (10 players, two female) involved interviews only, and was used to follow up on concepts and issues identified in the first session. All twenty participants were experienced WoW players (usually playing daily). Each player had a main character but also maintained a number of 'alts', with the amount of time spent on non-main characters varying widely.

In session one, observation sessions took 2.5 hours on average and involved the player showing us each of their characters, and then engaging in one or more normal activities in the game such as raiding, trading, PVPing (competing against other human players), or socializing. After watching the gameplay, we conducted a semi-structured interview, covering planned questions about character value, and follow-up questions to explore interesting events that occurred during the game session. Each interview lasted about 1.5 hours. We audio-recorded and transcribed each session for later analysis (over 40 hours of data). We analyzed the data iteratively using a grounded theory approach [17] with open and selective coding. We used data from each session to contextualize data from the others, allowing us to refine our categories. Each new set of interview and observation data yielded new codes and modifications of old ones; the process was repeated with new data until the categories stabilized.

In session two, semi-structured interviews were carried out by e-mail. Initial questions started a discussion about the players' characters, and asked about character value and relationship. Further questions followed up on earlier answers, and the discussion moved in different directions for different players. Interviews were carried out asynchronously over a period of one month. After interviews were complete, responses were analyzed using the categories and concepts identified in session one. Finally, after the interviews were completed, we reviewed previous MMO literature for examples where researchers had observed value elements that fit into our categories. These analyses revealed that players value their WoW characters in many different ways. We identified ten types of reported value, as introduced below.

RESULTS

We first look generally at how participants viewed their characters, and then address the question of what kinds of value a character can provide to the player.

How players viewed their characters

Our interviews show a wide variety of ways that participants think about their characters. First, identity-based relationships were one of the main ways that players described their characters (particularly their main), much as has been reported in previous research (e.g., [10,15,37]). People made statements such as: "[the character] is me in the game world"; "I suppose [PH][1] is a cartoon/fantasy representation of what I try to be/hope that I am;" or "The name [HF] is my personal pseudo-identity online. It makes sense to make my main character the representation of me."

However, participants also described a number of other ways that they viewed their characters. For example, some players clearly saw their characters as a means rather than an identity – as one player said, "[I don't] refer to it almost as if it were a sentient being, really it's not. It's me playing it; it's my puppet as if I had a marionette." Another person

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[1] Anonymized initials are used in place of character names.

said "It's the model I use to play the game. I don't go out there pretending that I'm this character in this realm."

Players also mentioned the possession-based and object-based relationships that were suggested by Wong and colleagues [43]. Main characters were sometimes described in these terms, even if there was also a strong identity relationship. Participants had no difficulty talking about their characters in different ways at different times – sometimes with identity language, and sometimes in value terms. The theories reviewed above, however, suggest that it is not surprising that players can view characters in multiple ways simultaneously [19].

Alt characters were more often talked about in value terms, and all participants had at least one of these characters. The language used to describe them varied widely, but often used metaphors of tools, actors, or independent entities: e.g., one person said "It's like I'm playing this chess piece to beat up this [other] chess piece, or how will a piece deal with this situation given its limited movement."

Mains can become Alts (and vice versa), and even strong identity relationships can change over time. One participant discussed a shift in their thinking about a character who used to be her Main until her guild dispersed. This character changed from being strongly associated with the player's identity to being almost entirely a utility:

"Since the guild disappearance I don't use [RG] for really much of anything anymore. The only time I hop on her is when I need to utilize her professions or need a level 90 toon to help with a raid. Unfortunately she has reverted to simply being a tool for me. When I play her I don't feel the same way as I do with my current toons or that I used to feel when I was actively playing her."

It was clear that players do attribute several kinds of value to their characters, and these values are not mutually exclusive. In the next sections, we identify and describe ten different types of value arising from the study.

Utility Value

Utility is a classic form of value in many different theories, and utility is a strong element of many WoW characters. The useful things that a character can do or accomplish are clearly a valuable aspect for many participants in the study. Almost all players described at least one character (or an attribute of a character in a situation) that was primarily about utility. In many cases, the better the utility provided by a character to the player (e.g., the better the character is at playing a particular role), the greater the perceived value: e.g., one person described a character by saying "my warrior is a good tank," but had little else to say about him.

It was also clear that players often had utility in mind when creating some characters. One person stated "I would always choose the tactical advantage over the aesthetic look;" another said "I chose Shaman because I heard they had really high DPS and heals;" and a third stated:

"To be honest, I only spent 30 seconds to create my paladin. […] I did not spend too much time on appearance, because you can

change her hair style in game. And I don't really care about it. So it can be regarded as an 'all business' style."

In many cases utility characters were created in order to fill a particular need in a guild: e.g., one player stated "The reason that I created him is my raid needed a holy paladin as their main tank healer since the previous paladin AFKed." This player was strongly utility-oriented: almost all of his characters were created because of what they could do, and he did not name any of the characters (his guild uses player's real names online).

Other characters had particular skills that were valuable for the player, and when they were performing these skills, the relationship was primarily a utilitarian one. For example, one player said "I played him only for taming a variety of wild beasts"; another said, "This makes her a very valuable tool for earning gold and crafting powerful items." Another player made it clear that when playing a character for utilitarian needs, there is no real identity relationship:

"When I am using her purely as a tool (like when I log in to her now to get materials and am not interacting with anyone or anything) I do not impart any sort of personality on her at all. If someone interacts with me while I am in this situation, 'I' am the one to respond and if people were to ask me about [RG] while I am in this situation I respond purely as if she is a game object and nothing more."

The mechanics of WoW also lead to certain types of utility characters, particularly 'bank Alts' who exist only to store items and gold for the player's other characters. Several of our participants had at least one of these characters, and one person had several characters whose role was purely to make (in-game) money:

"I used [EN] as my mule, my cash cow. This character made all the gold for all my other characters. I used him to rule the auction house which was for the longest time in WoW the best way to make money using a buyout low sell very high approach."

This player also stated that the utility-based nature of this character conflicted with another identity-based character: "Unfortunately this made [EN] a known name on the server and therefore I tried to never associate [HF] with [EN]."

WoW also has specific PVP areas that can lead players to create specialized fighting characters (similar perhaps to gladiators). As one participants described:

"I then made a few more characters [who] all shared one purpose. They were level'd up and then level locked […] Once level locked I acquired them significantly over-powered gear for their level. These characters would then fight in player versus player (PvP) and dominate. These characters were for competition and I associated very little with them."

Finally, several participants mentioned that at a higher level, all characters are just mechanisms: as one stated, "to a certain extent, all of the characters are a tool to play the game; actually, to the most extent [they are]."

Prior work on utility value. Several researchers have also noted that players are very concerned with character utility. For example, studies of why players create certain characters show that many characters are made for specific game purposes (e.g., to serve a guild) [36,10,12,18], and as

DiGiuseppe and Nardi stated, "the single most common class choice across all classes was to be valuable to a team" ([9], p. 10). Equipment choice often has similar motivation: as Taylor states, "there is a significant focus on choosing particular clothing and weapons for very utilitarian reasons (better statistics being predominant)" ([35] p. 27). In addition, Ducheneaut and colleagues observed the practice of creating Alts that are only for storage or trading [12].

Personal Investment Value
Unlike many other objects, characters are entities that can be improved or enhanced, and these improvements take time and effort. As indicated by Richins [32], meaning and value derive from repeated interactions with something, and character development in WoW requires a great deal of work with the character. For example, becoming better at a skill requires many hours in the game world, and leveling a character to the maximum can take hundreds of hours.

Most of our participants indicated that their characters had value because of their investment: for example, one player said "It's not something that you can put a price on but it has value because I've put time and effort into it;" another said "I don't feel like protective of them, but I do feel they have value from all the time and effort I've put into them." Another simply said "Time, lots of time." Several participants explicitly used language that suggested investment, as well as comparisons to other kinds of objects in which one could invest – for example, one player said:

"I guess it's like a car or truck, you buy it and pay it in payments – more than likely it cost a lot, you put a big investment into paying [for] your car, [so] you want to take care of it, same with your toons that you make – grinding from level 1-90 is rough."

Once the player has spent time developing a character, there is a clear attachment to that specific character (even though the character is just a digital record). Richins and other theorists state that as objects gain meaning through prolonged interaction, they become less and less fungible (i.e., they cannot be replaced with an equivalent item because the replacement does not contain the same meanings); and this was clearly true in our participants' comments. For example, one person said:

"I could grind another character up to 85 and equip her with the same stuff and give her the abilities and she would be carbon copy, but she wouldn't feel right. She's not the original character."

The achievements and progress that players see in their characters can also be an important part of the play experience – this is of course part of the game design, in order to keep people involved, but it also provides value to the player. As one person said:

"I put in the time and chip away at it, I'm able to work on developing her and actually see the results. They're predictable for the most part - I just have to be patient. Even when things in my life weren't working the way I wanted, I could get 'actual' things done with [PH]. I actually think that I enjoyed playing her in a few particularly stressful times simply because it was something that I could control and see the results for."

A character's level is one external and quasi-economic assessment of its worth (e.g., a high-level character would be worth more than a low-level character on the open market) that is widely understood in the WoW community. Thus, characters also have value as a representation of achievement in WoW (i.e., the degree of investment) – this is apparent in that players often include the level when talking about their characters (e.g., "She is a level 90 Blood Elf Hunter;" or "This character is still not lv90 yet. I spend about 1 hour per week to level him up").

Character level is also a game restriction (some zones are limited to certain levels), which increases awareness of this achievement. For example, one player said:

"Since [PS] is only at level 68 she has no value in terms of her utility in regards to the latest expansion content since she does not reach the minimum level requirement for the Mists of Pandaria zone."

However, players in our study differed widely in the way that they valued both particular character enhancements and the effort needed to achieve them. While one player might see ten hours as a significant investment of time, another might consider this to be inconsequential (or, depending on what attribute was being improved, might consider the effort to be a waste of time). Some players were very interested in developing many different aspects of the character (e.g., one player said in regards to her Main, "I invested an enormous amount of time in rounding her as a character – leveling, questing, gathering, leveling my abilities, doing achievements, getting better equipment") but others were much more focused on particular attributes (e.g., the overpowered PVP characters mentioned above).

In addition to the object-based comparisons, several players described characters with considerable pride, as if they were independent people, or even one's own child. One player said "I have in my own way been creator and breathed life into him, so he would be like (in some weird crazy roundabout sense) my child;" another said:

"Look at my character! She's grown up so much. I almost feel like I'm sharing photos of children. Like I have a daughter or something and she's grown up so much."

We also asked participants about another kind of investment – the potential real-world monetary value of their characters (characters can be bought and sold at external websites and can be worth hundreds of dollars). Players said that this was not a major concern for them. Only one of our 20 participants had ever done this – the player said that they had previously sold an old account in this fashion. Some participants even indicated that the disparity between the personal investment value and the potential real-world value made the idea somewhat ridiculous: e.g., "It's like asking for $20,000 for a pinkie. It's just something I wouldn't put a dollar value on."

Prior work on investment value. Previous studies have also identified aspects of the investments that players make, including the time that players spend in the game [45], the effort that goes into (and satisfaction that derives from) leveling a character [47, 14], and the emotional investment that players have in their characters [49].

Identity and Self-Expression Value

As discussed earlier, players and characters often have strong identity relationships. Here we consider not the nature of these relationships, but the characters' value as a means for self-expression – as noted by Richins [32], objects can allow people to express aspects of their self, such as their personality, their ethnicity, their beliefs, or their competence and mastery of a skill.

Participants stated several ways in which these personal attributes came out in their characters – we previously described how a character's level is a representation of achievement, but often the character's class or visual appearance were also seen as valuable. For example, one player who created a shaman class character stated:

"I've always been interested in real life shamanism and how they view the world... I identify with [my character] because he is the shaman, and that is something I know; that kind of spirituality I find attractive. I mean even though it's a game, he's a shaman so he's representing this classic iconic real life station. People for thousands of years have followed these traditions and passed on to their children's children's children."

Characters were also often described as the player's "representative" – that is, an agent who can be relied on to maintain the player's reputation. As one person said, "She's my ambassador;" another stated "I suppose she is a bit of a representative of me in the gaming world, though she is a shinier version of me!". Players also mentioned choices of visual appearance in this way: for example,

"She isn't particularly striking, particularly in comparison to other female characters like Elves, but I kind of like that about her - she is unassuming :-)"

In addition, players described aspects of their character's behaviour or imagined attributes: one person said "Like me, [PH] is good natured, she enjoys helping people, [and] she loves to gather things (items, achievements)."

Prior work on self-expression value. As described above, much research has investigated identity in MMO games. Some of this work identifies the value of avatars for self-expression, particularly in the visual appearance of the character [26,14,49]. For example, Fron and colleagues observe that "costumes, garb, attire, gear, fashion – in short, dress-up – provide players with a means to 'put on' these identities and explore the avenues they open" ([16], p.15).

Enjoyment Value

Many objects are valuable to their owners because of the enjoyable activities that they enable (i.e., intrinsic indirect value in theoretical terms), and some WoW characters are primarily created to allow players to enjoy the game. The game, after all, is intended to be fun – but because of the investment needed to develop and level a character, several participants talked about Alts that they created purely for enjoyment. As stated by one player:

"When I had to make a character for me to just level and enjoy I made a Blood Elf Hunter […] This was a 'just for fun on the side' character. Not much investment."

In addition, many Mains were also seen as having at least some enjoyment value (alongside other value), even given the work they required – for example, as said by one player:

"I enjoyed being a druid - lots of magic and healing, less hand-to-hand combat […] I enjoyed creating a character that was of great use to others […] and I really enjoyed socializing with other characters - helping people randomly, and hooking up for quests, especially for special occasions like Children's Week or Brewfest."

Prior work on enjoyment value. Although it is very clear in previous work that people enjoy playing MMOs, we have found only a few instances where players talk about the enjoyment of their characters over and above the rewards and achievements of the game itself (e.g., [36,35]).

New-Experience Value

Some characters are valuable in the new and different experiences that they make possible for the player (of course, all game content must be experienced through an avatar, but in some cases this is the character's primary purpose). There may be elements of pure enjoyment in these new experiences, but our participants also mentioned other reasons for creating these characters. For example, several participants stated that they made characters to see what gameplay was like with a different class or role – e.g., "I created [the Disc Priest] because I was curious about what is the gameplay style of a healer in WoW." Another person reported creating a character as a kind of 'scouting report' to learn about an enemy class:

"I created him because Mage is a big threat to my healers in PVP arenas. I have to know more about this class so that I can react better when meeting them in arena or RBG."

Prior work on experience value. Researchers have observed that some players create characters purely to explore the game world. For example, Taylor states "One woman I spoke with recounted her experiences trekking her necromancer around the world ('from one end of Norrath to the other') and the peril and excitement such a journey brought. Another told me she specifically created a druid because they 'were the ultimate explorers and at that stage of the game I just really wanted to explore'" ([35], p. 32).

Memory and Sentimental Value

Many objects have value in their ability to remind the owner of a person, a relationship, or an event. Several participants mentioned that their characters contained memories in this way; one person, who had previously characterized himself as being very focused on achievements and goals, said:

"These characters store a lot of memories for me. Although the original reason for me to create them has some specific target, what they have left for me is not only who they are, but also what the teams have done. Teams cannot always be stable, but what my characters have done with that team [shows] the timeline of how our team has changed and progressed."

Another player described one of their characters as a tribute to another person from a former guild:

"The only value I really have in [FX] is the sentimental value of her being made in the image of a friend's old toon […] When he said

that he was going to retire the character and that he didn't plan on playing him ever again, I made [FX] as an homage to the Undead Priest to which I had become so close."

Characters can also represent other memories and experiences for a player – similar to the way that a scrapbook can store mementos of the past. One person made this clear using the metaphor of photographs: "My character is as valuable as a photo album, it's a collection of memories." Even if a character is not particularly useful or attractive, they may still be valuable to the player if they 'have been through a lot together' – using the character may remind the player of memorable experiences (e.g., skirmishes or particular interaction with other players).

Prior work on memory value. Wong and colleagues suggest that when characters are shared, they could record or collect information about their 'adventures' while on loan [43]. Similarly, Manninen and Kujanpää [22] discuss the idea of players journeying through a game world with their character, and building up shared memories. They state "the investment of time and the empathic approach to the character may also result in players wanting to think back on the events shared with, and the qualities built for, the character. In this way the character gains sentimental value" ([22], p. 28).

Aesthetic and Creative Value
Some possessions provide intrinsic value through sensory pleasure, and this is true of WoW characters as well. Aesthetic value involves attraction to a character's attributes (e.g., appearance or movement). Participants primarily valued the visual aesthetics of their characters, and much of the discussion involved topics related to making characters visually appealing. Players are able to express themselves creatively through the design of a character, and are able to appreciate the results of these efforts. Aesthetic value may be associated with self-expression, accomplishment, and social recognition.

Several participants stated that they made conscious choices about their characters to achieve aesthetic goals. For example, in contrast to the player above who stated that he always chose utility over looks, one player stated:

"When I play games like this I always make my choices out of flavour and never utility - this is why I am never usually among the top OP (over-powered) players. [...] I chose her race because it was my favourite at the time and I chose her appearance because it was the look that I liked best."

Another player who had originally chosen the Undead race for his Main said that the character was "the ugliest you can get in WoW. Not at all pleasing to me. I considered paying $20 to race change to Blood Elf; however [the character] had spent so much time Undead it felt wrong to change."

Other participants stated that they went further than simply making appearance-based decisions, and actively created entire 'looks' for their characters that were aesthetically pleasing. There are many ways to customize the visual appearance of a WoW avatar – e.g., through different armour, items, mounts, or pets (as one player said, "you are able to have them follow you around so they can become part of your toon's physical appearance"). These add-on items can help to create a desired visual effect, and participants stated that they could get very involved in this creative process – as one person said, "you spend 20 hours making this beautiful art piece."

The aesthetic and creative work could be for either public or private consumption. For some participants, personal goals were most important: "I like how my characters look, I like having pets that match. It matters to me, I don't care if it matters to you." Another player stated that the look they were trying to achieve matched other aspects of how they created the character:

"I wanted him to be all very black with golden eyes, which just pleased me... I thought the golden eyes were more a shaman color, you know? Somebody who'd see visions, and would be able to see the spirits, you know? His eyes had been touched in that way."

Public displays of characters were also common – in these cases, a character is a creative outlet to be shared and appreciated by the world. There is a mixture of aesthetic and public communication value in this activity – as one person said, "I see others as looking at the items she's wearing." One participant related the way in which these creative acts can be shown to the public at specific times:

"I have a black cat pet and my [Main] is black and I have a [black] Bombay cat [...] At Halloween every character that has a sinister squashling brings out a sinister squashling."

Prior work on aesthetic value. Several researchers have noted players' interests in customizing character appearance [14] and in creating particular visual appearances [16]. For example, Fron [16] describes several creative aspects of clothing and fashion practices in role playing, including crafting items of clothing and the design communities that build up within the game. Creativity and visual aesthetics have even become out-of-game interests for some sub-communities – as evidenced by 'WoW fashion' websites (e.g., the *Kirina's Closet* or *World of Dresscraft* blogs).

Sociability Value
Although WoW can be played as an individual, many players prefer to play with friends ("I don't think I would play as much if I didn't have real life friends to play with"), with family, or even with strangers [23]. Characters thus have value in that they enable social interaction with others. Many participants stated that they created Alts specifically to play with friends who were on other WoW realms (it is difficult to move characters across realms).

One person stated that one of her Alts "was primarily created to quest with a character that my husband had on the server. [Another character] was also created to play with my husband's alt." Other players related stories of being recruited by a group of friends, which required the creation of a new character. One person said "My friends were trying to get a gladiator title for season 10. So they recruited me and I decided to make a Shaman"; another stated "I only

made [MN] to help my group and now that they're gone he will sit there till I see fit."

several studies [23,7,13]. A few authors have noted that characters can be created primarily to enable social relationships – for example, Nardi and Harris [23] suggest that Alts are used to allow friends to play together when their main characters are at different levels.

Social Communication Value

Public meaning gives objects value, and having certain objects communicates status, achievement, and identity to a social group [32]. Several participants stated that the publicly-visible nature of characters was important, and particularly when the player had achieved something rare or difficult. This kind of value is different from the creative act of making a character for aesthetic reasons; in WoW it often has elements of being proud of one's accomplishments and wanting to receive public acclaim for something that has been difficult to achieve. Players clearly derive value from a personal sense of accomplishment and the social recognition they receive. For example, one player related the story of acquiring new mounts with two friends:

"Our Jewelled Panther mounts that took us a few months of hard work to get. […] the mounts required over 60k gold to make. […] Once all three of us finally had our panthers, we spent probably about an hour just flying around together […] and walking through town in a line and many other things to show them off (if not to other people than even just for ourselves). I played ['Swagger Like Us'] through Vent when we had finally accomplished this and were sitting around town =)."

A similar experience was reported by another player who completed a difficult game task that rewarded him with a proto-drake flying mount:

"I've gone so far as to do it in such a way as being ostentatious... I took one of those elixirs that makes you bigger, and planted my big [black proto-drake] on the landing pad, so you had to run up to the foot if you were going to fly out, and see this huge gigantic thing and me sitting there. I did that for an hour easy."

Prior work on communication value. Previous work has discussed ways that a character's visual appearance can reflect achievements or status. For example, Taylor [35] found that certain items of clothing or gear indicate a player's level of advancement or mastery: "Obtaining epic weapons or more generally owning impressive equipment […] all become artifacts of mastery and signal to both the user and the server community their skill at the game" [35] (p. 28). Fron also states that specific items can even convey where a character has been in the game world (because certain items are only obtainable in certain places) [16].

DISCUSSION

Our analysis reveals a range of player-character relationships and ways in which players value a character in a game like WoW. We saw and described ten types of value that a player can ascribe to a character, suggesting that this is an important part of a player's enjoyment of the game.

For researchers, our focus on the value of a character helps to explicate some of the complexities in the ways that

Prior work on sociability value. Researchers have explored the importance of sociability and collaborative play in players relate to characters. Our value categories highlight the fact that players can value their characters in many ways (e.g., as one facet of an identity, as a theatrical role, as a canvas, or a memory repository). Our interviews showed us that conversations about characters are often full of different perspectives – even within a single statement. There can potentially be several ways of interpreting the ways that players talk about their characters, but value is a lens that helps us understand a quality that clearly adds importance and meaning to MMO games. Considering the value of characters in games can help user experience researchers and game developers understand players and their actions more completely. Additionally, the ten values that we listed here provide a structure that can be used to design interviews or survey instruments. While some of the values we have identified here support and reaffirm existing value research in games, we have also explicated new sources of value such as the character as a representation of a relationship, or as a repository of memory.

For developers, thinking about character value can provide new insights into player retention, and can provide a better understanding of how players interact with a game. As discussed earlier, expectancy-value theory [38] suggests that players who value different aspects of their character will react differently to game content. For example, a player who values social communication through showing off a character's rare or good-looking gear, and who knows the probability of an item drop, might spend more time in raids to get the item and will view their character as having a higher value for it. This could lead to increased activity in the game world over a longer period. Game developers can make use of our categories to encourage their players to return to the game because their characters have value to them. The long-term retention of players is an ongoing concern for developers, especially for MMOGs, and an understanding of the player-character value relationship can help designers improve retention rates. In the following paragraphs we discuss some of these opportunities.

Supporting aesthetic value. Game developers already know that aesthetics are a critical element of games – graphics, art, and soundtrack are all cited explicitly by players as a important aspects of a game. However, as a dimension of value to the player, aesthetic components have only recently begun to be explored. Over the last few years we have seen the rise of the free-to-play and 'freemium' business models in the game industry. For example, games such as WoW, Lord of the Rings Online, Dota 2, Team Fortress 2 and social environments (e.g., Second Life) have implemented additional capabilities for designing or purchasing clothing, apparel, and style items. The real monetary value of these digital items demonstrates a clear understanding of the aesthetic value players place in their characters – value that players are willing to pay for. A second possibility involves

enhancing creative expression – such as the integration of player-side creation and sharing tools. These tools would allow players to create their own aesthetically-valuable objects (e.g., faces, hair, or clothing) for characters. Some games are already exploring this possibility – Valve has introduced a community market system into the Steam delivery system that allows players to buy and sell items for real money. Taking the idea further, sensing tools like the Kinect could also capture players' motion data and allow them to create customized character movements, which could then be captured, sold or traded with other players.

Supporting social value. For characters whose primary purpose is communicating and interacting with other players, game developers could add features that are commonly seen in social-network platforms like Facebook or Twitter. For example, status messages and updates could be shown as in-game artifacts similar to the 'comic blurbs' already seen in WoW. Enhanced communication and social value could encourage players to use the game system as a primary communication channel, keeping them in the game. Well-supported social value could also encourage player retention if players use the game system for other kinds of communication. WoW has seen the inclusion of some of these features such as cross-game communication with their 'RealID' system. Popular casual games such as Farmville or Settlers Online have also successfully built on the value found in social networks. Furthermore, games could make more use of the fact that players are part of different social groups (e.g., friends, family, and guild), by allowing players to customize a character depending on the social context (either in terms of information that can be queried from the character or even the in-game visual representation).

Supporting investment value. Players value both their own understanding of investment in a character, and also the public display of achievements and progress. Giving players the opportunity to improve a wider range of character attributes can enhance this kind of value. Game developers understand the need for player investment as a means for motivation and progression, but investment value could be further enhanced by making many extendable attributes that can be improved through in-game tasks, and by making progression through these improvements clearly visible. Some games (although not currently WoW) could also make use of ideas such as character sharing [43] as a way to enhance investment value (e.g., a guild could all pool their resources to improve the utility of a character, and link it with a guild rather than a single player account).

Supporting memory value. Games could do much more to enhance the value of characters as a record of experiences and adventures. Games could give players the ability to revisit these previous experiences: for example, games could provide tools for recording images or videos of a character's current appearance and capabilities, and these visual records could be stored in photo albums, scrapbooks, or 'highlight reels.' One possible configuration of such a system might be a timeline (similar to Facebook's version), where a player could quickly and easily explore their history and the history of their friends within the game. Such a system would also provide investment value since the timeline could also illustrate the player's investment as well as past experiences. Games could also make it possible to replay scenes from a character's history, so that players could relive interesting or memorable episodes that they experienced through the character, or walk through the progression of the character to its present form.

Last, we note that maximizing character value may not always be the most important consideration. Different play strategies in MMOGs lead to different player-character relationships, and some players may not want to have characters of high value, or may never see a character as having any type of high value. Nevertheless, character value is a factor in a some players' decisions about which games to pick up and which games to return to – a player's gaming activity is often split among multiple games and multiple characters, and so the higher the character value that can be generated by an individual game, the more likely it is that a player will become attached to that game.

CONCLUSION AND FUTURE WORK
Research into MMOGs suggests that there is considerable diversity in the range of player-character relationships, and in the ways that players think about character value. To investigate the concept of character value in more detail, we carried out in-depth interviews with twenty WoW players; we identified ten different types of value categories that can help in understanding the complex ways in which players think about their characters. This work can inform game developers who wish to enhance players' experiences through increased character value.

There are a number of directions for future research in this area. First, we plan to continue our observational fieldwork, to see whether our categories hold in other MMOGs. Second, we will continue our exploration of the connections between different relationships, different value dimensions, and the ways that players shift between these views based on context. Third, we will develop prototypes that provide examples of the kinds of support described above, to investigate how best to make use of the diversity of player-character relationships in game design.

ACKNOWLEDGMENTS

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