Information Behavior and the Formation and Maintenance of
Peer Cultures in Massive Multiplayer Online Role-Playing Games: A Case Study of City of Heroes

Suellen Adams
School of Information
University of Texas at Austin
suellen@mac.com

ABSTRACT
Within Massive Multiplayer Online Role-Playing Games (MMORPGs) players have the ability to create anonymous personae that do not have to adhere to the social conventions of the offline world. Nevertheless, small groups, with their own rules and mores (such as guilds, clans and teams), are clearly created and maintained within game worlds. The purpose of the research to be conducted is to examine how the conflation of play theory and information behavior theory, predominantly meaning-making, serve to explain the development and maintenance of peer cultures within the virtual world of the game or games. This paper is a brief conceptual framework for this research. Included in this framework are sections on various conceptualizations of MMORPGs, role vs. identity, play theories, and information behavior and meaning-making theories. All of these pieces of the framework will, I believe, ultimately aid in the final analysis of the research now being conducted.

Keywords
MMORPG, peer culture, play theory, information behavior theory, meaning-making

A BRIEF OVERVIEW OF THE STUDY
Within the MMORPGs players have the ability to create anonymous personae that do not have to adhere to the social conventions of the offline world. Nevertheless, small groups, with their own rules and mores (such as guilds, clans and teams), are clearly created and maintained within game worlds. Some of the rules are imposed from outside the game world, but the players themselves create many of the rules. Sometimes these conventions and mores seem to reflect the world outside the game, and other times to bear little resemblance to "real life."

The concern in this research is primarily with the information behaviors, particularly meaning-making, as represented *inside* the game world and not between the in-game world and the outside world inasmuch as is possible. Clearly there is a blurring of lines between the two, which will have to be accounted for, but it is not the primary concern of the research in question. Another

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goal is to discover if and how the concepts and theories of play arising from a variety of disciplines serve to explain the process of building and maintaining peer cultures within the game world.

The purpose of this research, then, is to examine how the conflation of play theory and information behavior theory, predominantly meaning-making research, serve to explain the development and maintenance of peer cultures within the virtual world of the game or games.

Perhaps the most difficult dilemma is the relative anonymity of the game environment. Avatars can conceal the identity of the players who choose or create them. Yet, it is difficult to say that one is not dealing with "real" people, because avatars serve as the vehicles by which players express their chosen roles/identities within the game. The avatars can be seen as another dramatic representation of identity that is played out within a specific environment [8]. Therefore, it is the meaning-making and play displayed by the avatars or chosen characters that I wish to study. Much is left to examine at this early juncture about the nature of role vs. character vs. avatar vs. identity.

It is obvious that behind every avatar is a human, and this is another complication. The avatar and the human are inextricably linked, and it is possible that humans are exploring meanings by way of an assumed identity embodied by the avatar. It seems clear that the apparent meaning-making displayed by the avatar may offer some implications about the meaning-making of the human. However, the proposed research will attempt to locate meaning-making and other information behaviors within the game world rather than directly or indirectly to the human in the outside world.

What follows is a brief conceptual framework for this research that is still in the process of being constructed. Included in this framework are sections on various conceptualizations of MMORPGs, role vs. identity, play theories, and information behavior and meaning-making theories. All of these pieces of the framework will, I believe, ultimately aid in the final analysis of the research now being conducted.

CONCEPTIONS OF MMORPGS

MMORPGs can be conceived of variously as games, as play spaces and/or as cultural contexts. In the following sections there is a brief exploration of three of the ways that Massive Multiplayer Online Role-Playing Games are thought of.

MMORPGs As Games

The difficulty in defining MMORPGs simply as games is that "game" is a rather amorphous concept with many definitions. Sometimes games are defined in terms of themselves, that is, if it looks like a game, it's a game.

Nevertheless MMORPGs or Massive Multiplayer Online Role-Playing games are generally seen as particular types of computer games that are composed of virtual worlds within which players create embodied selves or avatars. The avatars are then used as vehicles through which the players explore the virtual worlds, take on quests and so forth. The players are often, if not

always, expected to take on a role as they guide the avatar through the virtual world. That is, they are expected to remain in character within the game world. Tess Snider [14] suggests thinking of role-players as stage actors engaging in a performance. The avatar then becomes the embodiment of the role.

MMORPGs as Play Spaces: The Metaphor of the Virtual Sandbox

Some people regard online role-playing games as not quite "games" at all, defining games as something with a definite beginning and end state or states, that is, at least one win condition. MMORPGs are likened (rather dismissively) by at least one of the game makers that I spoke to in doing prior research as "not games, but virtual sandboxes." [Adams, S. unpublished pilot study available from suellen@mac.com]. In some ways this is an apt description of a virtual environment or play space in which people can try on different roles and imaginary quests can be undertaken—a place to play, somewhat as young children do, rather than a "game" to play.

Although it is commonly understood that only children engage in play in which the scripts are continuously improvised, moving between dramatic passages and negotiation of the scenarios being played out, many adults engage in similar kinds of play [5]. Such organizations as Civil War reenactment groups, the Society for Creative Anachronism, Rendezvous, and the Baker Street Irregulars bring people together to create a pretend presence outside their normal day-to-day lives. Massively Multiplayer Online Role-Playing Games do the same, and therefore also echo "children's" play.

Statistics show that MMORPG players' average age is in the middle 20's. In "The House of Make Believe," Singer & Singer [13] mention that improvised role-based fantasy play continues beyond childhood, claiming that it may, in fact, enrich adult life.

MMORPGs As Cultures

While the sandbox metaphor is apt in some ways, the case can be made that each MMORPG represents a culture of its own. "As players enter the game world, they are confronted with a bewildering array of new and foreign concepts – much like a stranger entering a new culture. " [6]

The cultural context of the MMORPG can be defined in much the same way as culture is defined outside the virtual environment. Spradley [15] for instance, says that culture is learned. He divides the defining elements of culture into three categories: the things people do (cultural behavior), the things people make and use (cultural artifacts) and the things people know (cultural knowledge). His particular definition of culture is "the acquired knowledge people use to interpret experience and generate behavior." (p. 6).

The culture of an online game is composed first of player behavior, as expressed or mediated through language and avatar behavior. In this context, speech becomes very important as a signifier of meaning, since other signals such as facial expression and touch are notoriously absent. Not only is speech, generally provided in text form, a highly important element, it is a delineator of the culture. One must "speak the language," which contains many abbreviations

and alternate spellings. As [6] point out " [gamers] must also be socialized into the game community. To be recognized as a good player you need to learn the lingo, perform your role well when grouped with others, and more generally demonstrate that you are an interesting person to play with." (p. 2).

The next element of any culture is the concept of cultural artifacts. While avatars/players do not create "things" in the traditional sense, there are items in the game space that signal wealth and/or status (and incidentally are bought and sold both inside and outside of the game). Those items and attributes are important to acquire both for the purposes of personal advancement and the purpose of grouping with others. Cultural behaviors and artifacts can be displayed on the screen, as may other information-bearing material such as player statistics, and avatar characteristics themselves.

The third element of culture, cultural knowledge, on the other hand, resides in two places; the minds of the players and the minds of the game creators. As Snider [14] points out there are certain codified rules that are part of the environment, but there very often the rules take the form of uncodified conventions and community taboos. Just as in any culture or community these rules are passed down either explicitly or implicitly to the players. At the same time, players are continually shaping and modifying the rules. Regardless of the codified rules built in by game makers, it appears that the greatest resource in attaining cultural knowledge is fellow players. Players are encouraged to ask questions and to depend on the players' community for knowledge [6].

As Spradley [15] points out, culture, when viewed as acquired knowledge, has much in common with the symbolic interactionism that is rooted in sociology. From the perspective of the symbolic interactionists like Cooley [3] and Mead [12], society and culture shape and constrain conduct, but they are also the products of conduct. It is these theories which are most likely to offer insight into how the behavior of individuals in these new cultures creates new groups or peer cultures and how they maintain the groups thus created, as the theoretical foundations lie in the concept that individuals and cultures are in effect simultaneously "making" one another. That is, culture has an effect on the identity and actions of an individual, just as individuals and their actions make up a culture or cultural group.

ROLES AND IDENTITIES

In order to enter the game world, players must create characters or avatars, and while there are some quests and set paths to follow, players also improvise sometimes creating ways of playing never intended or expected by the game makers. The avatars embody the roles the players of an MMORPG have chosen. While there are limitations in even the most advanced avatar creation software, a player still has a fairly wide range of choices to create a visual representation of the roles they wish to adopt (as well as supplying the avatar with certain other characteristics and powers).

Although roles and identities are not the same thing, they are closely related concepts. The avatars can, in fact, be seen as another dramatic representation of identity that is played out within a specific environment [8]. In playing these games the players (just like actors on a

stage) take on a dual nature. The player is aware of both the role he/she is playing, but also that there is another human identity behind it.

Sherry Turkle [17,18,19], in her ground-breaking works on identity and the Internet, describes all types of massive multiplayer game environments as places for playing with (both in terms of experimenting with, and using the role/identity as a vehicle for play) and exploring personal identity or identities. Designers of Multiplayer online games are continually attempting to provide ever-increasing scope to allow players to customize their characters in order to let them "design an embodied online identity." [1]

Although some disagree with Turkle's [17.18,19] broad ranging idea regarding the exploration of identity online, [7] others, including designers [1] and players [Adams, S. unpublished pilot study available from suellen@mac.com] agree with her. A number of players in Adams' 2002 study reported using their game experience to try on different ways of being, some of which were then brought to their outside lives, these results are also borne out by studies by Lee [10], Yee [20], Ducheneaut and Moore[6] and Leppalahiti [9]. According to respondents in Leppalahiti's [9] study, choosing and playing different characters is akin to living many lives, giving one a diverse and extensive view of the world. The very fact that identities are mediated by virtual avatars in anonymous environments reduces the risk of failure in interaction. This gives players an opportunity to test different interactional strategies [6]. Further evidence that people are really trying on different identities and ways of being is that one person may have several avatars in one game, or completely different types of avatars in several games thereby experimenting with a number of strategies.

Since I am doing participant observation research in the MMORPG, City of Heroes, I found the creation of an avatar to be my first hurdle. Although I considered it simply as a role to be played, I became aware that to a great extent, whether I intended it or not, whatever "role" I chose was going to become my outward "identity" to others within the game environment.

I experimented with who I will "be" in this new culture, and since I had decided that on some level it is an identity that one takes on temporarily, as well as a role, it was important to me to choose appropriate powers, a suitable name and other non-physical attributes for my avatar. Evidence of these attributes and powers, both the ones you start with and the ones you gain through play can be ascertained fairly easily by other players, thus creating a basis for meaningful action.

Multiplayer Online Games are highly connected places [1]. Unlike other physical or virtual types of situations MMORPGs encourage social interaction [6]. Connections occur on many levels, and are, to at least some degree based on the meanings that players derive about fellow avatars/players in the context of the game world. Blondell [1] points out that many of the conclusions that players come to regarding others relate to onscreen appearance and available game statistics.

THE STUDY OF PLAY FROM THE VIEWPOINT OF TWO DISCIPLINES
There is a mind-boggling heterogeneity of theory in the study of play. The study of group formation and group dynamics in play is no different. Research and commentary regarding group formation and group dynamics for players of all ages can be found across various areas of scholarship in the study of play and the areas are not distinct from one another. Brian Sutton-Smith [16] in his 1997 book "The Ambiguity of Play" identifies frameworks or rhetorics of play growing from seven different disciplines. This particular research employs the frameworks identified with the disciplines of psychiatry and anthropology. Both of these disciplinary perspectives can act as lenses in the study of the creation and maintenance of peer cultures, which are, simply put smaller, more or less permanent groups that have developed their own rules and mores within the context of play. Psychiatry is concerned with elements of the imaginary of role-play, creativity and art. Anthropology sees play as, among other things, a way of preserving (and creating) culture.

INFORMATION BEHAVIOR AND MEANING-MAKING
Information behavior, sometimes called information seeking or even information use, is another important concept or group of concepts being employed in this research model. Just as play is a term with various meanings, studied various ways, by various people and disciplines, so is information behavior in all its manifestations. Thus far meaning-making seems the most useful of these concepts to study the subject at hand.

In the field of information studies there are numerous ways of viewing "information," the theories and concepts are as heterogeneous as those about play, however one of the more deceptively simple ones is that there is a continuum from data to information to knowledge. This notion allows players to view data inferred from cultural milieu plus the appearance and other attributes of fellow avatars, plus the information given us directly by others and turn it into personal knowledge. Turning information into knowledge, then, requires the personal making of meaning. This knowledge, and the meanings made, allow us hypothesize who might be a good candidate for conversation, who we might want to engage in small group interaction with and so on. It also allows us to hypothesize what we are to do next.

Psychologist Jerome Bruner [2] in his book "Acts of Meaning", points out that no meaning is to anyone's advantage unless he or she can get others to share it. So meanings are negotiated. This type of meaning-making extends beyond personal meaning making to groups and indeed to cultures, as the interplay between individual and culture plays out.

Peer culture formation and maintenance
In the instance of small groups or peer cultures a group of players must have been able to negotiate meanings that will operate for the group. These negotiations produce sets of stable group activities and rituals, acquisition of certain in-game artifacts by joint effort and clear values and mores (rules) for group members that by Corsaro and Eder's [4] definition constitute the same sort of peer cultures children produce through the experience of play. Although the small groups or peer cultures in MMORPGs are primarily made up of adults, the type of

relatively open play and negotiated meanings that children take part in as they play seems to have similar effects on the adult game players.

One negotiation of meanings is the language used by some groups in some games. The language is somewhat secret, particularly to those outside the game culture. It is not entirely opaque, but someone who has never seen it before might find it completely incomprehensible. The language, often referred to as l33tsp33k began with the hacker culture in the 1980's and has continued to exist and grow. Wordplay in spoken language is a common enough phenomenon. L33tsp33k is in a sense visual wordplay using written rather than spoken language. This sort of wordplay is clever and creative, and constantly changing.

Other meanings that are negotiated as a group comes together are elaborate fictional "histories" or back stories about the group and how it came to be. Groups develop hierarchies by agreement, either explicitly or implicitly. Finally, teams or guilds almost always devise rules for themselves that go beyond the rules of the game, as referred to previously. They may govern behavior, amount of time one has to be in the game in order to be available to help others, and so forth.

The history, hierarchy, and other factors also serve to keep groups together. A few of the other common ways to promote group maintenance include the demonstration of affiliation by using the same color schemes in their characters' dress [11]. This is similar to team identity in sports, or national identity in festivals and the like. Further, team members are often required, as part of their membership, to wear what is called a "guild tag" or "team tag" which appear with their names in the chat window.

A FINAL NOTE: WHAT COMES NEXT?

I am sure that as my work progresses much of the above framework may fall away and much may be built up in its place. Like Leppalahti [9]) I am not a heavy gamer, rather a variety circumstances have led me to an academic interest in MMORPGs. I have found my inexperience to be both an advantage and a disadvantage to date.

Because I have decided that participant observation is the most appropriate method to attain the depth and richness I am intending in this study, I must immerse myself into the virtual world. Although I have a great deal of experience with IRC and chat rooms, and so understand much of the lingo, I am a bit slower and more tentative in becoming integrated than I would like. To my advantage, though, is the ability to look at the world of the MMORPG through a fresh set of eyes, and hopefully a different set of lenses.

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