

## **Dreams and MMOs: Do Avatars Dream of Hero Quests?**

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This paper examines dreams related to Massively Multi-Player Online Role Playing Games (MMOs). Despite the prevalence of dreams in everyday life, their significance remains undefined and open to interpretation. Given the unique characteristics of interactive virtual worlds, MMO game play may lead to unique dream experiences. The author collected data related to dreams and MMO experiences in order to discover the ways that in-game experiences manifest themselves in dreams, and if this manifestation is unique among dream experiences. Results were not sufficient to identify any unique connections between MMOs and dreams. Rather, these dreams collected in this study proved to be comparable to traditional interpretations of dreams as residual manifestations of events that recently occupied the dreamer’s mind.

### **Overview**

Within popular culture, and even among psychologists and philosophers, there are ongoing arguments about the significance of dreams. Do they reveal something profound and quintessential about the “unconscious” mind, or are they merely the result of spontaneous neuron activity in the physical brain? The content of dreams often consists of a mixture of fact and fiction. Although in wakeful states it might seem easy to determine what is real and what is artificial, in dream states these opposites are often distorted and melded together. Memories of dreams often remain with people as ongoing fantasies, fears and other more subtle symptoms. Thus, the content of dreams can play a role in the psychological development of a person. It is therefore relevant to consider what goes into dreams and what comes out (unconscious beliefs and behaviors). Virtual worlds – such as MMOs – present “realistic” graphics and social interactions that can rival the “realness” of the real world. A study of how MMO-related dreams differ from other dreams might reveal something unique about the gaming experience. This study will attempt to answer two qualitative questions: 1) According to players, what ways do in-game experiences manifest themselves in their dreams? 2) How do these dreams treat virtual world experiences, compared to real world experiences?

### **Literature Review**

#### *Prevalence of dreams related to electronic media*

The prevalence of dreams related to electronic media is on the rise as technology and electronic entertainment become more assimilated into daily life. Although their meaning and significance may be in dispute, it is generally the case that dreams involve material previously experienced in waking life. Since electronic media – including television, computer games and

the Internet – are increasingly a common experience in life, it is only natural that they would enter people’s dreams (Schwartz, 2000, G03). Multiple studies have shown a strong correlation between exposure to electronic media and dreams related to such media. For example, Jan Van Den Bulck (2004) found that among his sample of Dutch school children, 60.1% of boys and 58.7% of girls experienced pleasant, television-related dreams at least once a month. Additionally, 32.9% of boys and 36.3% of girls had television-related nightmares at least once a month. By contrast, for the lesser-used medium (by comparison of hours played per month) of computer games, only 43.9% of boys and 15.6% of girls experienced pleasant, game-related dreams. And 12.1% of boys and 5.2% of girls had game-related nightmares (2004, p. 46).

Players of MMOs may also experience more game-related dreams, given the higher level of immersion that is characteristic of these games. Among *Everquest I* players, Nick Yee (2001, p. 63) found that 68.1% of surveyed players had dreamed about the game. Most of the dreams fell into one of four categories: achievement of a specific quest or task, ordinary game activity, anxiety related to the game, and sexual themes. Female players were “significantly more likely” to dream than male players. Yee also correlated game-related dreams to “The Big-5 Personality Factors” developed by P. Costa and R. McCrae. According to Yee’s personality data, “Players who dream about EQ score significantly higher on Neuroticism ... and Openness ... than those players who do not dream about EQ” (2001, p. 64).

An interesting phenomenon often occurs in dreams related to MMOs: identity is shifted from the dreamer to his or her in-game character. In other words, when a person dreams about playing the game, he or she often views the dream from the point of view of a character in the game, not the real person controlling the character. Additionally, people from the real world can be inserted into the game, while the dreamer remains “in character.” The converse situation is also common, where dreams take place in the real world but everyone, including the dreamer, behaves as they would if they were in the game (Schwartz, 2000, G03). Within these examples of synthesis between virtual and real world content, the dreamer is usually in a position of power (over the events in the dream), not only in the sense that it is like they were playing the game, but also in the feeling of control over the outcome of the dream.

### *Effects of video games on the mind*

Research by Robert Stickgold suggests that the brain continues to “play” video games during sleep. Stickgold subjected research volunteers to several hours of Tetris playing for three days, during which time, over 60% reported dreaming about falling Tetris pieces (Lacey, 2000). The study pool also included amnesiacs, which, despite their tendency to forget the previous day’s events, reported dreams about Tetris. Stickgold’s results showed that novice players were more likely to dream about Tetris, while expert players were less likely to dream about Tetris. This inverse relationship between dreams and level of experience suggests that the dreams facilitate learning. “With such predictable associations being made and presumably strengthened at sleep onset, one can only surmise that during REM sleep more unpredictable, potentially valuable, but frequently useless, associations are tested and, when appropriate, similarly strengthened” (Stickgold, 2000). In other words, dreams serve as a practice field for game play.

As video games proliferate popular culture among children and adults, social scientists have attempted to determine the consequences, positive or negative, of video game play. Of particular concern is the potential for video games to influence violent behavior. Another, less covered, aspect is the potential for video games to improve the mind. Jayne Gackenbach summarized some of the latter’s research findings in a 2006 presentation. Video gamers

demonstrate greater attentional resources, as evidenced by their ability to keep track of multiple visual targets at once. Gamers also have better capacities for spatial reasoning. How do video games influence the mind? While playing a game, a person is said to transfer his or her presence, or psychological concentration, in the game. This kind of immersion or absorption often accompanies a state of flow, where the level of challenge in the game matches the player's level of interest (Gackenbach).

There is also evidence that video gaming can bring about a heightened state of awareness, most notably in the form of lucid dreaming. Lucid dreaming occurs when a person is aware that he or she is dreaming and can consequently control (to varying degrees) the action of the dream. Gackenbach's research found that lucid dreams are common among high-use gamers and not as common among low-use gamers. Strickgold's study demonstrated that Tetris players continue to play in their dreams. Players reported satisfaction and frustration regarding these dreams depending on how successful they were at playing in their dreams. Dreams as a continuation of real-life challenges and experiences are in line with Freud's proposal that dreams represent wish-fulfillment. In other words, the dream allows players to finish what they weren't able to in real life. In this situation, the dream mirrors the goal-oriented nature of the game. Thus, the game has directed the actions of the mind.

#### *Freud's interpretation of dreams*

In "On Dreams," Sigmund Freud describes his methodology for interpreting dreams and explains some of the ways that dreams work. ("On Dreams" is Freud's adaptation of "The Interpretation of Dreams" for the popular consumption.) Psychoanalysis is applied to dreams by first recalling everything about a dream, especially those elements that seem irrelevant. Each element is examined for its real-life associations, which are then pieced together to explain the dream. This method attempts to reconcile the memorable events of the dream, or manifest content, with the derived associations, or latent content. It is important to clarify that the latent content (dream-thoughts) exists first, and is transformed into the manifest content (dream-content) through a process known as dream-work (Freud, 1989, p. 148). Examining the dreams of children is crucial because "an explanation of psychical processes in children, in whom they may well be greatly simplified, may turn out to be an indispensable prelude to the investigation of the psychology of adults" (Freud, 1989, p. 149). Such an examination reveals that dreams depict the fulfillment of a wish that arose during the previous day. All dreams are variations on the wish-fulfillment premise, no matter how complicated or meaningless they may seem.

The dream-work exists in order to bring unconscious thoughts into consciousness. It is necessary to transform the latent content in order for it to pass into consciousness because it is being scrutinized and repressed by a censor. (The censor is later explained by Freud on page 165 to be the gateway between two agencies of consciousness.) The first way in which manifest content is created is condensation. Condensation reduces a plethora of details about an experience or object down to a single representation (or metaphor). Patterns of condensation can occur, known as composite structures, which can be dissected to help ascertain meaning. In addition to condensation, dramatization occurs as a way of creating the situations we experience in dreams; and displacement occurs when the intensity/relevance of some thoughts is shifted to others. Consequently, the most relevant dream-thoughts can be contained in what seem to be the most irrelevant dream-contents (Freud, 1989, p. 161). One of the overarching characteristics of dream-work is its reliance on pictorial arrangements of dream-content, which may be coherent images or disconnected and modified images mixed throughout.

## Method

Given the affirmative findings of previous studies, I assumed that the majority of MMO players experience game-related dreams. Consequently, I limited my sample to players who have had dreams. To ascertain the ways that game play manifests itself in dreams, I collected first-person accounts of specific dreams and related gaming experiences. To recruit interviewees, I posted solicitations in message boards dedicated to EQ2 and World of Warcraft, including IGN, OGameing and MMORPG.com. I also posted on dream-related forums at Google Groups and the International Association for the Study of Dreams. My recruitment message specified that I was looking for people that had “dreamed that you were in the game or that parts of the game were in your real life” (Appendix 1) and requested players to contact me via email. I later posted a follow-up message with a link to an online survey. This message specified that I preferred interview participants but also welcomed survey responses, which I estimated to take about ten minutes.

Interviews were conducted via email. To facilitate discussion, I limited each email to about four questions. This number increased as I neared the end of my study time. It took three to ten days to complete an interview, depending on the timeliness of the subject's responses. I chose to use email because it gave respondents time to clearly articulate their responses. In hindsight, this was perhaps only necessary for the description of the participants' dreams. Subsequent questions and answers could have been obtained just as effectively via instant messaging or in-game chat. (It was frustrating to wait days sometimes for a response that probably took only a few minutes to type.) Most participants typed their responses using proper grammar. When a person who usually used proper grammar lapsed into informal speech, I edited their responses for consistency. Pseudonyms were created using the names of actors and characters from the television series *Lost*.

## Results

Dream data was collected from a total of twenty respondents, including eleven males and nine females. Fourteen people responded via survey while six were interviewed via email. Two of the interviewees answered the survey first and then emailed me to be interviewed. Although email interviews allowed for follow-up questions, the length and quality of responses were comparable to those collected via survey. For the purposes of this study, I do not consider it necessary to distinguish between the two bodies of data. All but one of the respondents were between the ages of eighteen and twenty-nine. The majority were students, followed by a range of white-collar employees, one housewife and one paintball referee. Twelve respondents reported playing EverQuest I and/or EverQuest II as their primary MMO while the remaining eight played World of Warcraft. All of the dreams reported in this study came from either EverQuest I/II or World of Warcraft.

When asked to describe an MMO-related dream, most respondents were able to recall a particular dream. The minority of respondents that could not recall a particular dream, reported fragments of dreams or general impressions about their dreams. Most dreams took place in the game, and involved situations and actions related to game play. Some dreams involved specific quests.

“The one that I remember the most was while trying to complete Stiletto's orders, I kept getting stuck on the epic skele in cove of decay, and after I logged off I continued trying to fight the thing in my dreams” (Claire Ravin).

Other dreams involved actions related to quests in general. In these dreams, the related quest was not known or did not explicitly exist in the game.

“In my dream, we have a planned raid going on, everything works out quite fine and I do my usual job of keeping our Main Tank alive... suddenly he dies and the whole raid wipes. I never saw that coming and there really is no reason for him to die on that particular encounter” (James Holloway).

The most common dreams involved actions that related to casual playing of the game, and usually involved something that occurred recently in the game.

“The dream I have had mirrored an action from in-game. In my dream (more of a nightmare), I was with my wife and a few friends swimming in the ocean. Then my friend and I saw something shiny on the bottom and we thought “Hey it might be gold or something” so we began swimming down to get it. Then I see this flash of white in the corner of my eye and the next thing I know my leg is missing and blood is every where. Then I woke up, scared to death. (This is on top of a fear of the ocean I have and creatures in it looking at me as food)” (John O’Quinn).

When asked if people or objects from the real world had appeared in their game-related dreams, seventeen people responded positively. The most common crossovers were people appearing in place of their characters.

“Yes, instead of his character Brent was himself in the dream and I was myself instead of my character. Also we were carrying real swords instead of the ones from in game” (Walt Kelley).

A handful of dreams took place in real life. In these dreams, graphical elements of the game, such as nametags above people heads, crossed over from the game to real life. Evangeline Austen reported her real-life city appearing to be pixilated while it was attacked by a monster from the game.

“There was an epic mob, only it wasn't one that really exists in EQ2. It was a giant nightblood... He spit fire out his mouth and was running rampant around the city I live in and wreaking havoc on everything... So I started calling all my guildmates on the phone, I'm the guild leader and everyone responded ASAP... When I looked around at everyone, we didn't look like our characters, we looked like ourselves... it was my RL city, but it looked like things do on a computer screen, it looked graphical, not real” (Evangeline Austen).

Out of ten people that responded to the question of whether they knew they were dreaming, six answered positively and four answered negatively. Unfortunately, I coupled this question with another, which apparently resulted in half of the respondents overlooking it. Out of those that said they knew they were dreaming, or at least felt that the dream was not real, three reported that this was a common characteristic of their MMO-related dreams. The other question asked if people were themselves or their characters in dreams. Nineteen respondents (one person did not answer) to this question stated that they were their real-life selves, regardless of the dream’s setting.

## Discussion

The dream accounts I received were in line with what I was expecting. They can be categorized by setting: either in game or in real life. In both cases, there was always some crossover between the game and real life. Identity appears to remain constant regardless of setting. In other words, although the dream may take place in the game and the dreamer may exhibit in-game abilities, the dreamer experiences the dream as his or her real-life self. The alternative would be to experience the game as the person's in-game character, but I am not sure if this is possible. After all, how could a person experience someone else's (or something else's) experience? Moreover, "in-game" experiences actually belong to a real-life person sitting at a computer, no matter how immersed he or she is in game play.

Among the dreams that took place in the game, most seem to have been continuations of game play. Whether it was related to a specific quest or general game activity, the dreams did not vary much from regular, real-life game play. This characteristic is in line with Stickgold's Tetris research. The mind continues to "play" the game (or go through the thoughts of playing the game) even while asleep. These dreams may also be a form of wish-fulfillment, as they allow the dreamer to keep playing and working on quests.

"There are days though, just as with adventuring, that I want to get x pieces of furniture done, before I go to sleep, and I will continue to make those same pieces while I am asleep, or dream about rearranging my house" (Claire Ravin).

Wish fulfillment might also be occurring if, as Stickgold suggests, dreaming correlates to improved game play.

In other cases, the wish-fulfillment may go beyond the game. Although the dream may take place in game, the actions seem to represent wishes or concerns from the real world.

"I was in the game Everquest (about 6 months after I began playing this game). I was trying to protect my daughter from the gnolls that were in South Karana at the spires. I kept putting her behind me to shield her while I fought gnolls (she was around 14 at the time) ... At the time, she was being stalked by a former boyfriend and I think this was my mind's way of protecting her" (Libby Watros).

This example was not the only dream of a sensitive nature that I received. Two others dealt with possible rejection by a loved one.

"I cannot remember much about my dream but the most vivid thing to me was the fact that I was doing a quest the twisted part of it was the fact it was a quest as to if I would be a worthy mother and wife. ... I was pregnant at the time" (Shannon Grace).

In Josh Holloway's dream, he is blamed by his guild for the loss of their main tank during a raid. He eventually leaves the guild, and some of his other guild mates join him.

"The most disturbing thing happens afterwards. As we talk about starting a new guild, my girlfriend enters my room (in Real-Life) and tells me something along the lines of: 'Why did you let him die?' Then she leaves and I have the strong impression of never seeing her again" (James Holloway).

In all of these cases, the respondents' real-life concerns played out in a game-related dream. These dreams exemplify the relationship between manifest and latent content, as explained by Freud. The actions in the dream (in the form of in-game characters and actions) serve as a metaphor for what is occurring in real life. It is important to note that I am only aware of these likely connections because the respondents were generous enough (and self-aware enough) to offer this contextual information. I think it is likely that several more of my respondents' dreams have real-life trauma at their core, but I do not have the contextual information or the psychoanalytic credentials to interpret such findings. Nevertheless, these dreams demonstrate the distortion of content that occurs in dreams.

### **Conclusion**

MMO players in my study reported dreams that are consistent with the scholarly accepted roles of dreams, mainly that they represent residual images of events that happened in the person's life. In a dream, the distinction between in-game content and real-life content is mixed together and rendered irrelevant. Dreams have always been known to mix content from seemingly unrelated parts of a person's life – MMO dreams are no different.

I had originally hoped to extract a unique characteristic of MMO dreams that might distinguish game play from other experiences in life. No such characteristic emerged from my relatively small subject pool. Further, the results were so varied that few correlations could even be suggested. The only conclusion that I am confident in making is that MMO dreams operate just like "regular" dreams. Thus, the content of MMOs, a type of virtual world, can enter our dreams just as any real-life event or thought can. Future studies, as I thought I could do here, might try to isolate a variable of game play that might manifest itself uniquely in dreams. It is likely that such research would need to adhere to one particular interpretation of dreams in order to analyze dreams and render consistent results. It would also have to gather as much contextual information as possible, just as a psychoanalyst would in analyzing a dream.

## Appendix 1: Recruitment Messages

### *Recruitment Message for Interview*

Greetings,

My name is Jason, and I am a student at Trinity University in San Antonio, Texas. I'm currently taking a class about virtual worlds, and I would like your help with an ongoing research project. My class has been playing Everquest II for the past four months, with characters ranging in level from 10 to 27. Our primary characters are members of the guild The Vindicators on the Antonia Bayle server.

I am currently seeking people over the age of 18 who have had dreams related to EQ2 or other virtual worlds (WoW, SWG, etc). If you have ever dreamed that you were in the game or that parts of the game were in your real life, then I would like to ask you some questions about your experiences.

We can conduct our interview via e-mail, in-game chat or through an instant-messaging program. I will preserve your anonymity and the confidentiality of your responses.

If you are willing to be interviewed about your thoughts on this topic, please email me at [eqearlgrey@yahoo.com](mailto:eqearlgrey@yahoo.com) or send an in-game email to Earlgrey.

I appreciate your contribution to my research. At the conclusion of my project, I will send you a link to my paper, as well as the papers of my classmates.

For more details about our course and the research project, visit:  
<http://www.trinity.edu/adelwich/worlds/faq.html>

Thanks in advance for your time.

Jason

*Recruitment Message for Interview or Survey*

Would anyone be willing to help out a poor college student studying MMOs? :)

I'm currently seeking people over the age of 18 who have had dreams related to MMOs. If you have ever dreamed that you were in the game or that parts of the game were in your real life, then I would like to ask you some questions about your experiences. Your information and responses will be kept confidential.

If you are willing to be interviewed about your thoughts on this topic, please email me at [eqearlgrey@yahoo.com](mailto:eqearlgrey@yahoo.com).

Alternatively, you can help me out by taking this 10-minute survey.

Dreams and MMOs survey  
<http://www.surveymonkey.com/s.asp?u=524012078698>

I appreciate your contribution to my research. At the conclusion of my project, I will post a link to my paper, as well as the papers of my classmates. For more details about our course and the research project, visit: <http://www.trinity.edu/adelwich/worlds/faq.html>

Thanks in advance for your time.

Jason  
Trinity University (San Antonio)

## Appendix 2: Interview Questions

- First, think about a particular dream that you've had relating to MMOs. This can be a one-time dream or a reoccurring dream. It can be a simple dream or a really complex and confusing one. Please tell me as much as you can remember about this dream.
- What happened? Where did it happen?
- Does it relate to anything that happened in the game or real life?
- What do you remember the most about it?
- Did the dream take place more so in the real world or in the game world?
- What kinds of things crossed over between the real world and the game world?
- Did you know that you were dreaming?
- In the dream, were “you” yourself or your character?
- Did you feel like you had accomplished anything when you woke up?
- When you think about it now, can you explain the sources of the things that happened in the dream?
- Do you think the dream had a meaning?
- Has dreaming about the game affected your attitude towards it?
- Has it changed your playing habits?
- What kinds of non-game dreams do you have?
- Do you usually remember your dreams?

### **Appendix 3: Survey Questions**

- Describe a dream that you've had involving an MMO. What happened? Where were you in the dream? Did it relate to anything that happened in the game or real life? What do you remember the most about it? Please provide as much detail as you can recall.
- Were there parts of the dream that crossed over between the game and real life? If so, what were they? (ie. people and objects from real life in the game world or vice versa)
- Did you know that you were dreaming? Were "you" your real-life self or your character?
- How do you explain or interpret this particular dream? Or MMO dreams in general?
- How have your MMO dream(s) compared to "regular" dreams? Are they more/less immersive? interesting/boring? frequent?
- Do you have any additional comments about dreams and MMOs?

## Appendix 4: Forums Used for Recruitment

### *MMORPG.com*

Everquest II General Discussion

<<http://mmorpg.com/discussion2.cfm/thread/76349>>

World of Warcraft General Discussion

<<http://mmorpg.com/discussion2.cfm/thread/76351>>

### *IGN.com*

EQ2 General Board

<[http://vnboards.ign.com/eq2\\_general\\_board/b22210/96088579/p1/?14](http://vnboards.ign.com/eq2_general_board/b22210/96088579/p1/?14)>

WoW Asylum

<<http://vnboards.ign.com/Message.aspx?topic=96497183&brd=22603>>

### *OGaming.com*

The Lounge: Off-topic Discussion

<<http://eq2.ogaming.com/forum/index.php?showtopic=17177>>

General Forums: The Inn

<<http://wow.ogaming.com/forum/index.php?act=ST&f=6&t=7075>>

### *International Association for the Study of Dreams*

Dream Research Projects

<<http://dreamtalk.hypermart.net/bb2005/viewtopic.php?t=571>>

### *Google Groups*

alt.dreams

<[http://groups.google.com/group/alt.dreams/browse\\_thread/thread/41bdbbb1eacf31d4/e95232841db2c260#e95232841db2c260](http://groups.google.com/group/alt.dreams/browse_thread/thread/41bdbbb1eacf31d4/e95232841db2c260#e95232841db2c260)>

alt.games.everquest

<[http://groups.google.com/group/alt.games.everquest/browse\\_thread/thread/f5c8f11f538f19f0/755a57a2b3099217#755a57a2b3099217](http://groups.google.com/group/alt.games.everquest/browse_thread/thread/f5c8f11f538f19f0/755a57a2b3099217#755a57a2b3099217)>

WoW: World of Warcraft

<[http://groups.google.com/group/mmorpg-wow/browse\\_thread/thread/987a5f0162e4ab43](http://groups.google.com/group/mmorpg-wow/browse_thread/thread/987a5f0162e4ab43)>

World of Warcraft Chat

<[http://groups.google.com/group/World-of-Warcraft-Chat/browse\\_thread/thread/1692eb8648e7da99](http://groups.google.com/group/World-of-Warcraft-Chat/browse_thread/thread/1692eb8648e7da99)>

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