

# Constructions and Reconstructions of Self in Virtual Reality: Playing in the MUDs

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## Playing in the MUD

In an interactive computer game designed to represent a world inspired by the television series *Star Trek: The Next Generation*, over 1000 players spend up to 80 hours a week participating in intergalactic exploration and wars. They create characters who have casual and romantic sex, who fall in love and get married, who attend rituals and celebrations. "This is more real than my real life," says a character who turns out to be a man playing a woman who is pretending to be a man. In this game the rules of social interaction are built not received.

In another, more loosely structured game, each player creates a character or several characters, specifying their genders and other physical and psychological attributes. The characters need not be human and there are more than two genders. All interactions take place "in character." Beyond this, players are invited to help build the computer world itself. Using a relatively simple programming language, they can make a "room" in the game space where they can set the stage and define the rules. That is, they make objects in the computer world and specify how they work. Rachel, an 11-year-old, built a room she calls "the condo." It has jewelry boxes containing magical pieces that transport her to different places and moments in history. When Rachel visits the condo, she invites her friends, she chats, orders pizza, and flirts. Other players built TVs showing scenes taking place in the rooms of the game, a transportation system to navigate the space, and a magical theater that replays past game events. Some have built robots, for example a program named "Julia," that "pretends" to be a person as she offers directions and helps to locate your friends.

Both worlds exist on international computer networks, which of course means that in a certain sense, a physical sense, they don't exist at all. From all over the world, people use their individual

machines to access a program which presents them with a game space—in the high tech world such spaces have come to be called "virtual"—in that they can navigate, converse, and build.

The first game, *Trek Muse*, and the second, *LambdaMOO*, are examples of a class of virtual worlds known as MUDs—an acronym for "Multi-User Dungeons." In the early 1970s, a role playing game called "Dungeons and Dragons" swept the game cultures, a game in which a "dungeon master" created a world in which people created characters and played out complex adventures. Several years later, *Dungeons and Dragons* was interpreted for computational space in a program called "Adventure." There, players proceeded through a maze that was presented to them through text description on a computer screen. The term "dungeon" has persisted in both the games and hi-tech culture, and in the case of MUDs, refers to a virtual social space that exists on a machine.

There are over 300 multi-user games based on at least 13 different kinds of software on the international computer network known as the Internet. Here I use the term "MUD" to refer to all the various kinds. All provide worlds for social interaction in a virtual space, worlds in which you can present yourself as a "character," in which you can be anonymous, in which you can play a role as close or as far away from your "real self" as you choose. Where they differ is in how constrained that world is. It can be built around a medieval fantasy landscape in which there are dragons to slay and gold coins and magical amulets to collect, or it can be a relatively open space in which you can play at whatever captures your imagination, both by playing a role and by participating in building a world.

In the MUDs, the projections of self are engaged in a resolutely postmodern context. There are parallel narratives in the different rooms of the MUD; one can move forward or backward in time. The cultures of Tolkien, Gibson, and Madonna coexist and interact. Authorship is not only displaced from a solitary voice, it is exploded. The MUDs are authored by their players, thousands of people in all, often hundreds of people at a time, all logged on from different places. And the self is not only decentered but multiplied without limit. There is an unparalleled opportunity to play with one's identity and to "try out" new ones.

My past research into the experiences of individuals working with computers has led me to underscore the power of this technology not only as a medium for getting things done but for thinking through and working through personal concerns (Turkle, 1984). Engagement with computational technology facilitates a series of "second chances" for adults to work and rework unresolved personal issues and more generally, to think through questions about the nature of self, including questions about definitions of life, intentionality, and intelligence.

What is true of individuals working alone with a computer is raised to a higher power when people use computers to communicate with other people as they do on the MUDs. In the first case, the person alone with the computer, I have found that individuals use computers to work through identity issues that center around control and mastery; in the second, where the computer is used as a communications medium, there is more room to use the control provided by the computer to develop a greater capacity for collaboration and even intimacy. The medium enables the self to explore a social context as well as to reflect on its own nature and powers.

My method of investigation of MUDs has been ethnographic and clinical: play the games, "hang out" with game players in virtual as well as real space, interview game players in person both individually and in groups. Some of my richest data came from a series of weekly "pizza parties" for



MUDDers within the Boston area.<sup>2</sup> There the topic was open and conversation turned to what was on the players' minds: most often love, romance, and what can be counted on as real in virtual space.

I begin my report from this new social and psychological world by taking one step back to general considerations of how role playing games enable people to work through issues of identity and then move on to the form this takes in MUDs, which enhance the evocative potential of traditional games by further blurring the line between the game and what players refer to as RL, "real life," or TRW, "the real world."<sup>3</sup>

Traditional role playing prompts reflection on personal and interpersonal issues, but in games that take place in ongoing virtual societies such as MUDs, the focus is on larger social and cultural themes as well. The networked computer serves as an "evocative object" for thinking about community. Additionally, people playing in the MUDs struggle towards a new, still tentative discourse about the nature of a social world that is populated both by people and by programs. In this, life in the MUD may serve as a harbinger of what is to come in the social spaces that we still contrast with the virtual by calling the "real."

### Role Playing Games

As identity workshops, MUDs have much in common with traditional role playing games, for example, the role playing games played by Julee, a 19-year-old who has dropped out of Yale after her freshman year. Part of the reason for her leaving college is that she is in an increasingly turbulent relationship with her mother, a devout Catholic, who turned away from her daughter when she discovered that she had had an abortion the summer before beginning college.

From Julee's point of view, her mother has chosen to deny her existence. When asked about her most important experience playing role playing games, Julee described a game in which she had been assigned the role of a mother facing a conflict with her daughter. Indeed, in the game, the script says that the daughter is going to betray, even kill, the mother.

In the role playing game, played over a weekend on the Boston University (BU) campus, Julee and her "daughter" talked for hours: Why might the daughter have joined her mother's opponents, how could they stay true to their relationship and the game as it had been written? Huddled in a corner of an empty BU classroom, Julee was having the conversation that her mother had not been willing to have with her. In the end, Julee's character chose to ignore her loyalty to her team in order to preserve her daughter's life.

Clearly, Julee projected feelings about her "real" mother's choice onto her experience of the game, but more was going on than a simple reenactment. Julee was able to reexperience a familiar situation in a setting where she could examine it, do something new with it, and revise her relationship towards it. In many ways, what happened was resonant with the psychoanalytic notion of "working through."

Julee's experience stands in contrast to images of role playing games that are prevalent in the popular culture. A first popular image portrays role playing games as depressing and dangerous environments. It is captured in the urban legend which describes an emotionally troubled student disappearing and committing suicide during a game of Dungeons and Dragons. Another popular image, and one that has been supported by some academic writing on role playing games, turns them

into places of escape. Players are seen as leaving their "real" lives and problems behind to lose themselves in the game space. Julee's story belies both stereotypes. For her the game is psychologically constructive rather than destructive. And she uses it not for escape but as a vehicle for engaging in a significant dialogue with important events and relationships in her "real" life.

Role playing games are able to serve in this evocative capacity precisely because they are not simple escapes from the real to the unreal, but because they stand betwixt and between, both in and not in real life. But in the final analysis, what puts Julee's game most firmly in the category of game is that it had an end point. The weekend was over and so was the game.

MUDs present a far more complicated case. In a certain sense, they don't have to end. Their boundaries are more fuzzy; the routine of playing them becomes part of their players' real lives. The virtual reality becomes not so much an alternative as a parallel life. Indeed, dedicated players who work with computers all day describe how they temporarily put their characters to "sleep," remain logged on to the game, pursue other activities, and periodically return to the game space.

Such blurring of boundaries between role and self present new opportunities to use the role to work on the self. As one experienced player put it, "you are the character and you are not the character both at the same time." And "you are who you pretend to be." This ambiguity contributes to the games' ability to be a place in which to address issues of identity and intimacy. They take the possibilities that Julee found in role playing games and raise them to a higher power.

#### **Virtual Realities: Role Playing to a Higher Power**

The notion "you are who you pretend to be" has a mythic resonance. The Pygmalion story endures because it speaks to a powerful fantasy: that we are not limited by our histories, that we can be recreated or can recreate ourselves. In the real world, we are thrilled by stories of self transformation. Madonna is our modern Eliza Doolittle; Ivana Trump is the object of morbid fascination. But of course, for most people such recreations of self are difficult. Virtual worlds provide environments for experiences that may be hard to come by in the real.

Not the least of these experiences is the opportunity to play an "aspect of your self" that you embody as a separate self in the game space.<sup>4</sup>

Peter is a 23-year-old physics graduate student at the University of Massachusetts. His life revolves around his work in the laboratory and his plans for a life in science. He says that his only friend is his roommate, another student whom he describes as being even more reclusive than he. This circumscribed, almost monastic life does not represent a radical departure for Peter. He has had heart trouble since he was a child; his health is delicate, one small rebellion, a ski trip when he first came up to Boston, put him in the hospital for three weeks. His response has been to circumscribe his world. Peter has never traveled. He lives in a small compass.

In an interview with Peter he immediately made it clear why he plays on MUDs: "I do it so I can talk to people." He is logged on for at least 40 hours a week, but it is hard to call what he does "playing" a game. He spends his time on the MUDs constructing a life that in only a seeming paradox is more expansive than his own. He tells me with delight that the MUD he frequents most often is physically located on a computer in Germany.



And I started talking to them [the inhabitants of the MUD] and they're like, "This costs so many and so many Deutschmarks." And I'm like, "What are Deutschmarks? Where is this place located?" And they say: "Don't you know, this is Germany."

It is from MUDs that Peter has learned what he knows of politics, of economics, of the differences between capitalism and welfare state socialism. He revels in the differences between the styles of Americans and Europeans on the MUDs and in the thrill of speaking to a player in Norway who can see the Northern lights.

On the MUD, Peter shapes a character, Achilles, who is his ideal self. Life in a University of Massachusetts dorm has put him in modest and unaesthetic circumstances. Yet the room he inhabits on the MUD is elegant, romantic, out of a Ralph Lauren ad.

Peter's story illustrates several aspects of the relationship of MUDDing and identity. First, the MUD serves as a kind of Rorschach inkblot, a projection of inner fantasies. Second, unlike a Rorschach, it does not stay on a page. It is part of Peter's everyday life. Beyond expanding his social reach, MUDs have brought Peter the only romance and intimacy he has ever known. At a social event held in virtual space, a "wedding" of two regular players on his favorite Germany-based MUD, Peter met Winterlight, one of the three female players. Peter who has known little success with women, was able to charm this most desirable and sought after player. Their encounter led to a courtship in which he is tender and romantic, chivalrous and poetic. One is reminded of Cyrano who could only find his voice through another's persona. It is Achilles, Peter's character on the MUD, who can create the magic and win the girl.

While people work one-on-one with the computer, the machine becomes an evocative object for thinking through issues of identity which tend to be centered on control and mastery. But Peter's experience (where the computer is a mediator to a reality shared with other people) has put computation more directly in the service of the development of a greater capacity for friendship, the development of confidence for a greater capacity for intimacy.

But what of the contrast between Peter and Julee? What can we say about the difference between role playing games in the corridors of BU and on computer virtual worlds?

Julee and Peter both use games to remake the self. Their games, however, are evocative for different reasons. Julee's role playing has the powerful quality of real-time psychodrama, but on the other hand Peter's game is ongoing and provides him with anonymity, invisibility, and potential multiplicity. Ongoing: He can play it as much as he wants, all day if he wants, every day if he chooses as he often does. There are always people logged on to the game; there is always someone to talk to or something to do. Anonymous: Once Peter creates his character, that is his only identity on the game. His character need not have his gender or share any recognizable feature with him. He can be who he wants and play with no concern that "he," Peter, will be held accountable in "real life" for his characters' actions, quarrels, or relationships. The degree to which he brings the game into his real life is his choice. Invisible: The created character can have any physical description and will be responded to as a function of that description. The plain can experience the self presentation of great beauty; the nerdy can be elegant; the obese can be slender. Multiplicity: Peter can create several characters, playing out and playing with different aspects of his self. An ongoing game, an anonymous personae, physical invisibility, and the possibility to be not one but many, these are the qualities at the root of



the holding power and evocative potential of MUDs as "identity workshops."<sup>5</sup> Faced with the notion that "you are what you pretend to be," Peter can only hope that it is true for he is playing his ideal self.

Peter plays what in the psychoanalytic tradition would be called an "ego ideal." Other players create a character or multiple characters that are closer to embodying aspects of themselves that they hate or fear or perhaps have not ever consciously confronted before. One male player describes his role playing as

daring to be passive. I don't mean in having sex on the MUD. I mean in letting other people take the initiative in friendships, in not feeling when I am in character that I need to control everything. My mother controlled my whole family, well, certainly me. So I grew up thinking 'never again.' My 'real life' is exhausting that way. On MUDs I do something else. I didn't even realize this connection to my mother until something happened in the game and somebody tried to boss my pretty laid-back character around and I went crazy. And then I saw what I was doing.

The possibilities the medium offers for projecting both conscious and unconscious aspects of the self suggests an analogy between MUDs and psychotherapeutic milieus. The goal of psychotherapy is not of course to simply provide a place for "acting out" behavior that expresses one's conflicts, but to furnish a contained and confidential environment for "working through" unresolved issues. The distinction between acting out and working through is crucial to thinking about MUDs as settings for personal growth. For it is in the context of this distinction that the much-discussed issue of "MUDs addiction" should be situated. The accusation of being "addicted" to psychotherapy is only made seriously when friends or family suspect that over a period of time, the therapy is supporting repetitions and reenactments rather than new resolutions. MUDding is no more "addictive" than therapy when it works as a pathway to psychological growth.

Robert is a college freshman who in the months before beginning college had to cope with his father's having lost his job and disgraced his family because of alcoholism. The job loss led to his parents' relocation to another part of the country, far away from all of Robert's friends. For a period of several months, Robert, now at college, MUDded over 80 hours a week. Around the time of a fire in his dormitory which destroyed all his possessions, Robert was playing over 120 hours a week, sleeping four hours a night, and only taking brief breaks to get food, which he would eat while playing.

At the end of the school year, however, Robert's MUD experience was essentially over. He had gotten his own apartment; he had a job as a salesman; he had formed a rock band with a few friends. Looking back on the experience he thought that MUDding had served its purpose: it kept him from what he called his "suicidal thoughts," in essence by keeping him too busy to have them; it kept him from drinking ("I have something more fun and safe to do"); it enabled him to function with responsibility and competency as a highly placed administrator; it afforded an emotional environment where he could be in complete control of how much he revealed about his life, about his parents, even about something as simple for other people as where he was from. In sum, MUDs had provided what Erik Erikson would have called a "psychosocial moratorium." It had been a place from which he could reassemble a sense of boundaries that enabled him to pursue less bounded relationships.<sup>6</sup>

Through theories which stress the decentered subject and through the fragmented selves presented by patients,<sup>7</sup> contemporary psychology confronts what is problematic in traditional notions of a unitary self. MUDs have become a new context which provokes reflection on such questions. Virtual



communities such as MUDs are the most dramatic example of the way the culture of simulation challenges traditional notions of human identity. Indeed, they make possible the construction of an identity that is so fluid and multiple that it strains the very limits of the notion. Identity, after all, literally means *one*. When we live through our electronic self-representations we have unlimited possibilities to be *many*. People become masters of self-presentation and self-creation. The very notion of an inner, "true self" is called into question.

These remarks have addressed MUDs as privileged spaces for thinking through and working through issues of personal identity. Additionally, when role playing moves from circumscribed "weekend encounters" such as those Julie participated in onto a sustained virtual stage, a new social world grows up too. The development of virtual social life is of signal importance: it makes MUDs very special kinds of evocative objects.

### Evocative Objects: Gender, Community, and "Bots"

In *The Second Self* (1984) I called the personal computer an evocative object because it provoked self-reflection and stimulated thought. It led to reevaluations and reconsiderations of things taken for granted, for example, about the nature of intelligence, free will, and our notions of what is alive. And I found that the computer did this not just because it presented people with ideas as did traditional philosophy, but because it presented them with experiences, an ongoing culture of personal computing that provoked a new philosophy in everyday life.

The same kind of process, this provocation of new discourse and reflection, is taking place around computer-mediated communications in virtual realities such as MUDs. But the emphasis of the new discourse and reflection is on social and cultural issues as well as individual ones.

One dramatic example is the novel and compelling discourse that surrounds the experience of "gender swapping" in virtual reality, whereby men may play the roles of women and women the roles of men. As MUD players talked to me about their experiences with gender swapping, they certainly gave reason to believe that through this practice they were working through personal issues that had to do with accepting the feminine and/or the masculine in their own personalities. But they were doing something else as well which transcended the level of individual personality and its dynamics. People were using gender swapping as a first hand experience through which to form ideas about the role of gender in human interactions. In the ongoing culture of MUDs, these issues are discussed both within the space of the games and in a discussion group on USENET called "rec.games.mud."

Discussion on USENET about gender swapping has dealt with how female characters are besieged with attention, sexual advances, and unrequested offers of assistance which imply that women can't do things by themselves. It has dealt with the question of whether women who are consistently treated as incompetent may start to believe it. Men playing women on role playing games have remarked that other male players (read male characters) sometimes expect sexual favors in return for technical assistance. In this case, offering technical help, like picking up the check at dinner, is being used to purchase rather than win a woman's regard. While such expectations can be subtly expressed, indeed sometimes overlooked in real life, when such things happen in MUDs, they are more visible, often widely witnessed, and openly discussed. As this takes place, the MUD becomes an evocative object for a richer understanding not only of sexual harassment but of the social construction of gender.



MUDDing throws issues of the impact of gender on human relations into relief and brings the issue home; the seriousness and intensity of discussions of gender among MUDDers speaks to the fact that the game allows its players to experience rather than merely observe what it feels like to be the opposite gender or to have no gender at all. MUDs are objects for thinking about gender, but there are similar stories to tell about discussions in MUD environments about violence, property, and privacy. Virtual communities compel conversations about the nature of community itself.

On an early MUD known as Habitat, which ran as an experiment in the United States and has become a successful commercial venture in Japan, players were originally allowed to have guns. However, when you are shot, you do not cease to exist but simply lose all the things you were carrying and are transported back to your virtual home. For some players, thievery and murder became the highlight of the "game." For others, these activities were experienced as a violent intrusion on their peaceful world. An intense debate ensued.<sup>8</sup>

Some players argued that guns should be eliminated; unlike in the real world, a perfect gun ban is possible with a few lines of code. Others argued that what was damaging was not the violence but the trivialization of violence, and maintained that guns should persist, but their consequences should be made more real: when you are killed, your character should cease to exist and not simply be sent home. Still others believed that since Habitat was "just a game," and playing assassin was part of the fun, there could be no harm in a little virtual violence.

As the debate raged, a player who was a priest in real life founded the "Order of the Holy Walnut" whose members pledged not to carry guns. In the end, the game designers divided the world into two parts: in town, violence was prohibited; in the wilds outside of town, it was allowed. Eventually a democratic voting process was installed and a sheriff elected. Debates then ensued about the nature of Habitat laws and the proper balance between individual freedom and law and order. What is remarkable is not just the solution, but the quality of the debate which led up to that solution. The denizens of Habitat were spending their leisure time debating pacifism, the nature of good government, and the relationships between representations and reality.

Virtual reality is not "real," but it has a relationship to the real. By being betwixt and between, it becomes a play space for thinking about the real world. It is an exemplary evocative object. When a technology serves as an evocative object, old questions are raised in new contexts and there is an opportunity for fresh resolutions. I conclude with a final example of how MUDs are able to recast some old questions about personhood and program.

When in the context of "traditional" computation, people meet a program that exhibits some behavior that would be considered intelligent if done by a person, they often grant the program a "sort of" intelligence, indeed a "sort of" life, but then insist that what the essence of human intelligence or indeed of human uniqueness is what "the computer cannot do." Computers cannot have intentions, feelings, the sense of an "I" (Turkle, 1984).<sup>9</sup>

In MUDs, however, intelligent computational entities are present in a context which gives new saliency to questions about their status. Some of the inhabitants of these virtual worlds are artificial intelligences, robots, affectionately referred to as "bots" that have been built by enterprising players. When you wander about in a MUD, you find yourself in conversations with them, you find yourself asking them for directions, thanking them for being helpful, ordering drinks from them at a virtual bar,



telling them a joke. And you find yourself doing all of these things before you know that they are not people but "things." (Of course, you may be a person "playing" the role "an intelligent Batmobile" or "a swarm of bees.") The "thingness" of the bots is not part of your initial encounter or the establishment of your relationship with them. You have unintentionally played out a Turing test in which the program has won.

Reaction to such experiences is strong, much of it still centered on the question of human uniqueness and "whether a program can be an 'I'." (For example, within the Narrative Intelligence electronic discussion group centered at MIT, there was heated debate about "bots" and the question of the "I." In this debate, sophisticated programmers of and players in virtual worlds admitted to being nonplussed when they first realized that they have unknowingly participated in casual social conversation with these virtually "ambulatory" artificial intelligences [AIs].) But another way of talking about the bots has grown up as well, a discourse marked by two new themes.

First, instead of dwelling on the essence of "bots," conversation among MUDders turns to the ethics of whether "they" (the bots) should or should not be required to announce their artificiality. This discussion of "full disclosure" is of course taking place in the context of a virtual world where changing gender, race, and species is the norm. With people playing robots, there is a new level of self-consciousness about the asymmetry of demanding that robots not play people.

In the film *Blade Runner* sophisticated androids almost indistinguishable from humans have been given the final defining human qualities: childhood memories and the knowledge of their mortality. This is a world obsessed with the Turing test; the film's hero, Decker, makes his profession diagnosing the real from the artificial. But by the end of the film, Decker who has spent his life tracking down and destroying androids, is less concerned with whether he is dealing with an artificial being and more concerned with how to thank one of them for saving his life and how to escape with another of them with whom he has fallen in love. The film speaks to an increasing tension in our traditional notions of the real and the artificial. As we live in a world of cyborgs, the important distinctions may not follow from *a priori* essences but from ongoing relationships.

And indeed, the second new theme in MUD-based conversations about "bots" turns discussion away from questions of essence and towards the most practical matters. How exactly should the AIs function within the community? Are specific bots disruptive or facilitating? Are they rude or are they kind? In this sense, MUDs may be harbingers of the discourse about the artificial in a post Turing test world.

There is a lot of excitement about virtual reality. In both the popular and academic press there is enthusiasm and high expectation for a future in which we don gloves and masks and bodysuits and explore virtual space and sensuality. However, from the point of view of how we think about identity and community, there is reason to feel great excitement about where we are in the present. In the text-based virtual realities that exist today, people are exploring, constructing, and reconstructing their identities. They are doing this in an environment infused with a postmodern ethos of the value of multiple identities and of playing out aspects of the self and with a constructionist ethos of "Build something, be someone." And they are creating communities that have become privileged contexts for thinking about social, cultural, and ethical dilemmas of living in constructed lives that we share with extensions of ourselves we have embodied in program.

Watch for a nascent culture of virtual reality that underscores the ways in which we construct gender and the self, the ways in which we *become* what we play, argue about, and build. And watch for a culture that leaves new space for the idea that he or she who plays, argues, and builds might be doing so with a machine.

## Notes

<sup>1</sup> For a general introduction to LambdaMOO and MUDding, see Pavel Curtis (1992), *MUDding: Social phenomena in text-based virtual realities*, and Amy Bruckman (1992), *Identity workshops: Emergent social and psychological phenomena in text-based virtual reality*. On virtual community in general, see Allucquere Rosanne Stone (1992), "Will the real body please stand up?: Boundary stories about virtual cultures" in Michael Benedikt, Ed., *Cyberspace: First Steps* (Cambridge: MIT Press).

<sup>2</sup> Amy Bruckman, a graduate student at MIT's Media Laboratory, was my research assistant and dialogue partner during a summer of intensive work on the MUD phenomena; my understanding of this activity and its importance owes much to our collaboration.

<sup>3</sup> For more material on the contrast with traditional role playing see Gary Alan Fine, *Shared Fantasy: Role-Playing Games as Social Worlds* (Chicago: The University of Chicago Press, 1983). Henry Jenkins' study of fan culture, *Textual Poachers: Television Fans and Participatory Culture* (New York: Routledge, 1992), illuminates the general question of how individuals appropriate fantasy materials in the construction of identity.

<sup>4</sup> "The Well" has a "topic" (discussion group) on "On Line Personae." In a March 24, 1992 posting to this group, F. Randall Farmer noted that in a group of about 50 Habitat users about a quarter experienced their online personae as a separate creature that acted in ways they do in real life, and a quarter experienced their online personae as a separate creature that acted in ways they do not in real life.

<sup>5</sup> This felicitous phrase was coined by Amy Bruckman (1992).

<sup>6</sup> Of course, taking the analogy between a therapeutic milieu and virtual reality seriously means that incidents when players lose their anonymity are potentially psychologically damaging. In therapy, the transference is to the person of the therapist or to the therapy group; in virtual space, the transference is to the "body" of the MUD often as represented by its "wizards" or system administrators.

<sup>7</sup> Perhaps most dramatically demonstrated by the increasing numbers of patients who present with multiple personality disorder, literally "divided selves."

<sup>8</sup> For more detail on this example, see Chip Morningstar and F. Randall Farmer (1992, pp. 289-91).

<sup>9</sup> See Turkle (1984), *Thinking of oneself as a machine*, pp. 271-305.

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