

The 'White-eyed' Player Culture: Grief Play and Construction of Deviance in MMORPGs

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ABSTRACT

This study explores the social process governing the nature, emergence, application, and consequences of labeling the 'white-eyed' or grief players in massively multiplayer online role playing games in Taiwan. We found that two types of 'white-eyed' players exist in MMORPGs. The explicit type, who come out and organize themselves into griefer pledges, can be understood as players who rebel against game rules. Most of the common players are actually the second type, or implicit griefers. They play grief in an unidentifiable way with weak self-awareness, and put the griefer stigma on other age-groups to alleviate their anxiety in a cross-age co-playing era.

Keywords

Grief play, Griefer culture, Stigmatization, Othering, MMORPGs.

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INTRODUCTION

One popular phenomenon in Taiwan's massively multiplayer online role-playing games (MMORPGs) is the so-called 'white-eyed' players. The 'white-eyed' are players who act in ways similar to those known as 'griefers' in some online gaming communities.¹ A grief player engages in playing to disrupt or distress other players' gaming experiences, and derives enjoyment from such behavior. Although the 'white-eyed' playing in Taiwanese gaming culture seems to include a wider range of activities than that of "grief play," both terms refer to a popular phenomenon that is at the core of the MMORPG culture. Grief players are generally considered the deviants in gaming societies; they break the laws (codes and rules of conduct) of their game worlds, violate the norms and etiquettes of their communities.

Current studies on grief play are limited in quantity and scope. For the most part, grief play is descriptively discussed from the perspective of the players' anti-social behavior or their alternative ways of bringing gratification. In other words, grief play is treated as a phenomenon that engages only the griefers and is relatively independent of other players' actions. However, the making and circulation of the 'white-eyed' (or the griefer) as a popular concept and a widely recognizable category among game players suggest that it requires collective recognition and corresponding social reaction by all players, griefers and non-griefers alike. Bringing all players into the focus of research allows us to see a wider spectrum of behaviors considered deviant in virtual communities and how varied agents of social control have shaped this process.

Following the issue of social control, the study of grief players can also contribute to our understanding of the emergence of power in social interaction. In an online gaming world, power takes several forms: techno-power that is written into system design and embodied in codes of the game, administrative power held by the game master, and normative power enforced by social discipline from all participating agents. Among the three, the last one is the least explored dimension. Thus, in this study we take a close look at the negotiation of normative power in online gaming communities. Who are the griefers? How do players construct the concept of griefer? What are the processes involved in identifying certain actions as grief play and an avatar as a griefer? What are the consequences of being labeled a griefer? How do players interact with griefers, both individually and collectively? And how do griefers react to social punishments and disciplining from others?

In searching for the social control mechanisms behind the white-eyed phenomenon, we found that only repeat offenders are stigmatized as white-eyed players. Although only certain players are stigmatized as white-eyed players, the meaning of the white-eyed is fluid, ambiguous,

¹ In Taiwanese, the literal meaning of the term 'white-eyed' is 'eyes without pupils.' It refers to someone who 'looks without seeing.' In Taiwan's online communities, the term 'little white' has been coined for cursing someone's behavior for being both childish (little) and causing grief (being white-eyed). We found in this study that the word 'little' here is quite important in the process of stigmatization, but for simplicity we will use 'white-eyed' or just 'griefer' in this paper to refer to those avatars who perpetrate offensive behaviors against other game characters.

and multiple. Therefore, introducing a second angle of analysis, that is, constructing the white-eyed as an othering process, will help in completing our understanding of the griever phenomenon. By associating the label of griever with an imagined 'inferior group,' online gamers find a way to cope with their anxiety of cross-age co-playing.

We think the most distinctive property of online gaming that separates it from other games is that, because of the gaming interface, a player cannot tell the sex and age of other players. When playing traditional games, usually we follow social convention or implicit rules on whom to play with. Kids often do not play with other kids of the opposite sex. Grown-ups usually do not play with people from other age groups. However, in an online game we could never be certain that those people we play with are from our desired category of sex or age. Yet we might guess who they really are behind the avatars, and the possibility of co-playing with cross-gender and cross-age strangers makes us anxious. In Taiwanese MMORPGs, "You cursed girlboy!" and "You damned white-eyed!" are two common put-downs when one feels cheated or offended. We found that in name-calling behavior, 'white-eyed' is usually associated with the griever player's imagined age cohort, rather than the exact nature of his or her behavior.

LITERATURE REVIEW

Who are the people behind those offensive avatars? Why do they disrupt others' gaming experience? Some scholars take a micro perspective of player interaction and try to understand griefers from their individual gaming motivation. On the other hand, some adopt a macro angle to examine the griefers based on the rules and norms of the gaming society, and regarded them as deviants.

Personal gaming motives are essential in the micro perspective, and they may overlap with each other. For example, Rieber [12] categorized gaming motivation into four aspects: play as power, play as progress, play as fantasy, and play as self. According to this framework, white-eyed gaming behavior can result from the pursuit of power, that is, doing whatever one likes to do at the expense of others and feeling good when others are offended. Or it is just because the player wants to make some quick progress by taking advantage of loopholes in game rules or taking a shortcut that other players consider unfair. It can also be comprehended as an effort to explore the multiple dimensions of self, e.g., achieving a better understanding of oneself by watching a 'griever self' in the game. All these possibilities focus on individual players and largely ignore both their gaming context and their complex interactions with other players.

Bartle [1] emphasized interactions among various types of players. In his studies on MUDs (pioneering MMORPGs), he employed two dimensions, players' gaming approach (acting/interacting) and gaming target (gaming world/other players), to analyze 'the nature of fun'. Under this partitioning the players are classified as achievers, explorers, killers, and socializers. Accordingly, griefers are members of 'killers'; they play against other players with an aggressive attitude. Later, Bartle [2] introduced a third dimension: the players' self-awareness of their behavior (implicit/explicit). In this more sophisticated framework, 'griefers' are killers without knowing what they are doing, and, in comparison, 'politicians' are conscious killers with a plan.

In the meantime, Bartle suggested that players transform over time. In other words, a player goes through different phases in his or her game life. In this rather dynamic structure, ‘griefers’ and ‘opportunists’ are considered the beginners’ stages because they are both acting implicitly toward an unknown gaming environment. As time passes, they may develop other types or stages. Further, varied types of players may achieve a rather dynamic equilibrium, and griefers certainly contribute their share to this equilibrium.

Instead of looking at ‘griefers’ as a stage in the course of a player’s life, the cultural perspective considers grief playing the common practice that deviates from the norm. Theories such as the social identity perspective [8] may provide insightful interpretations about griefers, such as their collective self-conception and the differentiation among griefers.

However, before taking this perspective to analyze griefers in online games, we need to notice an important factor, pointed out by Denegri-Knott & Taylor [4], that in a computer- and network-mediated environment, a deviant behavior and the person who behaves deviantly can be treated separately, which carries a certain import. Take Taiwan’s MMORPGs as an example. Once a player purchases a gaming account, he or she can play three or four avatars. Thus a player, especially an experienced player, may well play one avatar as a white-eyed (griever) or a ‘red guy’ (person-killer)² to serve such purposes as retaliation, experiencing antisocial conduct, exploring certain special designs in the game (e.g., “kill 99 avatars and you will go to hell”), or even making progress after rational calculation (e.g., to rob or to feud valuable objects from other players with the grief avatar, then transfer them to a normal avatar). Therefore, when asked the question “who may play grief?” most players feel the answer is “every player can be one.”

However, “who are the imagined griefers?” is quite a different question from “who may play grief?” When encountered with this question, many players associate griefers with a specific group of people, and the attribution exemplifies the practice of othering. Since othering is a way of defining and securing one’s own positive identity through the stigmatization of an ‘other,’ we need to know what identity of one’s own needs to be secured before we understand why the othering target is selected.

Moreover, how to deal with griefers when they are identified? This is not just a gaming situation for individual players; the answer to the question points to the strategies of othering behind griever stigmatization. As indicated by Canales [3], two types of othering, exclusive and inclusive, function to achieve different goals. Exclusive othering is for domination/subordination, and inclusive othering for transformation/coalition. Some griefers are identifiable; for example, they organize a ‘griever pledge’ openly. Is the nature of associating them with a certain group exclusive or inclusive?

² In Lineage Taiwan, an avatar becomes visually ‘red’ after it kills a regular avatar, thus the term ‘red guy’ was coined for the visible person-killer. Since a ‘red guy’ is treated as a criminal, it is no longer protected by the game law. Consequently, later when other avatars kill that ‘red guy’, they will not become red themselves. This is a typical example of regulating deviant behavior through game rules.

But most griefers are not easy to identify. In this study we regard playing grief as players' collective reaction in a yet-to-be-normalized environment, and investigate both their fun and anxiety in an online gaming world.

RESEARCH METHODS

To explore the above issues, the two most popular MMORPG games in Taiwan, namely 'Lineage' and 'Ragnarok Online' (RO), were chosen as our major targets of study. Data used for analysis were collected from several sources. First, 20 in-depth individual interviews and 9 focus group interviews were conducted with griefers and non-grief players of the two games. The interviews revolved around several topics, including the players' understanding of attitudes toward grief play and the strategies against it. A total of 53 interviewees, among them 20 females, were selected for hour-long in-depth interviews. Purposive snowball sampling was used to ensure that the sample was representative and not biased with regards to the sex, age, and educational and occupational background of MMORPG players. Their ages ranged from 11 to 54. The sample consisted of 12 elementary school students, 8 junior high school students, 15 senior high school students, 10 college students, 4 graduate students, 2 journalists, 1 social worker, and 1 junior high school teacher. Among all the interviewees, four of them identified themselves as griefers. Once an interviewee revealed that he or she was a white-eyed player, then follow-up questions were asked about the process by which the griefer became a deviant and about the griefer's social situation and resistance against the norms.

Second, we analyzed the regulations and Rules of Conduct posted on the official websites for the two games. Third, we reviewed the griefer clans' representations of themselves and their action reports as they appeared on the game websites. Fourth, we followed grief play-related postings from discussion forums for the two games. We investigated posts on Taiwan's first and second largest games' discussion groups, titled Bahamut and Gamebase. We also analyzed posts from PTT, Taiwan's largest Bulletin Board System and the official website of Lineage in Taiwan.

Finally, the data used in this study also included those collected through participant observations in the online game world. Personal contact and interaction with online game players enabled the authors to become more familiar with the meanings associated with the grief behavior. From these different sources we captured the multi-faceted nature of the white-eyed players.

FINDINGS AND DISCUSSION

Our primary finding is that two types of 'white-eyed' players exist in MMORPGs. The explicit (identifiable and self-aware) type is similar to Bartle's 'politicians.' Their coming out and organizing themselves can be understood as a rebellious response against game rules. On the other hand, most of the grief players are actually the second type--implicit griefers. They play grief in an unidentifiable way with weak self-awareness, and they put the griefer stigma on other age-groups to alleviate their anxiety in a cross-age co-playing era.

Identifying and Punishing Grieferers

Grief playing covers a very broad spectrum of disruptive and annoying activities ranging from verbal rudeness, ninja looting, and scamming, to player killing. In Table 1 we list the white-eyed behaviors mentioned in our interviews and the frequency of each category addressed. Through the interviews we reconfirmed the observation by Foo & Koivisto [6] that the definition of grieferers is ambiguous, changing, and subjective. On bulletin boards or game websites, whenever someone called a certain behavior ‘white-eyed’, almost always there would be someone else stepping forward and claiming that it was not. In addition, some behaviors, such as using bots to boost the ranking of avatars, were engaged in by some interviewees who claimed themselves to be non-grieferers. However, when other players behaved exactly the same way, they were accused of being white-eyed by these interviewees.

Table 1: White-eyed behaviors mentioned in interviews.

White-eyed behavior	Frequency of mentioning
Cursing others for no reason; using dirty words	13
Cheating for valuable equipment	12
Robbing equipment or money popped by killed monsters from the player who did the kill	12
Killing other players without a reason	11
Taking over badly injured monsters from other players	9
Impolite	5
Newbies who do no homework before starting playing	4
Luring monsters to a defenseless place	4
Begging for things	3
Begging for training their avatars	2
Using bots	2
Borrowing things and not returning	1
Killing pets of other players	1
New-Taiwan-Dollar worriers ³	1
Flooding public chatting channels	1

Some of the behaviors are clearly unacceptable by social standards, yet some others are harder to judge. How, then, do players draw the line between acceptable and deviant behavior? From the discussions about white-eyeders on two bulletin boards, we found that players specify grief behavior in three ways. The first one is to describe the grief facts, then analyze and curse

³ This term refers to a player who uses real currency, such as New Taiwan Dollars, to purchase game currency outside the game, and then buys valuable equipment in the game from other players via chat and PayPal instead of working hard to earn it like most other players.

the motivation behind them. Within this category the issue about ‘whether he did this consciously’ was frequently discussed. Many participants thought a white-eyed is someone who does not understand the gaming situation, whereas, someone who actually knows and still does it is a ‘bad guy’ or a ‘hypocrite’, but not a ‘white-eyed’.

Second, grief is differentiated for low-ranked avatars. In other words, newbies in the game are likely to be white-eyed. Third, the identity of the white-eyed avatar is attributed to its player’s real identity outside the game. For instance, white-eyed players were described as ‘with little knowledge’ or, more specifically, ‘junior high school kids’. But again, whatever was said about the griefers on the discussion boards, different opinions always followed. Interviewees hardly reached a consensus on grief plays.

How do players interact with griefers, individually and collectively? Normal players are in general very angry with the white-eyed players but can take no proper measures to punish them. An interviewee mentioned that since griefers are not willing to have a legitimate fight with him in the ‘person-killing field’, there is no way for a square, direct retaliation to take place. The only option is to curse the griefer and leave him alone. In addition, since the game world is so huge, it is possible that you will not run into him again.⁴

Some offended players posted the griefer’s name on related forums, but it was not effective since most viewers did not bother to take down all the IDs for later reference. Furthermore, because, as mentioned above, the definition of ‘griefer’ is not so clear, misunderstanding is a common problem. On one Bahamut RO bulletin board, someone called for a cooling down period before posting another’s ID, to avoid possible misunderstanding. Probably owing to the same reason, game management seldom plays an active role in regulating the grief behaviors by defining and enforcing specific rules.

Two Types of Griefers: How they perceive and respond to stigma

Through our interviews we observed that there are two types of griefers. The first group is well known or even infamous for their grief play; they are easy to identify, aware of their white-eyed status, and proud of it. A griefer posted on a bulletin board that he felt honored that he was wanted by six pledges. The second group, on the contrary, has a rather vague contour; they conduct white-eyed behaviors occasionally, but accuse others of grief play from time to time. The two types need to be discussed separately.

We list in Table 2 the different attitudes toward the game and varied responses to the white-eyed stigma by the two types of griefers. Well-known griefers are usually indifferent towards the game rules; they claim they are creating their own rules. A member of a griefer pledge told us, “You pay to play with unintelligent artificial characters, I pay to play you.” In

⁴ We found similar situations on a Western website named “Ready, set, game: Learn how to keep video gaming safe and fun: 10 tips for dealing with game cyberbullies and griefers.” It provides suggestions such as “ignore them”, “play on sites with strict rules”, “play games that limit griefers”, “avoid using provocative names”, and so on.

contrast, those who occasionally play grief believe that the game rules should be followed and more regulation is needed in order to build up a safe and fair game world.

Table 2: Differences between Two Griever Types.

	Attitude toward the game	Response to the white-eyed stigma
Well-known, self-aware grievers	Overpass game rules	Professionalization
Occasional, unconscious grievers	Protect game rules	Othering

In addition, when facing the white-eyed stigma, some self-aware grievers turn to professionalization as the trick to handle the crisis. They try to claim that there were rules about how to be a good griever. They claim professional grievers are the ones who go by the rules; grieving is no easy job. Moreover, the professionalization is at work when they set up organization, i.e., arranging a griever pledge so as to declare their right to define what a griever is. Of course, an ordinary player would not recognize the grievers’ activities as a profession. An interviewee said, “organized activities are not considered white-eyed!”

For the occasional grievers, they have a totally different mechanism to deal with the white-eyed stigma--namely, othering. By associating white-eyed behaviors with a group of ‘childish’ or ‘innocent’ players, they can justify their previous grief conducts as mistakes, on the one hand, and separate themselves from the stigmatized players, on the other hand. We observed that their reference to ‘the others’ were quite unambiguous. Almost all the interviewees imagined the white-eyed as “a sort of people”; “I don’t know them”; “they are not of my kind.” The segregation of us and them is rigid, with no possibility of crossing the boundary.

But as aforementioned, every player may play grief. And as a matter of fact the ordinary players may well empathize with the grief behaviors. Jennie, a 5th grade girl in elementary school, told us that the griever’s “private sub-consciousness drives him to do so, or he is just willing to present another self of his.” But nonetheless, they feel obliged to accuse the white-eyed from time to time. Why? We think that aside from personal reaction to offensive grief acts, accusing the white-eyed serves other social functions in MMORPGs. Through constantly reinforcing the stigma on the white-eyed, the ordinary players express their longing for order in the online gaming world.

The multiple identities in the game make the above mechanism even more sophisticated than simple stigmatization. Coco, a third-year university student in a master’s program, mentioned that “as long as the avatar I got to know is straight, that’s enough. I don’t care if you play grief with your other avatars.” Virtual societies provide a space for multiple identities to share, which provides fundamental contexts for us to better understand the griever stigma.

In summary, what we observed suggests that the online gaming world is a yet-to-be-normalized environment. In this gaming society, the “doing difference” mechanism proposed by West & Fenstermaker [14] is constantly functioning.

Cross-Age Co-Playing: Anxiety behind white-eyed stigmatization

Next we examine the question, “who are the imagined griefers?” Based on our interviews as well as the discussions on game bulletin boards, the imagined age of the griefers was an essential factor. And, most of the speculations pointed to one specific group: junior high school students. Table 3 shows eight interviewees by age-group, identity in the physical world, and what they assumed to be the identity of the white-eyed.

Table 3: Who are the imagined white-eyed?

Interviewee	Identity/age-group	Imagined white-eyed
Michael	Junior high student	Junior high students
Calvin	Senior high student	Junior high or elementary school students
Richard	Undergraduate student	Junior high or vocational school students
Mabel	Undergraduate student	Junior high or elementary school students
Kim	Undergraduate student	The younger the more likely
Peggy	Undergraduate student	Junior high or vocational school students
Leo	Master program	Teenagers
Coco	Master program	Kids

Why did junior high students, or early adolescents, become the scapegoats? As mentioned above, the gaming world is not only an environment with developing social norms, but it also exists as a new sphere demanding its own identity as it becomes embedded in the society. The MMORPGs and their players are still suffering from various stigmas. This external factor has a profound influence on the white-eyed phenomenon, especially on the embedded othering mechanism.

In Taiwan, when a person plays online games at home or at an Internet café, he or she is possibly considered ‘do not mind serious business’ or ‘out of touch’, which causes parents to worry. The parents, except for the few who play games themselves, expect their children to stop being childish and stop playing games day and night. Then, at what age should a person be considered too grown-up to play games intensively? According to our interviews, senior high school students already start to be aware of this social pressure and expectation, and start to feel anxious about it. In other words, junior high school is the last stage one can legitimately play games intensively, according to our existing social norms. Of course, in a pre-video-gaming society, adults and youths have their own ‘games’, such as sports games or power games, and they play the games with other people from the same age group. However, after the appearance of video games, especially online games, this gaming culture of “playing-within-one’s-own-age-group” was subtly but relentlessly disrupted.

MMORPGs have, it seems, allowed human beings to experience their very first large-scale, cross-age co-playing. And we believe that playing grief, the griever stigma, and the associated othering mechanism all resulted from this brand new anxiety toward cross-age co-playing. In the MUD era, because the entry thresholds with regards to gaming techniques and network resources were still high, the players were still of similar ages and they sensed other players behind various ids were people just like themselves, i.e., twenty-something professionals or college students. At that time, the primary anxiety about identification in MUDs was gender [9]. Now, the focus has shifted to age.

Figure 1 depicts the age group distribution of Taiwan’s online game players. Adults (over 19 years old) have exceeded 80 percent. This ratio is even higher than the survey conducted by Griffiths, Davies & Chappell [7] on two Everquest fan websites, in which more than 60 percent of the players were adults.

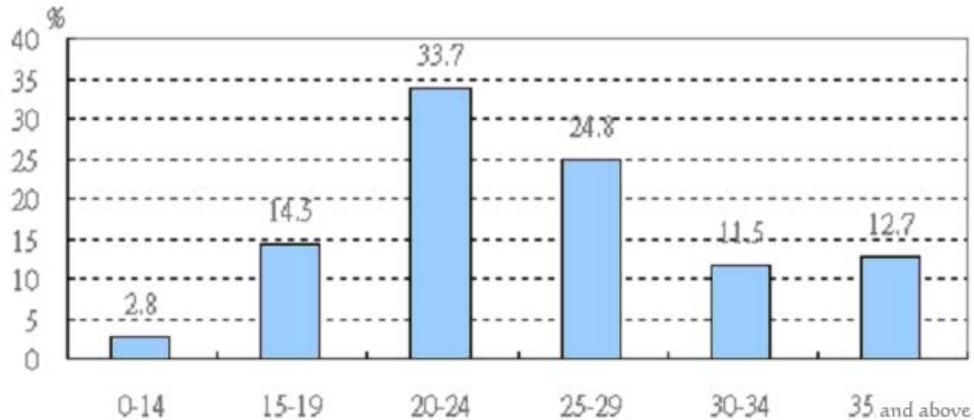


Figure 1: Age distribution of Taiwan’s online game players, 2004.
(Source: Insight Xplorer Marketing Research Company, Taiwan.)

We can say that video games used to be considered as the best pastime for adolescents, with regards to the social legitimacy of playing. Now, in the MMORPG era, both adults and kids have joined in the playing. Consequently, the three parties are playing with each other behind their avatars, but in the meanwhile, fighting for the power to control and interpret the game. For the adults, by accusing the griefers of being childish or by putting the word ‘little’ before ‘white-eyed’, they are trying to redefine the legitimate age for playing games. By means of othering the griefers by their age, they proclaim: “This is our game!” At the same time, they also deny the stigma from non-players that, “playing games is childish”.

In comparison, our interviewees in elementary schools did not reveal a specific impression about who the white-eyed are. They just feel that online games are a rather opaque world for grown-ups. Thus, when they encounter a grief avatar, they run away from it. Finally, for the junior high school students, they are the target of stigmatization within the game and they bear the brunt of the finger-pointing from all age groups, including their own. They can feel the pressure of the stigma. For instance, one 9th grader posted on the Bahamut Lineage board that when the time came for junior high students to leave the schools, someone in an Internet café, by using the public chatting channel, called for everyone to be one the alert and to hide account and password information. He felt bad about this. However, since games were originally ‘theirs’, they cannot just let others take them over. Some would even accept the griefer stigma; Michael, a junior high interviewee told us: “White-eyed junior high students like us did all these (grief plays). It is not likely a grown-up would be white-eyed.”

CONCLUSION

We found that there are two types of white-eyed players or griefers, one identifiable deviant group, the other faceless and fluid. Moreover, the purpose of the commonly existing griefer stigma is two-fold.

First, it takes effort to identify what the bad and inappropriate behaviors are so as to confirm the norms of good and acceptable behavior. However, this attempt to reduce the ambiguity of the moral 'gray zone' in the social interaction of virtual gaming communities is unsuccessful, because as proposed the definition of playing grief is ambiguous, and subject to both sides of the grief conduct. The only way to identify a griefer is when he or she comes out. The infamous but self-aware griefers justify their offensive ways of playing the game, and some even organize their own pledges and try to grieve in a 'professional' way. Furthermore, the griefer counter-culture serves as a fine illustration of the deviant group. The clans of the griefers develop their own identities and distinctive norms against that of the mainstream gaming community. Their self-perceptions and group identities offer us rich materials for exploring another dimension of the deviance formation story.

Second, since in general a griefer is hard to identify and almost all players may, at one time or another, engage in white-eyed behavior with or without knowing it, the griefer stigma is not for creating a group of 'outsiders' and making them visible targets for social sanction in the game. Rather, it is for naming a group of 'others' outside the game so that adult players can redefine gaming in their own way. 'Little white-eyed' or 'childish griefer' is not only a dirty name to call the player behind an offensive avatar, but also a response that emerges out of the collective anxiety about cross-age co-playing, which is a brand new experience for us.

REFERENCE

1. Bartle, R. "Hearts, clubs, diamonds, spades: Players who suit MUDs." in *Journal of MUD Research* vol.1, no.1 (1996). Available at <http://www.mud.co.uk/richard/hclds.htm>
2. Bartle, R. "A self of sense." (2003) Available at <http://www.mud.co.uk/richard/selfware.htm>.
3. Canales, M.K. "Othering: Toward an understanding of difference." in *Advances in Nursing Science* vol.22, no.4 (2000), pp.16-31.
4. Denegri-Knott, J., and Taylor, J. "The labeling game: A conceptual exploration of deviance on the Internet." In *Social Science Computer Review* vol.23, no.1 (2005), pp.93-107.
5. Ellemers, N., Spears, R., and Doosje, B. "Self and Society Identity," in *Annual Review of Psychology* vol.53 (2002), pp.161-186.
6. Foo, C. Y., and Koivisto, E. "Defining grief play in MMORPGs: Player and developer perceptions," paper presented in the *International Conference on Advances in Computer Entertainment Technology (ACE) 2004*, (Singapore, Jun 3~5, 2004).
7. Griffiths, M.D., Davies, M.N.O., & Chappell, D. "Breaking the stereotype: The case of online gaming," in *CyberPsychology and Behavior* vol.6 (2003), pp.81-91.
8. Hogg, M. A., Abrams, D., Otten, S., and Hinkle, S. "The Social Identity Perspective: Intergroup Relations, Self-Conception, and Small Groups," in *Small Group Research* vol.35, no.3 (2004), pp.246-276.
9. Lin, H., and Sun, C.T. "Problems in simulating social reality: Observations on a MUD construction," in *Simulation & Gaming* vol.34, no.1 (2003), pp.69-88.
10. Link, B.G. & Phelan, Jo C. "Conceptualizing stigma," in *Annual Review of Sociology* vol.27 (2001), pp.363-385.

11. Mulligan, J., and Patrovsky, B. *Developing Online Games: An Insider's Guide*. New Riders, Indiana, 2003.
12. Rieber, L. P. "Seriously considering play: Designing interactive learning environments based on the blending of microworlds, simulations, and games," in *Educational Technology Research & Development* vol.44, no.2 (1996), pp.43-58.
13. Salen, K., and Zimmerman, E. *Rules Of Play: Game Design Fundamentals*. MIT Press, Cambridge, 2004.
14. West, C., and Fenstermaker, S. "Doing difference," in *Gender and Society* vol.9, no.1 (1995), pp.8-37.