Social Regulation in Virtual Spaces

Jack Muramatsu
Information and Computer Science
University of California, Irvine
Irvine, CA 92697 USA
+1 949 824 1338
jmuramat@ics.uci.edu

ABSTRACT
The described dissertation focuses on social regulation of user behavior within virtual social spaces. A multi-year field study of two fantasy-based game MUDs (multi-user dungeons) was conducted to gain a detailed understanding of the work involved in regulating behavior in these virtual environments. This field study examines the work and techniques employed by game administrators (immortals) to maintain social regulation over their respective game MUDs. One key feature of social regulation in such virtual spaces is the use and possible use of specialized software routines to regulate specific behaviors. Ongoing analysis of the field study data is expected to provide an understanding of how aspects of the virtual world affect the manner in which social regulation is performed.

Keywords
Virtual spaces, social regulation, MUDs

INTRODUCTION
Social regulation[1] is an important and necessary social activity. It has been described as *"social arrangements employed to keep the behavior of some people in line with the expectations of others"*[2]. With the rise of virtual social spaces comes the increased use of technical means to effect social regulation. The fact that users' behavior in these virtual spaces is completely mediated by the underlying software facilitates the design and implementation of software code to regulate specific targeted behaviors. The use of code to regulate users' behavior represents a noteworthy partial shift away from people as the active agents of regulation. Social regulation in any particular virtual space can be thought of as a mixture of several types of regulation. A useful way of classifying regulation types is by the amount of work that is delegated to a non-human actor, in our case software code. This results in a continuum of regulatory types with the two end points being human-driven regulation and regulation driven by delegated computer software routines. As the Internet becomes an increasingly more pervasive part of daily life, the use of code to regulate behavior will likely increase and thus so too the importance of understanding the ramifications of these newer forms of regulation. To that end,

.

the described dissertation work is focused on answering two primary research questions:

❖ How do various types of regulation differ in their operation and social impact?

❖ What are the motivations behind and circumstances under which system administrators choose to change the type of regulation employed for a specific rule?

As environments where conflict between players is an integral part of the gameplay experience, game MUDs (multi-user dungeons) offer an excellent opportunity to observe regulation performed by administrators and by software code employed by administrators for that purpose. A multi-year field study of two fantasy-based game MUDs was conducted with the aim of answering these two research questions. Given their authoritative position in a MUD, the field study focuses on social regulation performed by game administrators rather than by players.

Previous work on social translucence[1] has focused on design techniques for increasing awareness and accountability in virtual spaces. The focus on social regulation extends such concerns by examining the work, decision making, and pragmatic tradeoffs undertaken by administrators in leveraging social translucence as a means of regulating user activity. The field study and the ongoing analysis will fill a gap in the currently limited literature on social regulation in MUDs and other similar virtual spaces [3,4].

FIELD SITES: ODYSSEY AND ILLUSION
I have conducted a field study involving participant observation on two text-only game MUDs which I will refer to as Illusion and Odyssey. I conducted participant observation on Illusion as an immortal (game administrator) from September 1997 to June 2001. I have studied a second system, Odyssey, from June 2002 to the present. In terms of user activity, Illusion has roughly 40 or so active players with an observed high-usage point of roughly twenty players online at the same time. Odyssey is much larger in terms of player base with roughly 300+ active players and an observed high-usage mark of about 250 players online at the same time.

Illusion and Odyssey are virtual worlds structured around a

---

[1] Social regulation is used as an alternative to the more common but often socially problematic term, "social control".

medieval fantasy based game. The players of these games use their personally created characters (often referred to as mortals) to explore the world and interact with other players. Players engage in two primary styles of game play. The first is often referred to as "leveling" and involves hunting and killing computer-controlled mobs (mobiles) as a means of increasing their character's game level. Many players also engage in adversarial play which involves direct competition between players, the primary example of which is player (character) killing or PK.

ADMINISTRATOR-DRIVEN REGULATION

Immortals are volunteer game administrators of a MUD and one of their primary responsibilities is to regulate player behavior in accordance with a MUD's formal rule set. Social regulation is a complex interactional process between players and immortals. Based on observations from both field sites and preliminary analysis of that data, it is clear that enforcement of rules by immortals cannot be reduced to a simple process of applying the rules to player behavior. Rather, immortals rely on previous experience to guide their determination of whether a particular action should be considered a violation of a particular rule and if so what response (punishment) is warranted. This process of using categories based on previous experience to guide enforcement activities has been described as *normalization*[5] in the literature on policing. The ongoing analysis of the observational data focuses on the central role of normalization in carrying out social regulation and on particular ways in which normalization differs in virtual environments as opposed to physical environments.

In the ongoing analysis of the observational data, particular attention will be paid to ways in which each of the sites' virtual environment structures the way in which immortals regulate player behavior. One key example of this structuring can be seen in the use of immortal-only commands built into the underlying MUD software to carry out activities such as surveillance and evidence gathering as well as punishing players deemed to be in violation of a particular rule. So while immortals drive the process of enforcing many of the MUD's rules, technology in the form of immortal-only commands plays an important role as well. Beyond this use of code to assist in the regulation of behavior, immortals on both sites have chosen to design and implement specific software routines to automatically enforce particular rules.

CODE-DRIVEN REGULATION

Seventeen cases of the use of code to automatically enforce specific rules have been extracted from the observational data from both sites. These cases which range in duration from a couple of months to nearly a year, span multiple sets of observations of immortal discussions about putting a rule "in code" through implementation and subsequent activation and use. In addition, each of the cases pertaining to Illusion includes full source code of the implemented rule enforcement routine.

In cases involving a shift from enforcement by immortal to enforcement delegated to code, data and findings on the immortal-driven enforcement of the rules including normalization and course of action will be compared with the source code implementations of the routines subsequently written to enforce those same rules. This will be done in order to analyze differences in operation between the two forms of enforcement.

Outcomes including both immortals' and players' experience with the coded restriction or rule will be carefully analyzed. Where applicable, the outcomes will be compared with data and findings related to prior immortal enforcement of the case's rule. Comparison of outcomes between both forms of enforcement will serve as one means of addressing the question of potential shortcomings and limitations of delegating aspects of social regulation to software code.

EXPECTED CONTRIBUTIONS

Contingent on the outcome of the ongoing analysis of the data from both field sites, the described dissertation will provide two key contributions. The first will be an understanding of the work required of system administrators in order to regulate behavior in virtual spaces. In particular, it will provide an understating of how evaluation of situations and people (*normalization*) differs in virtual spaces compared to physical spaces. The second contribution will be to provide an understanding of the operation, outcomes, and limitations of the use of code-driven regulation.

REFERENCES

1. Erickson, T. and Kellogg, W. Social translucence: an approach to designing systems that support social processes. *ACM Transactions on Computer-Human Interaction* (TOCHI), Vol. 7, Issue 1, 2000.

2. Hewitt, John P and Hewitt, Myrna Livingston. *Introducing Sociology: A Symbolic Interactionist Perspective*. Prentice-Hall, 1996

3. Pargman, Daniel. *Code begets Community: On Social and Technical Aspects of Managing a Virtual Community*. Linkoping University, Department of Communication Studies, Ph.D. dissertation. 2000.

4. Reid, Elizabeth. Hierarchy and power: Social control in cyberspace. In Smith, M. and Kollock, P. (eds). *Communities in Cyberspace*. Routledge, New York, 1999

5. Sudnow, David. Normal Crimes: Sociological Features of the Penal Code in a Public Defender Office. *Social Problems*, 12, 1965, pp. 255-76.