Virtual Misbehavior: Breaking Rules of Conduct in Online Environments

Janet Sternberg [1]

Twelve years ago, in the dead of winter, at the University of Oulu in Finland, a computer programmer named Jarkko Oikarinen created software for live, typed conversation among individuals and groups on the Internet. He called his software "Internet Relay Chat," abbreviated as "IRC" (Oikarinen & Reed, 1993; see also Cheung, 1995; Reid, 1991; Surrat, 1996, pp. 27–29). Six years ago, in the dead of winter, at my apartment in Brooklyn, New York, I discovered Oikarinen's creation and stumbled onto IRC for the first time. That fateful evening introduced me to life online in general, and in particular, to crime and punishment in virtual environments.

What I encountered on IRC eventually led to the research I'm conducting for my doctoral dissertation. I'm studying the aspect of life in cyberspace that intrigues me the most: misbehavior in online environments. It seems that wherever people gather on the Internet to interact with each other, some folks make, follow, and enforce the rules of civilized online behavior, while others break those rules and misbehave. In my research, I'm examining the types of misbehavior in which people engage, the rules of conduct people break, and the ways people deal with such misbehavior in a variety of online environments. In this paper, I describe the path that led me to develop this research topic.

My interest in online misbehavior grew out of experiences I had on IRC. On IRC, people gather in places they call "channels" to "chat" in real time by typing to each other. The more time I spent on IRC, the more I noticed things that drew my attention to misbehavior. Gradually, I came to suspect that dealing with misbehavior is a central part of life on IRC.

Initially, I noticed that the IRC software itself includes features which anticipate a need to regulate conduct, as if predicting that people will misbehave. The original IRC program contained two features that remain key elements of the many versions of IRC released since 1988. First, every participant has access to an "ignore" command, which blocks incoming messages from selected other participants. Second, each IRC channel is controlled by certain participants called "operators." Channel operators have access to special commands (unavailable to ordinary users) to "kick" participants out of a channel or even "ban" them from entering a channel at all. Thus, individuals can ignore others whose comments they deem undesirable, and operators can kick and ban troublemakers so as to maintain order in their channels. These features of IRC (and there are others) provide built-in tools for dealing with misbehavior and regulating online conduct.

The next hint I received that misbehavior figures prominently on IRC came from observing that IRC participants misbehave as often as they discuss rules of online conduct, which is to say, all the time. Misbehavior is a daily occurrence on IRC, something encountered routinely, dealt

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[1] Janet Sternberg is Assistant Professor in the Department of Communication and Media Studies, Fordham University, Bronx, NY 10458-9993 (jsternberg@fordham.edu). An earlier version of this paper was presented at the annual convention of the New York State Communication Association, Monticello, New York, October 10, 1999.

with constantly, and talked about incessantly. For years now, IRC users around the globe have been debating issues related to virtual misbehavior, on hundreds of channels on dozens of IRC networks, as well as on IRC-related electronic mailing lists, message boards, and sites on the World Wide Web. In venues like these, IRC users manifest their preoccupation with misbehavior by debating various aspects of the regulation of online conduct.

I ultimately became convinced that misbehavior is a focal point of attention on IRC when I accepted the status of operator on a couple of channels I'd been frequenting for a while. Channel operators use their special powers to enforce the rules and discipline those who misbehave. The commands to kick or ban are simple, but figuring out when to use these commands can be complicated. As operator and rule-enforcer, I had to recognize when someone was breaking the rules and misbehaving, and decide what to do. My fellow operators taught me how to enforce various rules that people might break. Some rules applied to IRC in general, some to specific channels only. Some rules related to common sense and politeness, and others to technical aspects of IRC. There were even rules for enforcing the rules! As I developed and exercised my abilities as operator, I learned firsthand that IRC participants do indeed devote a lot of time and energy to issues revolving around misbehavior and the regulation of online conduct.

Once I realized the extent to which IRC participants concern themselves with misbehavior, I began to wonder whether this might be the case elsewhere online. After all, IRC is just one kind of online environment where virtual communities develop—there are many others. How prevalent was misbehavior in other places where people gather online? How prominent were issues related to the regulation of conduct in online environments besides IRC? I set out to explore these questions in the two main types of text-based environments in which people gather to interact on the Internet: chat systems and post systems (see, e.g., Herz, 1995; Rheingold, 1993, pp. 110196; Sternberg, 1998; Strate, 1996, p. 369; Strate, Jacobson, & Gibson, 1996, pp. 8–9; Surrat, 1996, pp. 28–34).

Chat systems such as IRC employ synchronous communication: Participants hold live conversations by typing to each other simultaneously, which requires them to be present online at the same time, much like chatting on the telephone. Besides IRC, people gather for real-time typed conversation on the Internet in the "chat rooms" of America Online and the "CB channels" of CompuServe, and they also chat on Web sites. Some synchronous systems, known as Multi-User Dungeons or Domains ("MUDs") and MUDs-Object-Oriented ("MOOs"), allow users to combine chat with role-playing and text-based props and scenery. And synchronous chat systems such as The Palace incorporate graphics in addition to text: Users appear on screen as images called "avatars" and interact with graphical props and scenery, as well as typing to each other.

Post systems, on the other hand, involve asynchronous communication: Participants conduct non-simultaneous, delayed typed conversations, reading and replying to each others' posts at different times as suits their individual convenience, similar to "snail-mail" correspondence or to notices on offline bulletin boards. Countless asynchronous post systems exist on the Internet. Electronic mailing lists called "listserves" circulate posts among subscribers. The international system of public message boards referred to as Usenet newsgroups, as well as a growing multitude of private and commercial posting sites on the Web, are frequented by hordes of participants. People also post in asynchronous discussion conferences on independent bulletin board

services ("BBSs") such as FidoNet, The WELL, and Echo, and in asynchronous message boards and forums of mainstream networks such as America Online and CompuServe.

Visiting and reading about chat and post systems such as these, I satisfied my curiosity regarding the prevalence of misbehavior in a range of virtual gathering places and the importance that participants attribute to the regulation of online conduct. For both chat and post systems, as for IRC, my preliminary investigations uncovered ample evidence to suggest that people are definitely concerned with regulating conduct in their online environments.

First, I discovered that almost every chat and post system has built-in features for dealing with online misbehavior. Most systems offer ordinary participants an equivalent of the IRC "ignore" command to block messages from users whose comments they prefer not to receive. In addition, systems usually have some sort of rule-enforcer analogous to the channel operators on IRC, although their presence isn't necessarily apparent to average users. Depending on the particular system, enforcers go by titles as diverse as "sysop" (on BBSs and on CompuServe), "wizard" and "god" (on MUDs, MOOs, and The Palace), "moderator" (on listserves and in Usenet newsgroups), and "community leader," "ranger," and "guide" (on America Online). IRC itself has higher-level enforcers than channel operators: the IRC server operators called "IRCops," who may use extended privileges to remove troublemakers not only from channels but from entire IRC networks as well. The precise responsibilities of rule-enforcers such as these vary as much as the technical features of their respective systems and the rules they enforce. But, like the "kick" and "ban" commands used by IRC channel operators, most enforcers or "superusers" have analogous special powers for disciplining those who break the rules.

Next in my quest for information about misbehavior in online environments, I found that in most chat and post systems, people do in fact misbehave quite a bit, and others spend a good deal of time and energy discussing how to handle such misbehavior. In practically every virtual gathering place I looked at, participants engage in the same sorts of ongoing debates as IRC users about misbehavior and the regulation of online conduct. Participants in chat systems and post systems alike all over the Internet are preoccupied with misbehavior in their online environments.

Then I came across a wealth of online documentation produced by and for users themselves, pertaining to rules of conduct. Such documents typically set forth rules of conduct applicable in different online environments, stipulating policies for enforcing rules as well as sanctions for breaking them. Some documents are informal primers on proper network etiquette, often referred to as "netiquette." Some are compilations called Frequently Asked Questions or "FAQs." Yet others are more formal agreements known as Acceptable Use Policies or Terms of Service. In addition, guidelines for conduct often appear in the help features and manuals of software used to participate in online environments. The existence of such an abundance of documentation provides further evidence that the regulation of online conduct figures prominently in a wide range of virtual gathering places.

At this point, convinced that misbehavior on the Internet is widespread, and that the regulation of online conduct is critically important to those who participate in virtual communities, another question occurred to me. What did others besides virtual community participants have to say about misbehavior and the regulation of online conduct? As a media ecologist concerned with the effects of new technologies on human communication, I felt sure there must be research about online misbehavior, so I began to search for literature on the subject.

Indeed, I discovered quite a bit of material, but it would take us too far afield in this paper to describe in detail the literature I found which relates to misbehavior in online environments. Suffice it here to say that this literature falls into four groups. First is research concerning computer-mediated communication online and virtual communities in general (e.g., Baym, 1995; Foster, 1997; Holmes, 1997; Jones, 1995; Kollock & Smith, 1999; Lazar, 1999; Rheingold, 1993; Riley, Keough, Christiansen, Meilich, & Pierson, 1998). Second is research about an infamous triad of troublesome online behavior: flaming, spamming, and virtual rape (e.g., Collins, 1992; Dery, 1993; Dibbell, 1993, 1996; Leonard, 1997, 1998; Stivale, 1997). Third is research on cybercrime and law-breaking throughout the Internet from computer science and jurisprudence perspectives (e.g., Branscomb, 1996; Denning & Denning, 1998; Denning & Lin, 1994; Gardrat, 1997; Grabowsky & Smith, 1998; Johnson, 1996; Parker, 1998; Rose, 1995; Wisebrod, 1995). And fourth is research investigating misbehavior and rule-breaking in virtual communities from communication and media theory perspectives, in particular, studies of online behavior management and social control (e.g., Bruckman, 1994, 1999; Dutton, 1996; Kollock & Smith, 1998; MacKinnon, 1995, 1997, 1998; McLaughlin, Osborne, & Smith, 1995; Mnookin, 1996; Phillips, 1996; Reid, 1999; A. D. Smith, 1999; C. B. Smith, McLaughlin, & Osborne, 1998; Sproull & Faraj, 1997; Suler, 1997a, 1997b; Surrat, 1996).

These four groups of literature represent the areas of inquiry which contain the most fertile and provocative ideas about the regulation of conduct in online environments. What I concluded after reviewing these four groups of literature is this. Various scholars agree that looking at misbehavior can unveil and illuminate patterns in regular behavior which might otherwise go unnoticed, and that additional inquiry is urgently needed into misbehavior in online environments. But the status quo in research about virtual misbehavior is mixed.

In the realm of cybercrime and law-breaking research, confusion and ambiguity are multiplying rather than diminishing, and the state of affairs is dismal indeed (Sternberg, 2000). Computer science and jurisprudence experts cannot agree on what constitutes cybercrime or who controls cyberspace. Questions of cyberlaw bewilder laypersons and professionals alike around the world. Dissent, censorship, and free speech issues on the Internet have generated an abundance of First Amendment follies in the United States courts. And cyberspace abusers are sometimes treated as malevolent and sinister criminals, but sometimes merely as mischievous and playful pranksters, leading to rampant definition schizophrenia. Furthermore, there is no ringmaster whatsoever in charge of the legal jurisdiction circus in cyberspace, where familiar geographic boundaries become irrelevant, if not entirely meaningless.

The state of affairs in the realm of misbehavior and rule-breaking research is somewhat more optimistic. In the past few years, misbehavior on the Internet has begun to capture the attention of scholars and to gain recognition as a subject worthy of serious investigation. However, the literature which directly addresses misbehavior in online environments is still quite limited. Existing literature about virtual misbehavior from communication and media theory perspectives examines either specific aspects of misbehavior, or misbehavior in particular virtual communities, concentrating on issues of behavior management and social control. With the exception of one monograph and several chapters of a doctoral dissertation, significant literature about virtual misbehavior consists largely of articles from communication and media journals and computer-mediated communication anthologies, as well as pieces published online. None of the literature provides a

general survey of the entire topic, and to date, there is no book-length treatment devoted to the subject as a whole. Yet existing studies indicate beyond a shadow of a doubt that misbehavior occurs in practically every gathering place on the Internet, and that the regulation of online conduct is a universal concern for participants in virtual communities.

Moreover, throughout the related literature, researchers call for additional inquiry into misbehavior in online environments. For example, D. E. Denning and Lin emphasize that "how to determine the appropriate, acceptable, and effective sanctions to control miscreant behavior is an area that still needs careful analysis and development" (1994, p. 54). Dutton agrees that regulation of electronic communities is "a serious issue that merits more sustained debate and systematic analysis," and that "relatively few studies have looked at the norms governing this new medium. Norms have been identified as a critical factor shaping communication on networks ... but rarely studied" (1996, pp. 270, 288, n. 3). Sproull and Faraj, too, claim that more research is necessary, particularly comparing different online environments: "We also need research that documents implicit codes of behavior and social influence mechanisms across a wide variety of group types" (1997, p. 49). MacKinnon as well highlights the importance of investigating online misbehavior: "Sociopathy has been a major part of our virtual interaction from the beginning, despite our inability or failure to comprehensively document and research it. It is abundantly clear that the 'darker side' of virtual life merits considerable study" (1997, p. 207). And Kollock and Smith argue that "given the new possibilities that emerge in computer-mediated interaction, cyberspace provides an important research site to explore this fundamental question of social order" (1996, p. 110). Furthermore, they stress that the need is growing increasingly urgent: "As computer-mediated interaction becomes the medium through which public discourse takes place, the ways in which that discourse is socially organized become more consequential" (p. 125). The study of virtual misbehavior seems to offer particular promise as a way to shed light on social issues of importance in online environments that may well bear on social relations in the offline world.

I believe that to understand more precisely the nature of computer-mediated communication and interaction online, we must develop a clearer picture of virtual misbehavior. I propose that we can enhance our knowledge of both the symbolic and the physical environments we currently inhabit, our communities in cyberspace as well as our traditional communities offline, by studying the ways in which people make, break, and enforce rules of conduct in online environments.

And that is the story of how I came to research crime and punishment in virtual communities, that is, misbehavior in online environments. In closing, I trust I have not broken any rules of paper-presentation conduct, and I thank you, the audience, for behaving appropriately too.

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