CONTEXTS AND CUES IN CYBERSPACE: THE PRAGMATICS OF NAMING IN TEXT-BASED VIRTUAL REALITIES

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Although the relative paucity of social cues in computer-mediated communication poses problems for the organization of social relations in cyberspace, recent studies have begun to focus on the ways in which this deficit is managed. This article contributes to this research by addressing the question of how participants distinguish between contexts in online discourse. Data on cues, and on naming practices in particular in text-based virtual realities called MOOs illustrate the structure of contexts and the dynamics of contextualizing communication and interaction in cyberspace.

Participants in social interaction orient themselves by attempting to understand "what's going on." They do this by analyzing the contexts in which interaction occurs. This is true offline and online, but in the case of the text-based interaction that takes place in cyberspace, with its relative paucity of social cues, interpreting a context is particularly problematic. Nevertheless, studies have begun to focus on the ways in which this deficit is managed. (For recent accounts of both the problems and the attempts to solve them, see Baym 1995; Lea and Spears 1995; Parks and Floyd 1996; Reid 1995; Walther 1996.) This article contributes to this line of research by addressing the question of how participants in cyberspace distinguish between contexts in online discourse.

I address this issue by analyzing data on cues, in particular the use of real names rather than pseudonyms, that signal and transform contexts in a type of synchronous computer-mediated communication (CMC) called a MOO. A MOO is a kind of a MUD (Multiple User Domain), which, in turn, is a type of text-based virtual reality (VR) commonly found on the Internet. With few exceptions (e.g., Bruckman 1993; Chemy 1995a, 1995b; Marvin 1995; Reid 1994, 1995), MOO social interaction has received little systematic study, and much of that is descriptive rather than analytical. Most research about CMC has focused on other settings, as Danet (1995) has noted-work groups (e.g., Garton and Wellman 1995; Sproull and Kiesler 1991), newsgroups (e.g., Baym 1995; McLaughlin, Osborne, and Smith 1995; Parks and Floyd 1996), bulletin boards (e.g., Wilkins 1991), and chat lines (e.g., Ruedenberg, Danet, and Rosenbaum-Tamari 1995).

The data analyzed here come from naturally occurring instances of CMC and were collected over a period of several months during which I engaged in a type of online ethnographic fieldwork. This method of gathering data supplements those used in the kinds of short-term laboratory or experimental stud-
ies that have characterized most CMC research; the need for it has been identified by various researchers in different disciplines (Escobar 1994; Lea and Spears 1995; Parks and Floyd 1996; Walther 1996). I participated in and/or observed the kinds of interactions described below; I also “listened” to others’ accounts of interactions engaged in by themselves or others; and I drew on logs of interactions recorded by others, of which some are publicly available in histories or archives maintained on several MOOs and others were provided to me by those who kept them.

First, I review the concepts of context and cue (and related terms); these ideas were first developed and deployed in studies of face-to-face interaction (FtF) and constitute the background for their application to interaction in cyberspace. I then discuss MOOs and other forms of CMC; I include here a brief description of the MOOs that are the locus of this research, the characteristics of their participants,* and an introduction to their conventions of communication and interaction. Next, I examine the contexts and cues of these MOOs, focusing on the presuppositions participants bring to them and on the cues which participants use to signal their actions and interactions. The variety of these presuppositions poses a central problem for organizing social interaction. I then present an analysis of naming practices, including online and offline uses of real names and pseudonyms. In a concluding section, I suggest the implications of this material for analyses of communication and the development and organization of social relationships.

CONTEXTS AND CUES

The concept of a context—and related terms such as situation and frame—is typically defined in terms of two general dimensions or aspects (cf. Bateson 1972; Biber 1994; Goffman 1959, 1974; Goodwin and Duranti 1992; Gumperz 1982, 1992; Hymes 1974; Pitt-Rivers 1967; Tannen 1993; Tannen and Wallat 1993). One is the physical aspect, or “setting,” of an event or an encounter—where and when it takes place. The other is a cognitive dimension and refers to the concepts, beliefs, and values in terms of which people behave, as well as interpret, their actions and those of others. These are the assumptions and expectations, typically embodied in roles and relationships, that shape behavior. They are described by various terms including “premises” (Bateson 1972:187); “schemata of interpretation” (Goffman 1974:21); “background knowledge,” “sociocultural knowledge,” and “sociocultural assumptions” (Gumperz 1982:153); “presuppositions” and “knowledge of the world” (Gumperz 1992:230); “background assumptions” (Goodwin and Duranti 1992:3); and “knowledge schema” and “expectations” (Tannen and Wallat 1993:60). The cognitive dimension is consistent with ideational definitions of culture—see, for example, Geertz’s (1973:9) “structures of signification” and “frames of interpretation” and Schneider’s (1976:199) “premises, postulates, presumptions, propositions, and perceptions.”

Contexts vary in scope. They may be defined widely or narrowly; they may
be encompassing or encompassed. Sometimes the term “context” is used primarily to refer to a narrower range of phenomena, and other terms, for example, “extrasituated context.” are used for a wider one (Goodwin and Duranti 1992:6); sometimes it is used to refer to both. Moreover, any given event or encounter can be placed in different contexts, simultaneously and sequentially.

Tannen’s account (1984) of talk at a Thanksgiving dinner, employing Gumperz’s notions of context, is a good example of encompassing and encompassed contexts. Before analyzing the linguistic features that distinguish means and amounts of “interpersonal involvement” evident in the focal event, Tannen places the interaction in several contexts: the event as a social ritual, the social and sociological characteristics of the participants, the relationships they have with one another, their histories, its place in the contexts of their socio-emotional and occupational lives, as well as the standards in terms of which each evaluated the experience (e.g., “lively and entertaining conversation,” “competitive,” “a New York evening,” “New York Jewish element”).

Contexts are differentiated by cues. Cues signal the nature of the context and include where and when the action is taking place; the characteristics, roles, and relationships of those who are participating in it; and the manner of their behavior. Gumperz (1982:131, 1992:231) defines “contextualization cues” as those features by which participants indicate and interpret what’s going on. Although he discusses primarily linguistic features (e.g., prosodic phenomena, choices of code and lexical forms, formulaic expressions, registers), Gumperz (1992:230) includes nonverbal signs as well. Tannen (1993:63, 65) suggests that a register—a way of talking appropriate to a relationship and/or activity—is a “key element in framing,” here using frame and context interchangeably, adding that “register shifting is one way of accomplishing frame shifts.”

In addition to these cues, Bateson (1972) proposed the concept of a “metacommunicative sign or signal,” which conveys a paradoxical frame or context.3 This kind of cue signifies that the context is not what it appears to be: rather, it is contrary to it. The well-known example with which Bateson illustrated this concept is that of play (cf. Chayko 1993:173; Tannen 1984:23). However, such metacommunicative signals are not restricted to play and not-play frames, and the directionality of the message may be reversed. As will be seen, in a context characterized by pretend and play, such signs may send the messages “This is real” and “This is serious.”

MOOS AND OTHER TYPES OF CMC

Before describing the particular MOOs on which this research is based, it is useful to set them in a wider context. A basic difference between kinds of CMC is whether they are asynchronous or synchronous (cf. Baym 1995; Danet 1995; Lea and Spears 1995; Marvin 1995; Rheingold 1993; Walther 1996). Asynchronous CMC includes e-mail, mailing lists, newsgroups, and bulletin board services, where messages are not exchanged in real time.4 In synchronous types of CMC, including various chat programs such as Talk and Internet
Relay Chat (IRC) and different types of MUDs, users communicate in real time. The messages are transient and, unless recorded, do not endure beyond the moment in which they are created, sent, and received.

A MOO is a kind of MUD: it is an acronym for MUD, Qbject-Qriented. A MUD is a software program that permits multiple users (typically from widely dispersed sites) simultaneously to access a shared database and to communicate and interact in a virtual environment characterized by a spatial metaphor and an architectural motif (cf. Bruckman 1993; Chemy 1995a; Curtis 1992; Curtis and Nichols 1993; Lea and Spears 1995; Marvin 1995; Rheingold 1993; Reid 1994, 1995; Stone 1995). The database consists of rooms, entrances and exits, and other objects, and users can manipulate and extend it. Because of these features, MOOs have been described as “a kind of virtual reality, an electronically represented ‘place’ that users can visit” (Curtis 1992:1).

MUDs are text-based, not to be confused with other technologies that are also referred to as virtual reality. As Curtis and Nichols note (1993:6), “MUDs do not employ fancy graphics or special position-sensing hardware to immerse the user in a sensually vivid virtual environment; rather, they rely entirely on plain, unformatted text to communicate with the users. For this reason, MUDs are frequently referred to as text-based virtual realities.” Users act and interact with one another by typing: the objects they create and manipulate and the messages they send and receive appear as words scrolling across a screen. Although there are multimedia MUDs, most virtual realities (and the interactions in them) are likely to remain text-based (cf. Rheingold 1993:172-73; Walther 1996:31).

There are different types of MUDs and MOOs. MUDs began as adventure games: now there are also other kinds—social, educational, and professional—each version serving an ostensibly different function, although all entail social interaction and the formation of personal relationships (cf. Bruckman 1993; Curtis 1992; Curtis and Nichols 1993; Danet 1995; Marvin 1995; Rheingold 1993; Reid 1995; Stone 1995). Because MUDs are continuously being created and destroyed, it is difficult to enumerate them; however, it is estimated that in October 1995 there were “over 300 MUDs, many with over 2,000 registered users and hundreds of simultaneous players at any given time” (BusinessWire 1995:5). At that time, for example, LambdaMOO, ChibaMOO, RiverMOO, and EnigMOO, which are social MOOs, had populations of 8,009, 5,060, 1,555, and 851, respectively. Diversity University, which is an educational MOO, had 1,660 (not including occasional users who visit to take classes), and MediaMOO, which is dedicated to media researchers, had 1,217 registered users. The research on which this article is based was conducted on several of these MOOs and on others as well. Although many of these MOOs have been described in both popular and scholarly accounts (cf. Bruckman 1993; Curtis 1992; Marvin 1995; Reid 1994, 1995; Rheingold 1993; Stone 1995; Turkle 1995), for reasons of confidentiality, I do not say on which particular MOOs specific interactions described in this article took place.

The characteristics of MOO participants differ across types of virtual reali-
ties. Most users in social MOOs appear to be young adults, typically college
students (cf. Curtis 1992:6; Rheingold 1993:150). At Diversity University, user
statistics show a wider range: approximately 40 percent are 25 years old or
younger. 26 percent are between 26 and 35, 20 percent are between 36 and
45 and 13 percent are 46 or older. At MediaMOO, players appear to be even
older, a feature consistent with the MOO’s aim of being a meeting place for
media researchers. (An analysis of biographical statements provided by some
300 players recently registered at MediaMOO indicates that approximately
20 percent are undergraduates, 20 percent are graduate students, 40 percent
are faculty or academic administrators, and the remaining 20 percent work for
businesses or have business-related interests.)

Whatever the differences among MOOs with regard to stated purposes and
age profiles, all share common conventions of communication, action, and inter-
action (see Bruckman 1993; Chemy 1995a, 1995b; Curtis 1992; Curtis and Nichol
1993; Marvin 1995; Reid 1994, 1995; Rheingold 1993). On MOOs, there are
three commands participants may use to “talk” with one another. They can say
something by typing a “say” command (typing the word “say” or simply a quo-
tation mark [“] followed by a message, in which case all players in the same
virtual location (i.e., the same room) will “hear” (i.e., literally see) the message.
It is a public statement. For example, if a participant named Malinowski typed
the say command and the message Welcome to my tent, Malinowski would see
on his screen You say, “Welcome to my tent,” and the other participants would
see on their screens Malinowski says, “Welcome to my tent.”

If there are several participants in the same room and Malinowski wants to
publicly address only one of them (for example, a character with the name R-
B), he would type the following command (or an equivalent of it)-@to R-B
Only functionalists are welcome—and both he and the others in the room would
see on their screens Malinowski [to R-B]: “Only functionalists are welcome.”
This command permits users to specify the particular recipient of a message.

Players can also communicate privately in two different ways, each of which
limits distribution of a message to another specified person. One way is to use
the “whisper” command which confines communication to another player in
the same room or location. This is done by typing the word “whisper” fol-
lowed by the message followed by the name of the intended recipient. The
other way is to use the “page” command which confines communication to
another player in a different room or location. This is done by typing the word
“page” or an apostrophe [’] followed by the character’s name and then the
message. With both whisper and page commands, the message appears on
the sender’s screen and only on the identified recipient’s screen.

In addition to “speech,” another type of behavior is available to MOO par-
ticipants. They can emote, or “pose,” as Rheingold (1993:148) refers to it.
The emote command (invoked by typing “emote” or, simply, a colon [:], fol-
lowed by a message) displays nonverbal action. For example, when Malinowski
types :walks across the room, he and others in the same conceptual space would
see on their screens Malinowski walks across the room. (Using slightly differ-
ent commands, emotes can be used to signal actions within and between virtual locations.) This type of command permits participants in MOOs to engage in actions instead of only talking about doing them (cf. Chemy 1995b). As Rheingold (1993:148) remarks, “Instead of replying to a statement, you can smirk.” These virtual actions can include behavior that is not physically possible offline. For example, if Malinowski types :floats above your head, those in the same room see on their screens Malinowski floats above your head.

MOO participants can also interact with one another using asynchronous modes of communication analogous to those found elsewhere in cyberspace. They can, as Marvin (1995) notes, send and receive MOO-mail, the equivalent of e-mail; they can post messages to special interest groups, a system comparable to the newsgroups found on USENET; and they can, using MOO-mail, distribute messages to groups of people, replicating mailing lists found elsewhere on the Internet.

**MOO CONTEXTS**

MOO contexts are complex and difficult to decipher. One reason is that although different kinds of MOOs have different agendas, people form friendships and more intimate bonds on all of them, even in settings that are primarily work-oriented and/or that are intended to serve professional interests. In this regard, MOOs are like other forms of CMC, as several studies show (e.g., Lea and Spears 1995; Parks and Floyd 1996; Walther 1996; Wilkins 1991). As in the offline world, multifaceted relationships can complicate communication and interaction.

Interpreting behavior in MOOs is also problematic because individuals bring different presuppositions to them. This is evident in the distinction MOO participants commonly make between real life (RL) and virtual reality (VR). In one sense, the contrast refers to the locus of interaction, RL indicating offline experiences and VR, online experiences. In a related sense, it refers to the mode (or channel) of communication: VR is computer-mediated, whereas RL includes, for example, not only face-to-face interaction (FtF) but letter writing and phone calling. In this regard, RL and VR are alternative means of communicating, implying little about the relationships of those who use them or about the nature of the messages they send and receive.

However, RL also connotes that which is actual, marking VR as fictional. MUDs are imaginary worlds, an “illusion,” as Reid (1995:166) describes them, which have, as Rheingold (1993:155) notes, “no more tangible reality than the settings and characters in a novel or a soap opera.” This view is echoed by participants in virtual communities. For example, the following exchange was recorded between players?

Charley [to Ralph]: I would like to question the morals and sanity of this society.

Terry [to Charley]: -what- society? This place is a mental hospital.
Terry says, “You people are a bunch of fucking basket cases. Anybody who still takes anything that happens here seriously, especially after being here for so long, has lost their sanity.”

Another example is that of the player who posted the following message to a bulletin board on his MOO:

On a serious note, are you considering MOO to be RL? There is one thing real about this place, and it is lag.

From the perspective of MOOs as imaginary worlds, what happens in them is unreal, not to be taken seriously.’

Nevertheless, some participants take MOOs and what happens in them very seriously. Rheingold (1993:135) reports meeting MOO participants who “testify passionately that the feelings they have about their characters and worlds are real to them, and often quite intense.” Reid (1995:175) reiterates this point, quoting the participant who proclaimed—the reality of these imaginary worlds: I don't care how much people say they are, muds are not just games, they are “real”!!! My mud friends are my best friends. Similar comments can be read on the USENET newsgroups pertaining to MUDs (e.g., rec.games.mud, rec.games.mud.misc) and on bulletin boards on every MOO I have visited. Although MOOs may be imaginary worlds, the feelings they induce, like the reactions to any kind of fiction, can be as real as those generated by and experienced in offline events and relationships.

In short, a central problem of MOO communication and interaction is the diversity of assumptions participants hold. All participants, whatever their own assumptions, are faced with the issue of determining how others are defining the situation. They have to assess the context in order to interpret the meaning of the behavior that takes place within it. They attempt to solve this problem by signalling their intentions and by reading the cues others provide.

MOO CUES

Many of the cues used in MOO communication and interaction are common to other kinds of CMC. The best known are emoticons (cf. Curtis 1992; Marvin 1995; Reid 1994, 1995; Ruedenberg, Danet, and Rosenbaum-Tarnari 1995). These symbols, constructed from various combinations of keyboard characters and typically read sideways, are used to express various attitudes and emotions. The most frequently used emoticons are those for a smile and a frown, usually represented as :) or :-) and as :( or :-(. As others have noted, a smile may indicate warmth and humor, but it may also connote, in ironic fashion, the opposite meanings (cf. Baym 1995; Marvin 1995; Reid 1994, 1995). Embedded texts (Wilkins 1991) and explicit statements are expressive forms related to emoticons. The former entails placing a word or a phrase within
angle brackets (e.g., <smile>, <grin>, and <frown>), while the latter include declarations such as “I’m kidding!” or “I’m serious.”

Other cues are peculiar to MUDs and MOOs. Individuals participate in MOOs as “characters” (see note 5) and choose character names to establish a social identity and to define a social situation. These may be real names or pseudonyms. Commenting on character names on LambdaMOO, Curtis (1992:6) notes that they tend to be drawn “from or inspired by myth, fantasy, or other literature” or are “common names from real life, names of concepts, animals, and everyday objects that have representative connotations.” A perusal of any social MOO reveals that most character names are, in fact, both fictional and playful. Fictitious names are also common on educational and professional MOOs.

Participants may also assign a gender to a character. MOO software permits players to select from a range of genders, including those that are realistic (female and male) and those that are fantastic. In the imaginary worlds of MOOs, players may change their genders at will.

In addition to the choice of character name and gender, character descriptions are one of the most significant cues which participants use to indicate the kinds of behavior that may be expected. Many descriptions are playful, fantastic, or both. Curtis (1992:8) observes that a “large proportion of player descriptions contain a degree of wish fulfillment; I cannot count the number of ‘mysterious but unmistakably powerful’ figures I have seen wandering around in LambdaMOO.”

Moreover, it is not uncommon for the same participant to have multiple characters, as morphs on the same MOO or as different personas on different MOOs, each one expressing a particular social identity. For example, one participant has a female character whose description is a “tall woman who seems to be floating a few inches off the ground . . . or drifting among the clouds . . . or swinging among the stars.” As a character of ambiguous gender on another MOO, the same individual appears as “a tall and muscular person with broad shoulders, but there’s a swelling in the chest which suggests breasts—or maybe muscle. You can’t quite tell. The dark skin, pale eyes, full lips, narrow nose and waist-length blond dreadlocks are equally confusing.”

Emoticons, embedded text, and character name, gender, and description are obvious signs. Another cue that serves to signal or transform MOO contexts is the use of names as terms of address and/or reference. This particular mechanism—the pragmatics of naming—has not yet been analyzed in research on text-based virtual realities, and I turn to it now.

**NAMING PRACTICES**

Offline, naming practices serve to establish social relationships and to enhance or diminish their closeness. Terms of address, including the use of personal names, express social distance between individuals (cf. Alford 1988; Ventola 1979). In English, first names, in comparison with surnames and titles, indicate a closeness of relationship, with nicknames or diminutives express-
ing even greater familiarity. Terms such as “Honey” (or “Hon”) or “Love” (or “Luv”), used as terms of address, also connote intimacy. Such usage not only signals the status of a relationship but also may be used to increase or decrease its social distance. This exemplifies one kind of code change that characterizes the development of personal relationships (cf. Parks n.d.).

What does the use of real names signal in a MOO context? As in offline interaction, it indicates or enhances closeness. But, like the ironic use of emoticons, it has another meaning, signifying, in this case, a difference between the imaginary and the real. In a fictional world, in which the use of pseudonyms is the norm, the use of real names may be seen as a response to the sense of make believe, expressing or initiating a contrary frame. In this view, if pseudonyms convey the message “This is not real,” the use of real names conveys the message “This is real.”

The use of personal names to express or enhance closeness and to distinguish real from unreal is evident in several kinds of MOO behavior. It happens, for example, in casual conversation as seen in the following bit of MOO dialogue. In this instance, I (DJ) asked Marla about her use of the real name, Josh, of another player, Simon, who had just left the virtual room in which we were talking:

Simon goes home.
DJ says, “nice guy”
Marla says, “Very”
DJ says, “You called him Josh”
Marla says, “Yes.”
DJ asks, “why?”
Marla asks, “Ummmm... that is his name?”
DJ says, “I know that’s his *real* name! I meant why did you use it rather than Simon?”
Marla says, “I have known him for about a year and a half.”
Marla says, “No matter what the person’s MOOname is... If I want to come down one level of formality for one reason or another, I use their birthname if I know it.”
DJ asks, “one level of formality?”
Marla says, “If we are just chatting casually then I would use the MOOname. If for some reason I want to make it more personal... I use the birthname.”

This dynamic is also evident in a MOO ritual, the virtual wedding. In discussing MOO social interaction, Curtis (1992:34) identifies the “virtual wedding” as one of the “more impressive examples of MUD social activity.” He notes (Curtis 1992:14) that these events are “usually very happy and
celebratory occasions,” yet he also alludes to an “intriguing undercurrent of serious feelings” in them, an observation suggesting that they are otherwise characterized by playfulness. It is this juxtaposition of playfulness and seriousness in MOO weddings that makes them appropriate for examining the ways in which situations in virtual reality are defined. Before examining the use of real names to differentiate between VR and RL, I describe in more detail this type of ceremony.

The playfulness of MOO weddings is apparent from the settings in which they take place. For example, the marriage of one couple was held in a circle of stones, decorated in the following ways:

Wire has been hung from them [the stones] for the Celebration, with resistors, transistors, crayons and the occasional condom hanging from it in a festive manner. The shadows here are strangely placed, as if light is coming from within the Circle as well as from above. A table covered in wedding gifts sits to one side. A replicator and a huge bottle of champagne are also on it.

Playfulness is also evident in the language of the wedding vows. For example, the remarks of the Master of Ceremonies, in this case a fantastic bovine creature, reveal the whimsy of a MOO wedding:

Dearly belagged, we are connected here today, to join this [bride and groom] in wholly mootrimony. If there be any character here, who has any reason why this [couple] should not be joined together, let h** speak now, or forever hold h** peace. Do you, [groom’s name], take this moowoman, [bride’s name], to be your moofully wedded significant other, to connect with and to send hug-verbs, in lag and in line-noise-less-conditions, from this CST Time forward, until character reaping do you part?. . . Do you. [groom’s name and bride’s name], promise to love, cherish, and support each other, for paid phone-bills or unpaid, in gloom and in sunshine, for agreement or disagreement, from this moment unto forever, as long as the Internet shall last? . . . [After receiving confirmatory answers, he intones] May the blessings of the Bovine Illuminati fall upon this couple. May the Internet guide and never disconnect on them. May the curse of line-noise never intrude upon their passionate emotings. May they always page each other with kind and loving words, and may their RL phone calls be as wonderful as their VR existance [sic]. . . . [Finally, he concludes the ceremony] Ladies, Gentlemen, and Spivaks, under the authority of my position as Master of Ceremonies, I present to you, [names of groom and bride], Man, and wife, Woman, and husband. May they connect in harmony, forever!!!

The accounts of participants also indicate the ways in which they frame MOO weddings. This is evident in the wedding of Ben and Carol.
ing to a question posed by another player (who had asked whether the event was “for real or just an imaginary MOOwedding”), Ben, the groom-to-be, assured him that it was not real:

Much as I would like to marry Carol for real, my wife and kids might get a little angry . . . not to mention her boyfriend. No, we’ve never met IRL, and probably never will. despite living quite close and all. We’re doing this to declare our undying love and as an excuse for a PARTY!

On the day of the wedding, he reiterated his view in a posting to a bulletin board on the MOO:

This is NOT RL!!

There seems to be some suggestion that this makes me unfaithful to my RL wife. This is not true. I hope my wife will one day come on and meet Carol. They have a lot in common, including being 8 months pregnant. Again, this is NOT RL in here. . . . Really folks, don’t take it so serious. View it as two people celebrating there [sic] mutual feelings, and an opertunity [sic] for a bloody good parry. Come one and all, and watch the show.

Despite the avowed playfulness of MOO weddings, remarks by Ben suggest that he took the event more seriously than he had indicated. His comments are noteworthy because they differ from his assertion of unreality and because in an imaginary, playful world, it would be peculiar for players to become upset when expectations went unmet, unless they were taking seriously what was happening. For example, Ben became distressed when Carol was late in connecting for the ceremony, as the following text (logged by Ben) shows:

Ben looks at his watch a lot
Ben considers disconnecting [i.e., disconnecting] to avoid the embarress-ment [sic] of bein [sic] stood up
Ed pages, “Where is Carol?”
Ben pages Ed: “She got a late notice she had to do a lecture this evening. She’s obviously held up:O(
Ben sulks.
Ben is fingering her site. No sign of her at her screen
Ben is gonna DIE!!!!!!

Ben’s comments support the view that he saw his MOO wedding in two different ways, one playful, the other serious. Although the anomalies in the text mark the transformation of the frames, there are other ways of distinguishing them.

The diacritical function of the use of real names in differentiating contexts
may also be seen in MOO marriage ceremonies. The wedding of Irene and Victor, for example, was similar to that of Carol and Ben in outline, although it did depart from it in that the participants incorporated their own words into the vows. However, its particular salience is manifest in Irene’s postnuptial comments which demonstrate the significance of naming behavior. To establish the context of her remarks, I present an abridged log of the wedding (provided by Irene).

Master of Ceremonies says, “We are all gathered here today to witness a long standing traditional ceremony, one which will bind Victor and Irene together as MOO husband and wife forever.”

Master of Ceremonies says to Irene, “you may say your vows for Victor.”

Irene says to Victor, “My dearest Victor, I remember a time when I had nothing to look forward to and nothing to smile about. Then one day I saw a sign… and I smiled. From that point on there has been someone by my side, helping me to stand tall when I was down, to smile when I was sad and who always kisses away my tears. That someone is you. You have brought me from sadness and shown me how to smile again. You give me reason for MOOing, and the inspiration for my work here. Without you, I would still be living in sadness. From this day forward, I promise to love you, and to cherish the love that we share. I love you.”

Master of Ceremonies turns towards Victor. “You may now say your vows for Irene.”

Victor says, “Irene, through space and time I have found you. In reality, I know you only from a long series of electronic impulses passed from place to place and converging here in this time and this place. In the reality that is my heart, however, I have found a soul-mate, a friend, and a love that is far beyond my ken to explain. I have asked myself: How can such emotions be formed and sustained through this somewhat impersonal medium of electron flow? My answer? I have none. I only know what my heart tells me: and that is that I love you. So, tonight, I stand here with you in front of all these friends, to pledge my undying [sic] love for you, forever.”

Master of Ceremonies faces Irene.

Master of Ceremonies says to Irene, “Do you solemnly swear to love, and to cherish, Victor, in good and in bad times, forever and ever: and do you vow from this day forward you will make his moo life happy with all of your strength that you have?”

Irene exclaims. “I do!”

Master of Ceremonies turns towards Victor.

Master of Ceremonies says to Victor, “And do you solemnly swear to
love and cherish Irene, in good times and in bad, forever and ever; and
do you vow from this day forward that you will make her life happy with
all of your strength that you have?”

Victor says to Master of Ceremonies, “I do.”

Master of Ceremonies pronounces Victor and Irene MOO husband and
wife.

Given the several references to “reality” in the log and the apparent depth
and seriousness of feeling expressed in the vows, I asked Irene about the
absence of real life names in the ceremony. Her response is telling:

DJ says, “at other MOO weddings I’ve seen, people sometimes switch be-
tween character names and rl names. That didn’t happen at your wedding.”

Irene says, “no . . . we used our MOO names, because it was a MOO
wedding, but on our rings, inscribed, we used our real names.”

Irene holds her hand out and proudly displays her wedding band. It is
gold, with an oval shaped garnet in the center. The garnet symbolizes
romantic love and passion. Inside the ring is an inscription. It reads:
With love and devotion. . . . Jeff

DJ asks, “Victor is Jeff?”

Irene says, “yes.”

DJ asks, “What about Victor’s ring?”

Irene shows you Victor’s ring. It is gold, with a small oval shaped garnet
in the center. The garnet symbolizes romantic love and passion. Inside
the ring is an inscription. It reads: With love and devotion. . . . Barbara.

DJ asks, “Who’s Barbara? Is that you?”

Irene says, “yes. that is me. :)

DJ asks, “Do you ever call Victor by his rl name? or he you?”

Irene says, “yes, we call each other by real names, when conversations
are serious, or we want to show that we are feeling strongly about some-
thing.”

Despite the mutual declarations of never-ending love and devotion, the MOO
marriage of Victor and Irene, like that of so many marriages, both online and
offline, did not last. About two months after the MOO wedding, they parted
company.

Just as the use of real names in an imaginary world signals a particular
definition of the situation, the opposite is also possible. In discussing with
various MOO participants the potential significance of using real names instead of pseudonyms, one person told me that she has begun to use her character name in real life interaction. She sent me the following message:

I thought I should maybe tell you something about rl/vr names. . . . I’ve lately noticed that when I’m writing via email to a good friend, I tend to sign with “Veronica” as a means of signalling intimacy, and often seriousness. My .sig at the bottom of the letter makes it clear who is sending the letter, but I find I use my alternate name to say “this is the authentic part of me speaking” as opposed to perhaps a merely official part of me, just doing business.

The offline use of online names reverses the pattern but reveals the same social and psychological processes.

CONCLUSIONS

The different activities and relationships evident in MOOs, and the different assumptions players hold about them, suggest that the problems of reducing uncertainty and managing diversity are no less challenging for participants, and no less interesting for observers, than those found elsewhere. Moreover, the similarities between online and offline practices, in the formation and organization of social relationships as well as in the ways in which people communicate about them, make clear the relevance of both for the advancement of various explanatory models.

Paradigms developed for understanding offline relationships are applicable to online interaction, and the latter may be used to assess and expand the former. This point would seem so obvious—and I am not alone in making it (cf. Chemy 1995a, 1995b; Lea and Spears 1995; McLaughlin, Osborne, and Smith 1995; Parks and Floyd 1996; Walther 1996)—that it might appear to be trivial. However, in the face of those who have claimed that CMC would revolutionize social life and liberate it from the principles and processes that shape offline social relationships (e.g., Haraway 1992; Hiltz and Turoff 1993; Poster 1990; Rheingold 1991), it bears reiteration.

The study of contexts and cues in cyberspace also suggests directions for further inquiry. For example, the instances of using real names and pseudonyms in MOO casual conversations and ritual events described above point to the opportunity for a fuller analysis of various VR registers, including those found in friendships as well as those characterizing sexual encounters, which can be compared with those found in RL.

There is also an opportunity to study the ways in which people interpret multivalued signs, a problem not limited to CMC. For example, MOO participants recognize that a smiley face may express a literal meaning or an ironic one. They also say that they understand its significance in terms of the relationship in which it occurs, friends being better able to distinguish intention than
strangers. This hypothesis may be tested by analyzing the accuracy of interpreting emoticons in relationships that differ by level of disclosure and/or degree of closeness.

Another line of research concerns the connection between online and offline relationships. As relationships initiated in VR are carried over to RL (cf. Parks and Floyd 1996; Reid 1995), a subject of much speculation online and offline, the opportunity arises to assess hypotheses regarding the impact of rates of social information exchange on relational development (cf. Walther 1996). For example, are romantic relationships established online, entailing a slower and longer process of disclosure, more stable than those that have not had the benefit of a period of virtual incubation? To the extent that relationships formed in a reduced cue environment are idealized, it might be anticipated that the answer would be no, assuming the difficulty of meeting expectations that have not been subject to various reality checks. On the other hand, to the extent that such relationships entail the extended conversational processes by which a couple establishes a common definition of the situation (cf. Berger and Kellner 1964), or what has been described as a “relational culture” (cf. Wood 1982; Bell and Healy 1992), a positive answer might be expected. Whichever the case may be, the value of studying social relationships in cyberspace is the contribution it makes to understanding actions and interactions wherever they take place.

NOTES

1. I thank the following people for their comments on earlier drafts of this article: Adrianne Dana, Brenda Danet, Lois Jacobson, Sarah Lamb, Lee-Ellen Marvin, Daniel Pargman, Mac Parks, Mitch Pravatiner, Lynne Roberts, Jeni Tennison, Kaisa Vahahyppa, Lawrence Straus, and the anonymous-reviewers of this journal.

2. I use the term “participant” to indicate a person who is involved in MOO communication and interaction. It is not a word usually used by participants themselves, as Marvin (1995) states in her discussion of MOO terminology. In this paper, I use “participant,” “user,” and “player” interchangeably, although “player” has, as will be made clear later (cf. note 5), a special significance in the world of text-based virtual realities. Its meaning will be clear in context.

3. Goffman’s analyses of frames and keys continue Bateson’s work. In Goffman’s language (1974:43-44), “a key is a set of conventions by which a given activity, one already meaningful in terms of some primary framework, is transformed into something patterned on this activity but seen by the participants to be something quite else.” More recently, Straehle (1993), building on Bateson, Goffman, and Tannen, examined the irony in teasing behavior which is used to signal and transform frames and the relationships entailed in them.

4. In such asynchronous systems, the messages are typically permanent (unless deleted) and may be stored in some form of archive. E-mail differs from other forms of asynchronous CMC in that it is a point-to-point system involving the exchange of messages between individual senders and receivers (although there may be more than one recipient when the message is copied to others or sent to multiple recipients in a distribution file), whereas newsgroups involve the posting of messages by
individuals which are read by anyone who connects to them. Mailing lists combine features of e-mail and newsgroups: they distribute messages, via e-mail, from an individual sender to all who subscribe to a list.

5. The term “player” has a particular meaning in MOO jargon, as Marvin (1995) notes. Since her account is so clear and concise, I quote her comments in full:

MOOwords for participant include: MOOer, player, character, morph and typist. “Player” refers to a single object, with a unique number, programmed to be used as a “character” with its associated “morphs” under the control of a “typist.” “Player” is a technical term, part of the core of the programming language, and frequently used in official documents such as the “help manners” text. “Character” means the developed form of the player object, with its gender, description and name. “Morphs” are alternate characters, all attached to the same player. The “typist” is the actual human being, the person at the keyboard who controls the player, designs its character and morphs, and selects its gender setting.

6. I do not provide the names (real or otherwise) used by those who participated in these interactions: rather, I use pseudonyms for all the characters mentioned whom I quote or whose behavior I describe. Since participants in MOOs commonly use fictitious names (for their characters), the people mentioned in this paper are, in a sense, doubly disguised: pseudonyms applied to pseudonyms. In a few instances, I have also altered other personal details in order to insure the privacy of MOO characters and the people who inhabit them.

7. This view is implicit in the discourse about frame analysis. In Goffman’s language (1974:21), RL would be a “primary framework.” In line with his theatrical metaphor, Goffman (1974:47) contends that “Actions framed entirely in terms of a primary framework are said to be real or actual, to be really or actually or literally occurring. A keying of these actions performed, say, onstage provides us with something which is not literal or real or actually occurring.” In this regard, VR may be likened to the theater.

8. The choice of pseudonyms for establishing a social identity is not limited to MUDs or MOOs and is an important cue in other forms of CMC (cf. Baym 1995; Bechar-Israeli 1995).

9. The use of names to convey social closeness and a sense of reality in CMC is not limited to MUDs. Wilkins (1991), studying “computer talk” on a bulletin board among people who previously did not know one another, notes the frequent use of personal names to both mark and develop familiarity. Walther (1996:31), referring to efforts to make “Web-based shopping malls” more like “real-life malls,” notes a similar phenomenon: “The use of technicians’ personal names and pictures as access points, rather than using vague department- or role-related addresses, is hypothesized to begin the personalization of professional and corporate-consumer relationships.”

10. As Reid (1995:175) notes,

MUD weddings are simple in conception. The virtual bride and groom are married by another player who virtually reads, and actually types, the wedding ceremony. Tokens are often exchanged. . . . The wedding is usually attended by a number of fellow players. . . .

In fact, on many MOOs, the vows follow a prescribed (and programmed) form which may be copied from a “Generic Ceremony Feature Object”
REFERENCES CITED


