CHAPTER V

OPPOSITION AND ARGUMENTS

Conversation analysts maintain that speakers generally display a preference for agreement versus disagreement in ordinary peer to peer conversation (Pomerantz 1984). Specifically, talk which maximizes social alignment between speakers is preferred (Pomerantz 1984). However, several scholars have noted that some cultural groups gravitate toward opposition and disagreement (Goodwin 1990; Labov 1972; Schiffrin 1984; Modan 1994). In her work among African American children, Goodwin stated that opposition in talk provided an effective way for the children to "test or realign the current arrangement of social identities" (Goodwin 1990: 141-2). Such opposition "[highlighted]" rather than "[delayed or disguised]" a participant's alignment to prior moves (Goodwin 1990: 145). Researchers have also discussed how certain groups value ritual disagreement and insults, perceiving them as worthwhile activities in themselves (Labov 1972; Schiffrin 1984; Modan 1994). Dery asserts that in "some ways flame wars are a less ritualized, cybercultural counterpart to the African-American phenomenon known as 'the dozens,' in which duelists one-up each other with elaborate, sometimes rhyming gibes involving the sexual exploits of each other's mothers" (Dery 1993: 562; Labov 1972). Yet, groups that value opposition generally perform disagreement in ways that protect the integrity of speakers' social selves and maintain solidarity and social bonds between speakers (Schiffrin 1984; Labov 1972; Modan 1994).

However, evidence from the present data revealed that during performances of technical affiliation, speakers frequently used opposition to rearrange techno-social alignments in ways that did not strengthen social bonds. Although some encounters may

be labeled playful, many examples in the present data show that contra Dery, the duelists do not choose subjects (such as the sexual exploits of one's mother) that are preposterous and cannot be properly linked to a specific person (Labov 1972; Dery 1993). Rather, the duelists use accusations and insults that do have a logical (though not always agreed-upon) link back to the person being attacked. The agonistic nature of some online arguments worked to create and maintain unfortunate virtual reputations and to discourage participants from expressing alternatives to techno-social views coded as dominant (whether or not such views are actually normative). The hypothesis is that performing technical affiliation in agonistic ways is more likely to make it difficult for participants to engage in free self-expression, even though agonistic interaction is frowned upon by many community members.

The goal of the present chapter is to examine arguments about technology and techno-social culture in the online talk studied and to determine how participants use the frame of performing technical affiliation to increase social position, to manipulate the virtual reputations of other participants, and to discourage expression of non-dominant techno-social views. Participants who expressed non-dominant forms provided "arguables" that others could oppose in order to establish a sense of self vis-a-vis others in the conversation, and other interlocutors who are not present but nevertheless are either part of or excluded from membership in an imagined community of technologists. Notably, Goodwin took issue with previous work on opposition in talk that portrayed arguments as socially negative (Goodwin 1990: 14) According to Goodwin, these researchers focused on arguments' mediation and resolution phases (Goodwin 1990: 156). In contrast, Goodwin suggested that the process of opposition was an important area of investigation because it revealed how children built social competencies and how they developed effective ways to order their own societies (Goodwin 1990: 141-2).

The present study expresses concern, however, about what Tannen sees as an increasingly hostile, argumentative culture mired in an agonistic "war of words" that does

little to increase deep understanding of diverse views, but rather uses strategies that stifle non-dominant, complex, or diverse ways of viewing the world (Tannen 1998). Goodwin was certainly well aware that a person's "character and reputation" could be "gained or lost" during oppositional confrontations, often with painful consequences such as social ostracism (Goodwin 1990: 190). Bringing together these lines of inquiry, this chapter will examine the process whereby virtual reputations, social alignments, and social hierarchies are built, contested, and maintained during arguments within the framework of performing technical affiliation in online talk.

The chapter will also examine some of the social consequences of this type of opposition and argument, which have ramifications quite beyond individual conversations on a MUD, but rather speak to ideas about self-expression on the Internet and in face-to-face encounters. From an anthropology of science perspective, we will show how identity performances as members of certain imagined technical groups may also complicate the discussion and understanding of how technical systems work.

To conduct the data analysis, a sample of 30 logs from MUD A and 30 logs from MUSH B were chosen at random. All arguments (as defined below) within the logs were examined (for a total of 64 arguments from MUD A and 44 arguments from MUSH B). The topics of arguments vary and address a number of technical and techno-social issues. One particular subset of arguments that occurred among both MUD A and MUSH B participants was a debate about the superiority and characteristics of various computer operating systems (including the Macintosh OS, Windows, DOS, Linux, and Unix). However, a random sample revealed a far greater frequency of these types of arguments among the MUSH B participants. Therefore, a separate group of 100 logs was chosen at random from the MUSH B group and all 23 arguments about computer operating systems were examined to investigate whether such "debates" used ritualized positions to increase sociability and preserve social bonds, or whether participants used agonistic techniques to advance social position.

According to Schiffrin, an argument is characterized as an exchange in which Speaker A says something, Speaker B disagrees with all or some portion of what A has said, and Speaker A disagrees with some aspect of what B has said (Schiffrin 1984: 316). A conversation will still be considered an argument if Speaker A or some other party or parties (e.g. Speaker C) respond to what B has just said. For the purposes of this investigation, the data examined include instances in which Speaker A, Speaker C, or other parties may overtly disagree or simply respond to Speaker B. As long as the exchange contains at least three moves, and contains opposition between at least two parties, it will be considered an argument for the purposes of this study. Further, disagreements or responses to prior talk may take issue with the form as well as the content of talk. Schiffrin points out that arguments reveal speakers' orientation to talk, so that A's initial turn at talk reveals a particular stance by A "with which B is not similarly aligned and Speaker B [takes] an equally committed stance toward a proposition with which A is not similarly aligned" (Schiffrin 1984: 316). Following Schiffrin's analysis, the discussion here is concerned not only with opposing propositions speakers make, but also their stances to those propositions, and the subsequent negotiations in which speakers contest those alignments and their social ramifications.

Another important characteristic to consider in examining argument data is the oft-cited distinction between "making" and "having" an argument (Schiffrin 1984; Jacobs and Jackson 1982; Tannen 1998). At least three different scenarios may result from considering this distinction. First, each speaker may put forward a position in a discussion without necessarily expressing disagreement or showing opposed alignment to another speaker. Hence the speakers are making but not having an argument. Second, speakers may have an argument by, for example, hurling insults that do not involve constructing specific, reasoned arguments. In this case, the speakers are in opposition and are having an argument but not making arguments. Third, speakers may make arguments during an argument in which oppositional views are expressed. For the purposes of this

study, only the second and third cases are examined. In these instances, opposition or disagreement is present, but speakers may or may not invoke reasoned, debate-level arguments (Jacobs and Jackson 1982: 225).

The Use of Opposition to Increase Status

According to Shantz, children and adults tend to argue about similar things, including: "valued resources, controlling others' behavior, rule violations, facts, and truth" (Shantz 1987: 294). However, Maynard astutely notes that in a dispute, invoking and supporting a particular rule or value may not really be the central issue of concern (Maynard 1985: 19). Maynard states that, "it need not be the case that children believe in the exhibited value in any strong sense" (Maynard 1985: 19). Rather, "rules are used to manage local social concerns which are indigenous to the children's own social group" (Maynard 1985: 19). In fact, "children appear to use normative assertions to promote or maintain an immediate social order" (Maynard 1985: 20). Maynard provides an example in which one child asks to be invited to a party (Maynard 1985: 20). Another child invokes an external, adult "rule" that one should not "beg" to be invited to parties (Maynard 1985: 20). In this example, the children may or may not actually believe in or regularly employ this rule, but the child in question invoked it in order to manipulate the requester's bid to move from "outsider to insider status" within the party group (Maynard 1985: 20). Importantly, alignment bids become concrete only when they are "ratified" by other participants (Maynard 1985: 20-1). Similarly, we have discussed how participants performing technical affiliation may or may not actually believe the truth value of particular propositions. In this chapter, we will discuss how invoking normative ideas in opposition to prior moves is used to achieve higher social status by manipulating another speaker's behavior during an argument.

In (1), two participants from MUD A argue about the correct form of expressing amusement in online environments.

(1)

1 Comm rl: [Brian] HEH, I like Ray's new title
2 Comm rl: [Jack] why do you always do heh in caps?
3 Comm rl: [Bert] heh
4 Comm rl: [Brian] because it implies that HEH is funnier then just a regular heh. :P
5 Comm rl: [Jack] no, it's just lame
6 [MUD A] Hans enters the game.
7 Comm rl: [Jack] funnier than a heh is lol
8 Comm rl: [Jacob] I still say this thing is...is amazing!
9 Comm rl: [Gil] Use false words.
10 Comm rl: [Gil] 'Krunk'
11 Comm rl: [Brian] fine..
12 Comm rl: [Gil] That's just krunkin' unbelievable!
13 Comm rl: [Brian] heh, I like Ray's new title
14 Comm rl: [Jack] that's knuts!
15 Comm rl: [Gil] Krunkin' aye!
16 Comm rl: [Jack] kanuts, rather :P
17 Comm rl: [Brian] how that, mr. I Have To Be Percise On Internet Lingo?
18 Comm rl: [Jack] that's good.
19 [MUD A] Leo enters the game.
20 Comm rl: [Brian] hi leo
21 Comm rl: [Leo] hola
22 Comm rl: [Jack] heh, you get pissy too easily brian :P
23 Comm rl: [Bert] lol

In line 1, Brian prefaces his opinion about Ray's new title with the marker "HEH," which often signifies a chuckle, or mild amusement in online talk. In line 2, Jack uses a preliminary question to preface an eventual critique of the form of Brian's "HEH" (Schegloff 1980). Jack's question identifies the form "HEH" as a trouble source or "arguable" in Brian's talk. Jack asks why Brian "always" does "heh in caps." From the beginning of the sequence, the construction of Jack's "why" question places Brian on the defensive by asking him to account for his behavior. In a sense, the question is

disingenuous because Jack does not subsequently show interest in discovering the reasoning behind Brian's behavior. Rather, Jack's question functions as preliminary to a social critique of Brian's form of talk. Further, using the term "always" in his question attempts to construct a virtual identity for Brian as someone who habitually uses an unacceptable form of expression in online talk. This move is meant to construct Brian's identity as outside of a group of savvy Internet users while simultaneously constructing Jack's identity as a member of this "group." Yet we see numerous examples in the data in which the use of capital letters go unremarked, suggesting that it may or may not be a normative form. Rather Jack labels it a normative form to call an imagined community into being (one which eschews the use of capital letters) to which Jack aligns himself as a member.

Brian's response in line 4 displays awareness that Jack's question may be a form of criticism. Note that Brian ends his explanation in line 4 with the icon in which a person is sticking out a tongue, which resembles a move some children make when arguing. The icon Brian chooses to bracket his talk might be interpreted as either a playful or agonistic reception of criticism contained in the question. In line 4 Brian explains his use of capital letters in the word "HEH." Brian says that the capital letter format "implies that HEH is funnier than just a regular heh." Brian's comment includes an assessment that a "HEH" has a degree of symbolic meaning that "heh" does not.

According to Pomerantz, Brian's assessment is said to invite agreement (Pomerantz 1984). Through agreement, the next speaker would ostensibly portray a similar stance to Brian's proposition, and thus both speakers would be in social alignment (Pomerantz 1984). In Pomerantz's formulation, second assessments that disagree with assessments that invite agreement are typically dispreferred and are marked with delays, turn prefacers, initial agreements, and weak forms of disagreement, among other markers (Pomerantz 1984). However, Jack's response in line 5 expresses a strong form of disagreement to Brian's assessment. As Goodwin observed in her data, participants

"organized talk so as to highlight...opposition (Goodwin 1990: 145). Rather than being "preceded by delays," oppositional turns "contain a preface which announces right at the beginning of the turn, characteristically in the first word that is said, that opposition is being produced" (Goodwin 1990: 45). Similarly, in (1), Jack has structured his response to highlight his opposition, beginning in line 5 with the direct disagreement marker "no," and continuing with the strong oppositional assessment "it's just lame," when referring to Brian's explanation of why he uses a supposedly non-normative form.

Jack's question in line 2 is structurally an entrapment that encourages Brian to offer an assessment to which Jack arguably has an oppositional response prepared. Jack's second assessment in line 5 is a repair initiator, since it highlights a trouble source in Brian's use of "HEH" in line 1, and in Brian's account of his behavior in line 5. Conversational analysts note that speakers have a preference for self-repair, once another speaker has identified a trouble source in talk (Schegloff et al. 1977). But in this instance, Jack not only initiates repair but provides a candidate for repair of Brian's talk. In line 7, Jack notes that the marker "lol" (which stands for laughing out loud) is "funnier than heh." In lines 9, 10, and 12, Gil's suggestion begins a humorous side sequence that comments on neither Brian's use of "HEH" nor Jack's critique, but rather advocates the use of "false words" as acceptable tokens of expressions of amusement.

In line 11, Brian responds to Jack's critique with a "fine" and an ellipsis, which indexes forthcoming talk. In line 13, Brian completes the thought he started in line 11 by revising his comment. This time he uses the word "heh," in lower case letters. In one sense, Brian colludes with Jack's critique by responding with "fine" and revising his talk to remove the non-normative expression. On the other hand, the word "fine" is often used in conversation to signify a begrudging capitulation to end an argument, rather than a heartfelt revised alignment to an arguable. Further, in line 17, when Brian asks for Jack's approval of his revised talk, Brian refers to Jack as "mr. I Have to Be Precise On Internet Lingo," which critiques Jack and provides a kind of metacommentary on the interaction.

Brian's critique of Jack's criticism is fascinating because it implicitly calls attention to the fact that Jack is performing technical affiliation (although, it obviously does not use those terms). Brian's critique exposes Jack as insisting on a normative type of expression for Internet talk, and demonstrates that this kind of insistence can feel constraining. Brian's critique is clever because it semantically ties into his initial assessment in line 1. At the beginning of the sequence, Brian opened the conversation in line 1 by saying that he liked "Ray's new title." In this instance, Brian gives Jack a title indicated by his ironic use of "mr." to precede the title descriptor phrase. Brian also uses capital letters at the beginning of each word to emphasize the label as a title and give it a visually poetic emphasis (Jakobson 1990: 75-77). By identifying and questioning Jack's critique, Brian partially interrupts Jack's performance of technical affiliation. However, the combined social impact of Brian's behavior does not completely interrupt Jack's performance, since Brian revises his talk and seeks Jack's approval of the revision.

In my view, Brian's critique provided a refreshing alternative to the straightforward collusion that a performance of technical affiliation so often inspired. That Brian's critique of Jack had an impact is arguably visible in Jack's counter accusation that Brian gets "pissy too easily." In Goffman and Bateson's terms, Jack is attempting to re-key the frame of the conversation into a playful one that Brian has taken too seriously and thus not interpreted appropriately (Goffman 1974; Bateson 1972). A meta-communicative frame of talk is a set of principles that organizes social events (Goffman 1997: 155; Bateson 1972). A frame provides a way for social interactants to understand how to interpret each other's behavior. In this case, Jack tries to re-key the frame of the conversation as playful. Yet, Jack's original comments, including the entrapment question and the forms of strong opposition cast doubt on whether Jack was playfully teasing, or was deliberately attempting to regulate Brian's social behavior.

The larger context of this interaction is that Brian often found himself as the object of attack for a variety of infractions. Although Brian had important duties on the

MUD such as helping to run a shop, and working at the MUD's radio and television station, other participants often challenged Brian and critiqued the performance of his character and the quality of his interaction on the MUD. That Brian suffered ongoing criticisms might have made it difficult for him to interpret a one-off conversation as teasing behavior rather than as an attempt to place him in a one-down position vis-a-vis Jack. One possible explanation for the attacks on Brian may be age. Brian's online persona was that of someone younger than Jack, who was in his late teens. According to Maynard, "it is well know that children display an orientation toward age as an indicator of relative power and status" (Maynard 1985: 18). Some informants told me that younger players tend to violate more norms, act immaturely, and make more unwarranted demands on staff for special favors and benefits. In my observation, Brian did not fall into this category, although I did notice a number of instances in which participants became frustrated and critical of Brian's MUD participation. It is noteworthy that Bert, who also found himself the target of criticism on the MUD, colludes with Jack's attack by expressing what Jack labels as normative amusement in line 3 with "heh" and in line 23 with "lol." As Goodwin and Maynard note, other parties in an interaction may express alignments as bids to increase their own social positions (Goodwin 1990; Maynard 1985). However, any hypothesis about how age may be functioning in these contexts would need to be verified with in-person interviews.

Jack's use of opposition to enforce the social "norm" of using "lol" instead of the inappropriate form "HEH" to express amusement is worthy of a brief examination. On one level, Jack may be invoking ideas from what some have termed "netiquette" (or network etiquette). *Webster's Dictionary of Computer Terms* calls netiquette "a set of rules that reflect long-standing experience about getting along harmoniously in the electronic environment" (Pfaffenberger 1997: 346). One of netiquette's oft-quoted rules is to avoid using capital letters, which is considered "shouting" online (Pfaffenberger 1997: 346). Instead, to provide emphasis, users should "use asterisks as you would

quotation marks" (Pfaffenberger 1997: 346). Obviously, many people do use capital letters when they want to create a certain conversational effect, and many instances of capital-letter use pass by unremarked in online interaction (see for instance, examples (2), (3) and (4) below). In addition, it is not at all clear what harm is done by using capital letters, or why asterisks are better at providing "harmonious" interaction in online environments. Jack may be invoking aspects of netiquette to criticize Brian's use of the form "HEH" to indicate strong amusement. But Jack's critique also notes that the proper escalation from "heh" is to "lol." This particular "rule" is not part of netiquette and is nowhere required as a standardized escalation of amusement. In fact, one might argue that moving from "heh" to "HEH" is an acceptable escalation since netiquette connotes that a capital letter form of "HEH" does signify more signal strength than a lower-case "heh."

That Jack contradicts the netiquette escalation of "Internet Lingo" (to use Brian's expression) that he seems to be using to criticize Brian serves to illustrate Maynard's point that invoking "rules" to serve local social ends does not necessarily indicate that the rule invoker uses or believes in that rule (Maynard 1985). Maynard warns that, "care must be exerted not to equate the rule with a social group's own culture. Rather, we should examine how the rule is used in an interactive situation to achieve indigenous social ends which may or may not correspond to the content of the rule" (Maynard 1985: 24). Similarly, Jack may or may not actually believe that "lol" is the invariably proper escalation form of amusement after "heh" in online talk. Nevertheless, he uses the frame of performing technical affiliation to critique Brian and create a social hierarchy in which Brian is in a one-down position to Jack. Combined with Brian's collusion, Jack's critique makes it more difficult for Brian to express a non-normative form of online talk. The interaction results in the loss of Brian's privilege to express himself in certain ways, not only in the local conversation, but potentially across multiple interactions as well (if he chooses to continue to self-censor his online talk). It is particularly unfortunate that Brian

and possibly others observing the conversation engage in self-censorship over a so-called rule that the criticizer may not value at all.

The Virtual Reputation

In her observations of children's opposition, Goodwin points out that, "it is not sufficient to focus exclusively on the talk through which opposition is produced; one must also take into account how actors are portrayed and constituted through that talk" (Goodwin 1990: 149). Although Goodwin was speaking of children's arguments, her comments are strongly applicable to the present data. Goodwin discusses how speakers may use certain turn shapes and intonation contours to "both build a small effigy of the party being opposed, and display his/her own affective alignment to the actions that such a person performs" (Goodwin 1990: 147). Speakers can "caricature" other speakers by "portraying [their] actions as ridiculous or inappropriate" (Goodwin 1990: 147).

Similarly, Maynard uses Goffman's terms to discuss how participants' "virtual" and "actual" social identities may be used to signify social alignments and to create local social hierarchies (Maynard 1985; Goffman 1963). Even though Goffman was writing decades ago and was writing about face-to-face encounters, his comments are applicable to our understanding of the construction of online identity as well. According to Goffman, a virtual social identity includes those demands and assumptions we impute to another person (Goffman 1963: 2). An actual social identity includes those attributes someone can prove to possess (Goffman 1963: 2). Goffman states that we tend to assume that a person is categorized in a certain way (the virtual identity) but we may find out something about them (a provable attribute of their actual identity) that causes us to reclassify the person from one social category to another (Goffman 1963: 3). We might reclassify the person upwards or downwards, depending upon the newly revealed attribute (Goffman 1963). Goffman uses these definitions to discuss "stigmas," or

attributes in which an individual's identity is discredited in extreme ways (such as amputees, mental patients, and criminals) (Goffman 1963). Yet Goffman also notes that attributes that operate outside of societal norms are so widespread that, "the issue becomes not whether a person has experience with a stigma of his own, because he has, but rather how many varieties he has had his own experience with" (Goffman 1963: 129). Goffman was keenly aware of the effects that large and small stigmas would have on an individual's social life (Goffman 1963). He points out that, "failure to sustain the many minor norms important in the etiquette of face-to-face communication can have a very pervasive effect upon the defaulter's acceptability in social situations" (Goffman 1963: 129).

Using Goffman's framework in studying opposition, Maynard points out that people may attempt to bring to light a particular attribute in order to discredit someone and prevent their intrusion upon an in-group (Maynard 1985; Goffman 1963). Making assertions about another individual draws on the contrast between someone's virtual and actual reputations and discredits the person so that his or her presumed status within the group is "degraded" (Maynard 1985: 18). In other words, before the attribute is noted, people may assume that a person is qualified for in-group status (according to assumptions made about the person's virtual identity). After the person is discredited by the revelation of a specific attribute, a discrepancy appears between their presumed virtual identity and their actual one. This discrepancy may be used to readjust the person's status and disqualify them from in-group acceptance.

In the examples that Maynard and Goffman provide, attributes that people use to discredit others are "provable" in that evidence outside of interactive talk may be brought to bear when determining an attribute's truth value (Maynard 1985; Goffman 1963). In Maynard's data for instance, a child (Gary) asks another child (Andrea) what she is drawing (Maynard 1985: 16-17). Andrea initially answers his questions. Later, another child (Vicky) challenges Gary saying that Andrea's drawings are none of his business

(Maynard 1985: 16-17). To cement her argument, Vicky accuses Gary of being "only five," which suggests that Gary's age makes him unfit for participation in the reading group of six year olds (Maynard 1985: 17-18). In this example, Gary's age is something provable outside the context of talk, although Gary may not have access to that proof.

But in many cases in the present data, the attributes that a participant uses to discredit another are virtual attributes that are imputed onto the accused without external proof. When such attributes are imputed, there is no real way of verifying their veracity. In fact, they may be blatant misrepresentations. Nevertheless, the accused can feel real damage to his or her actual reputation both within the present conversation and across interactions. When participants invoke a discrediting attribute that is blatantly false, or offer an unprovable innuendo, the result is a discrepancy not between virtual and actual identities, but rather between two virtual identities, the original one (including initial positive assumptions made about the person) and the one constructed locally for social purposes. In essence, the attribute creates a discrepancy between two avatars of a person, although participants masquerade the second avatar as an "actual" social identity. The revised virtual identity may be accepted by observers as well as the target of the identity characterization as an actual identity, which leads to effects such as readjustments in social hierarchies that reach beyond the immediate conversation.

In example (2) from MUD A and examples (3), (4), and (5) from MUSH B, participants use in-group alignment strategies and innuendo to impute a virtual identity to another participant.

(2)

1 Comm rl: [Ray] Ok. I'm hoping to find someone who knows a bit about web
2 design. More specifically setting up java applets.
3 Comm rl: [Douglas] bleck, I almost perked up until you said java applets
4 Comm rl: Douglas sighs
5 Comm rl: Douglas wishes people didn't want all these goddamned bells and

6 whistles on their websites
7 Comm rl: [Douglas] why does EVERYBODY have to have a "my" SQL
8 Comm rl: [Ray] Well I don't need this person to write it just to take a
9 written program and put it in so it works.
10 Comm rl: [Martin] what is the question about java applets?
11 Comm rl: [Douglas] "click here to customize your My Brian Smith's Homepage"
12 Comm rl: Melinda falls over
13 Comm rl: [Melinda] i think i just fell inlove with this career
14 Comm rl: [Hal] I hate java applets...
15 Comm rl: [Chris] Video Game Development?;)
16 Comm rl: [Martin] java applets have thier place. A well designed page
17 dosn't need them.
18 Comm rl: [Ray] Me too but I have specific reason to use this one. ;)
19 Comm rl: [Ray] Ya but I can't write anything better so I'm just going to
20 use this. ;P
21 Comm rl: [Martin] there are times when you want to provide an entire
22 application like thing on the web, that cannot be done with cgi.
23 Comm rl: [Hal] HTML FOREVER! :)

In line 1, Ray asks a preliminary question to find someone qualified to answer his question about Java applets. In line 3, Douglas highlights opposition to Ray's question by opening his talk with the word "bleck," which usually signifies a disgusted reaction to something unpleasant or distasteful. As Goodwin observed, participants highlight rather than delay or disguise opposition during an argument in order to achieve local social ends (Goodwin 1990). Highlighting opposition is a crucial tactic in many performances of technical affiliation, in which participants attempt to re-arrange local social hierarchies.

Douglas explains that the arguable relates to Ray's inquiry about Java applets. According to Pfaffenberger, a Java applet is a "mini-program embedded in a Web document that, when downloaded, is executed by the browser" [1] (Pfaffenberger 1997: 30). Users may incorporate a wide range of applet types in order to add features and functions to a Web page. Although there are a large and varied number of applet functions, a few examples include: emulating calculators and clocks, enabling users to view computer-aided design data, offering surveys and quizzes, playing audio files,

providing news tickers, offering tutorials, and emulating currency conversions or specialized math calculations (such as various kinds of mortgages).

In lines 5-6, Douglas associates incorporating Java applets into Web pages with adding "all these goddamned bells and whistles" to Web sites. His "sigh" and his lament that he wishes people did not want "bells and whistles" on Web sites indicates two things. First, since he assumes that people who use Java applets automatically want to create Web sites with a dizzying amount of features, Douglas implies that people who use Java applets have poor judgment in Web design. Second, by wishing that "people" did not want so many Web page features in one page, Douglas is insinuating that Ray (who initially asked for help with the applet) is one of a group of people who desire a glut of features and therefore has poor judgment in designing Web pages. These moves form an identification process that conjures up an imagined community of people who need badly constructed Web pages. Douglas attempts to create his identity as someone outside of this group, while simultaneously creating Ray's identity as someone who does belong to this group.

One interpretation of the interaction is that Douglas is unable to answer Ray's question in line 1, and thus attacks the content of the question. Note that Douglas responds to the question in lines 3-4 by saying that he "almost perked up" until Ray mentioned "java applets." This packaging implies that he was interested in and (by implication) able to answer the question about Web design until Ray mentioned a need for specific expertise in Java applets. As discussed in the previous chapter, when a respondent cannot answer a question, he or she may perceive a threatened loss of techno-social capital vis-a-vis the questioner, and may try to address this imbalance by taking issue with the presuppositions, content, or form of the question. This interpretation is bolstered by Ray's response in lines 8-9 in which he states that he does not need someone who is so expert as to be able to "write" a Java applet for him, but merely someone who can "take a written program and put it in so it works." Douglas responds in line 11 with a

further lament about people who are uncreative enough to place a feature on a Web page that allows one to "customize" what is really a standardized and unimaginative template for Web home pages (e.g. in the form of "My Brian Smith's Homepage").

Douglas switches from addressing Ray directly as "you" in line 3 to a more generalized group of "people" in line 5. His move places Ray into a set of people who "want all these goddamned bells and whistles on their websites" and thus a set of people who have poor Web design judgment, in comparison to what Douglas implies are normative Web page constructions that do not offer a glut of features. In his work on innuendo, Bell notes that, "an innuendo is a non-overt intentional negative ascription, whether true or false, usually in the form of an implicature, which is understood as a charge or accusation against what is, for the most part, a non-present party" (Bell 1997: 36). In a sense, Douglas's insinuation accuses "people" in line 5, and "EVERYBODY" in line 7 who are not present, but by implicature, we understand that he is placing Ray in the negatively ascribed group.

Bell also notes that the use of innuendo places an assertion "surreptitiously in public consciousness" and it "tends to shift the burden of proof onto the target of the innuendo and brings about an irrevocable change in the belief system of the recipient with respect to the target regardless of whether the charges are ultimately refuted or not" (Bell 1997: 36). Douglas's negative ascription shifts the burden of proof onto Ray and introduces a "stigma" that potentially damages Ray's reputation as someone who is not knowledgeable about "good" Web page design and normative Web page aesthetics. As mentioned above, Douglas's innuendo in no way offers proof of Ray's actual reputation, since 1) we never glean from the conversation what Ray's exact use of the applet is, and 2) Ray does not explicitly offer any judgments about multi-featured, or multi-applet driven Web pages. In line 18, Ray does not explain why he needs the applet, only that he has a "specific reason" to use it. In fact, a recipient of Douglas's innuendo might interpret Ray's decision not to reveal his "specific reason" for using a particular applet as proof

that Ray's reasons would not meet Douglas's criteria for good Web page design. Douglas has, in effect, imputed a virtual reputation onto Ray that Ray is unable or unwilling to refute. Even if Ray attempted to refute it, as Tannen points out and as politicians are well aware, given the current "where there's smoke there's fire" mentality, baseless rumor and innuendo can permanently damage a person's reputation, whether or not the innuendoes are later proven completely false (Tannen 1998).

As Goodwin notes, it is important to examine how other participants observing the oppositional interaction align themselves with the arguing parties (Goodwin 1990). In the above exchange, Hal and Martin also offer opinions about Java applets. In line 14, Hal notes that he "[hates]" Java applets, offering a strong assessment that does not disguise his direct opposition to Ray's use of them. Hal's oppositional assessment does not contain any particular reason or justification. Ray responds to Hal in line 18, with "me too," thus indicating he hates applets as well but has a reason to use them. In lines 16-17, Martin at first disagrees with the previous negative assessments about Java applets, saying that they "have their place," but in the rest of his turn at talk, he colludes with Douglas's initial views by saying that a "well designed page doesn't need them." In lines 19-20, Ray agrees with Martin's assessment about Java applets, but admits that he cannot "write anything better" so he will proceed. In lines 21-22, Martin offers a justification for instances in which a Java applet might be useful, thus displaying some social alignment with Ray and engaging in a performance of technical affiliation that differs from Douglas's. At the end of the sequence in line 23, Hal offers another strong assessment framed as a kind of sports cheer in his statement, written in capital letters, "HTML FOREVER!" The packaging of Hal's response is a performance of technical affiliation that indicates that HTML (HyperText Markup Language) is sufficient and superior to incorporating Java applets into Web pages. In both of his turns, Hal offers strong opposition to Ray's project without providing specific reasoned arguments.

By agreeing with Hal and Martin, Ray in a sense colludes with the normative idea that Java applets are less than desirable for creating Web pages. Such a normative idea may or may not exist among technologists, but the participants use it to situate Ray's virtual reputation and thus his identity in a particular way. Ray ratifies Douglas's performance of technical affiliation by never refuting Douglas's implied negative ascriptions about the use of Java and its ramifications (e.g. creating unpleasant, dizzying Web pages).

In the performance of technical affiliation in (1), given the value that many teenagers and children place in using age to determine social hierarchy, Jack's argument may have had more force because Jack's online persona is older than Brian's. However in the current example, Douglas's online persona is younger than Ray's. In addition, both Douglas and Ray were more social equals on the MUD (than Brian and Jack) since Douglas and Ray were both coders and had important technical responsibilities for designing the world. A performance of technical affiliation is thus not limited to scenarios in which persons of higher status attempt to exercise control over those of lower status. As observed here, persons of similar or competing status may use a performance of technical affiliation to increase techno-social capital.

In (2), participants characterize criticisms of Java applets as normative in the technical community in order to create social arrangements in which people who do not accept these criticisms have lower social status. In examples (3), (4) and (5) from MUSH B, a participant's criticisms of JavaScript are used to impute a virtual reputation onto the criticizer who is portrayed as someone unable to keep up with the pace of technology. Such a characterization casts doubt about the criticizer's general ability to participate on the Internet. Since the conversation takes place over the course of an hour, only relevant excerpts will be discussed.

(3)

1 <Techies> Alexander says, "Does anyone else find it offensive if a website
2 demands javascript or shockwave or some other "optional" thing in order to use
3 their site?"
4 <Techies> Alexander says, "One of my (former) favorite sites has made *EVERY
5 LINK* a javascript link... even ones that "appear to be" standard text hyperlinks."
6 <Techies> Fred says, "Well... on a purely ethical level? Yes.. in reality? I just use
7 the latest IE with all the trimmings."

Example (3) begins a long argument in which Alexander expresses frustration with Web pages that require "optional" features in order to use them. According to Pfaffenberger, JavaScript is "A scripting language for Web publishing, developed by Netscape Communications, that enables Web authors to embed simple Java-like programming instructions within HTML" (Pfaffenberger 1997: 275). According to the Web Developer's Virtual Library Web page, "Shockwave is a technology developed by Macromedia, Inc, that allows the user to view Web pages with multimedia objects."[2] Shockwave enables users to create and playback interactive multimedia including audio, animation, and video. The Web site notes that, "To see a Shockwave object, you need the Shockwave plug-in, a program that integrates seamlessly with your Web browser. The plug-in is freely available from Macromedia's Web site as either a Netscape Navigator plug-in or an ActiveX control." Alexander is protesting Web sites that demand that the user have these technologies, even when certain JavaScript and Shockwave options are not really necessary to interact with all features of a Web page. Alexander points out, for example, that one does not need JavaScript to click on standard text links. His point is that mandating use of a technology for a feature that does not really require it is non-optimal.

Alexander's protest is in alignment with a number of technologists' views that all Web pages' basic content should be accessible, if necessary, in text-only form. In this way, a larger number of people are able to view and use Web pages without needing

specific tools (which may only be available on certain computer platforms). In addition, text-only options would enable people to view Web pages using computers which may have limited processing bandwidth, such as hand held Personal Digital Assistants and other mobile devices. The view that a basic text-only format for Web content should always be available is a democratizing vision of the Internet in which a large and varied number of people can access Web content without requiring specific technical tools.

Even though Alexander's expression of frustration is, in a sense, in alignment with this popular vision of the Internet among many technologists, several participants in the conversation turn his complaint into an arguable that becomes fodder for characterizing Alexander's identity in a negative way. The participants use the arguable to impute a particular virtual reputation to Alexander, who is portrayed as someone "behind the times" because he either lacks the latest technical tools for interacting with Web pages, or is reluctant to use such "advanced" tools. Fred offers the first response to Alexander and sets the stage for this characterization. In lines 6-7, Fred's response to Alexander's complaint takes the more familiar turn shape of initial agreement (that on an "ethical" level, Web pages should not require specific non-standard, proprietary tools), that prefaces a disagreement (Pomerantz 1984). According to Fred, "in reality," he just uses "the latest IE with all the trimmings." (IE stands for Internet Explorer, and is Microsoft's Web browser). Fred is suggesting that he uses "the latest" and therefore the most up-to-date tools, with "all the trimmings," or the broadest number of new features. In this move, Fred's performance of technical affiliation places him in a group of people that uses the latest technology tools, and by implication, places Alexander as someone outside this group. The conversation continues and the theme of Alexander's inability to keep up with technology is mentioned overtly and implicitly several times in (4).

(4)

1 <Techies> Alexander says, "I don't mind javascript as an *option*. I just find it
2 offensive as a *mandate*."
3 <Techies> Howard says, "bah, get with the times *ducks*"
4 <Techies> Howard bets you said the same when color was introduced to TV
5 *dives for cover behind fred*
6 <Techies> Alexander says, "problem is, howard, that's the way I think these sites
7 actually feel."
8 <Techies> Howard uses javascript to go beyond HTML
9 <Techies> Howard says, "the world isn't static, and neither is the web"
10 <Techies> Alexander says, "And if it is, I may as well leave the net. If my
11 freedom to control my own browser has been removed by the "latest fad feature",
12 then I don't want anything to do with the web at all."
13 Russell has connected.
14 <Techies> Howard says, "why do you not want to use it? just so i know?"
15 <Techies> Alexander says, "Because *I* want to control when my browser opens
16 a new window. THANKYOUVERYMUCH!"
17 <Techies> Madeline says, "what browser do you use, Alexander?"
18 <Techies> Howard says, "Neoplanet is cool, brings up a dialog box to warn you
19 of a new popup"
20 <Techies> Alexander says, "The silly thing is: those links (on radiotower.com)
21 don't NEED javascript. They're just URL's to the .ram links."
22 <Techies> Brad uses lynx. If it requires images, flash, or javascript to work... it's
23 not important enough for me to read. :)
24 <Coding> Peter has connected.
25 <Techies> Alexander says, "And my browser acknowledges RealPlayer as a
26 .ram/.ra/.rm plugin. so the javascript (apart from being offensively belligerant) is
27 unnecessary."
28 <Techies> Madline says, "I hate it too when I'm doing something opening
29 webpage and someother shit thing opens that I have to bother with shutting, which
30 I didn't want opened in the tfirst place."
31 <Techies> Howard doesn't mind it =)
32 <Techies> Howard goes with the times =)
33 <Techies> Howard uses Netscape 4.73 for Linux with javascript enabled for all
34 except mail
35 <Techies> Alexander refuses to be a sheep.
36 <Techies> Howard doesn't see it being a sheep

In (4), after Alexander reiterates his position, Howard jokes in line 3 that Alexander should “get with the times.” Howard’s turn is coded as jocular through the term “*ducks*” at the end of the turn, which acknowledges that Alexander may react angrily and be tempted to aim a virtual blow at Howard. In lines 4-5, Howard accuses

Alexander of having had a similar negative reaction to the introduction of color television. This insinuation is preposterous not only because it is unlikely that Alexander would have protested the introduction of color to TV, but also because Alexander might not have even been born at the time color television became commercially available. Yet, the supposedly humorous characterization serves a social purpose. It arguably places Alexander on the defensive by metaphorically portraying him as generally resistant to new technologies as common, necessary, and simple to use as color television. Howard's use of the phrase in line 5 that he "*dives for cover behind fred*" both anticipates Alexander's negative reaction and tries to frame his turn as humorous. Yet as the argument proceeds, it quickly becomes apparent that although Howard frames his comments as humorous to avoid a hyper performance of technical affiliation, they nevertheless reflect Howard's opposition towards Alexander's complaints. In lines 9, 31, and 32, Howard points out that times change and that he is able to go with the times, which implies that Alexander is not. Lines 31 and 32 have smiley emoticons, which function as attempts to soften the implied criticism of Alexander. Because Howard's characterization portrays Alexander as unable to assimilate new technologies, Howard effectively erects a small effigy of Alexander's character in which he is portrayed as ridiculously outside of technical community norms (Goodwin 1990). That Alexander is actually expressing what many technologists might view as a normative critique illustrates how Howard's and others' coding of the critique as non-normative is a strategy meant to call Alexander's opposers into an imagined community of technologists who use the latest technical tools.

Despite the fact that Alexander is high on the social hierarchy of MUSH B and has several important technical and advisory duties on the MUSH, Fred and Howard use a performance of technical affiliation to create a virtual reputation for Alexander that portrays him as out of alignment with certain aspects of a constructed technical community, even though Alexander's initial complaint is seen by many in technical

communities as a normative goal: to provide a wider access to the World Wide Web by reducing the need for specific technical tools in order to interact with Web content. Notably, not all participants are in opposition to Alexander. In lines 22-23, for instance, Brad points out that he uses Lynx, which is a Unix-based, text-only Web browser that enables text-only viewing and use of Web pages. This information is a performance of technical affiliation that potentially demonstrates Brad's alignment to Alexander. Brad's statement implies they are both technologists who choose to interact with Web pages without the use of extraneous tools such as JavaScript and Shockwave. Alternatively, Brad's use of the smiley emoticon may actually signal irony. Brad may be carrying Alexander's complaint to a mocking extreme since most people use graphical interfaces to use the world Wide Web. By the end of the conversation below, Alexander colludes with Fred and Howard's performance of technical affiliation and finally *labels himself* as too "outdated" to participate on the Internet.

(5)

1 <Techies> Alexander says, "It's like saying you can't go on the public streets
2 without driving a certain brand of automobile."
3 <Techies> Alexander says, "What if I wanna walk?"
4 <Techies> Victor says, "Then talk. ;)"
5 <Techies> Howard says, "no it's not, it's like saying, I don't want an airbag
6 because everyone else has one"
7 <Techies> Victor says, "Airbags kill more than seatbelts do."
8 <Techies> Madeline says, "I don't have an airbag."
9 <Techies> Victor says, "Good."
10 <Techies> Alexander says, "No, it's like saying I have to drive when I want to
11 walk."
12 <Techies> Brad wants an affordable electric car, dangit.
13 <Techies> Madeline says, "I got a 486. ...and last class I was in this spring, they
14 said 'most web users' have low end pcs."
15 <Techies> Victor says, "Move to Japan?... ;)"
16 <Techies> Howard says, "And it's like saying that humans developed into a
17 species that wears clothes, it's your decision not too, but more and more people
18 will laugh at you *ducks*"
19 <Techies> Victor strips off all his clothes and runs around the campus butt-naked.
20 ;)
21 <Techies> Matthew says, "In Japan they have a whole liune of computers that

arn't sold outside of Asia."
<Techies> Howard says, "Playstation 2 export restrictions?"
<Techies> Matthew says, "I don't know what they are, I think they're made by NEC."
<Techies> Brad thinks clothing depends heavily on climate, activity, and upbringing.
<Techies> Victor says, "What clothes, Brad?"
<Techies> Madeline says, "so they told us, to make webpages that open to the masses, and let the flashy gimmicks be done by those hwo 'uwually' don't have anything good to sell which is why they try so hard to decorate it all up fancy."
<Techies> Howard says, "also, you can walk, but, other people in their cars will get to where they want to get to alot quicker"
<Techies> Alexander sighs and gives up. Perhaps I am too outdated to be on the net afterall.
<Techies> Matthew says, "?"
<Techies> Howard says, "upgrade"
<Techies> Brad grins and howard, and usually gets where he's going a lot faster than people in cars, during rush hour at least.
<Public> Victor says, "Alex, personally, I say fuck the damned Web. The net is just the web these days. No one knows what Telnet or ftp is anymore. When I was first taught computers back in 1994, I was taught the whole 9 yards."
<Techies> Howard says, "yeah but on the net, those high bandwidth people would run you over and use the sidewalk too"

Alexander's complaint in (3) began as a specific one against Web pages that require JavaScript and Shockwave, and ended with a more generalized critique of Web sites that require users to adopt tools that might be wholly unnecessary and exclusionary in order to use certain Web page features. It is important to note that Alexander's complaint revolves around a specific criticism about mandating rather than offering certain tools as options. It is a very different complaint than eschewing the tools or other technologies in general. Yet, through the course of the conversation, the specifics of Alexander's complaint are lost in an argumentative technique that focuses on generalized examples of technology, rather than on the content of Alexander's specific complaint.

In lines 1-3 of (5), Alexander introduces an analogy to explain his critique. He notes that requiring such tools is like requiring that one use a certain brand of automobile, even if one wants to walk. Alexander's metaphor is logical in a way. One could easily think of scenarios in which it would be impractical, undesirable, or nonsensical to use a

car. In another sense, Alexander's analogy is imperfect and unfortunate for his argument because it places JavaScript and Shockwave on the same level, in terms of technological and social impact, as an automobile. Certainly JavaScript and Shockwave enable users to accomplish things with Web pages. But eschewing JavaScript and Shockwave is not analogous to rejecting a technology as revolutionary and ingrained in the social life of many cultures as is the automobile. Alexander's own metaphor unfortunately contributes to his general characterization as a person eschewing so-called advanced technology tools for less advanced ones. This theme began in (3) in lines 6-7 with Fred's note that he just uses the "latest" technology with "all the trimmings." The theme appeared in (4) with Howard's comments in lines 3-5, 9, and 32, and is picked up again by Howard in lines 16-18 in (5). In lines 16-18 in (5), Howard turns back the technological clock even further and imputes a metaphoric virtual reputation onto Alexander that has him eschewing even more basic technology such as clothing.

Both Brad and Madeline attempt to show social alignment with Alexander at several points throughout the conversation. In lines 29-31, Madeline points out that Web pages that use "flashy gimmicks" probably lack substantive content, implying that Web sites requiring JavaScript or Shockwave are not necessarily of high quality. Brad aligns himself with Alexander by taking issue with Howard's metaphor about wearing clothes. Brad correctly points out in lines 26-27 that the desirability of wearing of clothes depends on a number of factors including "climate, activity, and upbringing." Instead of responding to Brad's persuasive argument which would broaden the discussion to include ideas about context and situations when it is or is not appropriate to use a particular technology, Howard returns to the automobile metaphor in lines 32-33, pointing out that those who use advanced technology will achieve their goals much more quickly. By moving away from the contextual specifics of Alexander's critique, and focusing on broadly generalized metaphors about technology use, Howard can more effectively caricature Alexander as unable to keep pace with "advanced" technology.

Despite Brad and Madeline's attempts at social alignment, Alexander finally concludes in lines 34-35 that he may, after all, be "too outdated to be on the net." Alexander is potentially simply trying to end a conversation that does not seem to be progressing. Alexander's comments have at least two possible readings. The first is that the Internet and the World Wide Web have degraded so severely in its operation, quality, and access that a technologist like himself who espouses democratizing, content-driven visions of the 'Net are out of alignment with the new, suboptimal values of Web page designers and participants. This interpretation is bolstered by Victor's performance of technical affiliation in lines 40-42, which is in alignment with this view. Victor points out that "no one knows what Telnet or ftp is anymore." He is implying that old timers like Alexander and Victor are among the few Internet participants who were around in the early days of its development and are familiar with text-based programs like Telnet and ftp (file transfer protocol) that require more sophisticated knowledge to access Internet content than merely pointing and clicking on links in graphical Web pages. Technologists often use length of time of interaction with a particular technology to indicate social status. Those who were around longest on the Internet and have greatest experience with older technologies like Telnet and ftp would have higher social status in this model than new entrants who are unfamiliar with the way the Internet initially worked.

The second interpretation is that Alexander is colluding with the other participants' characterization of him as too outdated to be on the 'Net because he is reluctant to adopt new technical tools for their own sake or simply because others do. Matthew and Howard respond to Alexander in the context of the second interpretation. In line 36, Matthew responds to Alexander's surrender with a question mark, indicating confusion over why Alexander thinks he cannot participate in the Web as it is currently conceived. Howard responds in line 37 by admonishing Alexander simply to "upgrade" and adopt the new Web tools. Howard responds to Victor's performance of technical affiliation by returning once again to the generalized metaphor of using cars versus

walking. In lines 43-44, Howard uses Alexander's metaphor against him by pointing out that on the 'Net, "high bandwidth people" (i.e. those in cars) will run over those who are not in cars, and they will take over and use up resources meant for low bandwidth people (i.e. those who walk). By switching away from the particulars of Alexander's complaint and focusing on generalized metaphors about primitive versus so-called advanced technology, Howard is able to mold talk such that it becomes more difficult to express certain ideas about technology, even if those ideas are considered by many technologists to be normative ones.

The previous discussion offers insight about how virtual reputations are constructed and how they are used for local social purposes. The data show how a performance of technical affiliation can impute a virtual reputation onto a participant by introducing, either overtly or through innuendo, a stigma or attribute that results in a participant's social reclassification. Instead of creating an actual reputation, however, the introduction of the attribute through oppositional talk creates a virtual reputation or avatar that participants masquerade as an actual depiction of a participant's character. The masquerade becomes more effective when the target participant colludes with the performance of technical affiliation and either accepts the reclassification or refrains from disproving or refuting the claims. Making such a refutation may be difficult or impossible if the innuendo is unprovable or preposterous. Even if such a refutation was attempted, the effects of the innuendo are quite likely to remain in effect within and across multiple interactions (Tannen 1998; Bell 1997). Through a performance of technical affiliation participants are more effective in creating a virtual effigy of a participant by moving away from the contextual or technical particulars of the target participant's observations or complaints, and focusing instead on broad metaphors and generalizations that bear little resemblance to the original arguable. Such a conversational move enables participants to caricature a target participant in cartoonish ways, imputing behavior that

clearly falls outside the patterns that participants label as "normative" within the parameters of the local talk.

Giddens provides important insight on the kinds of identification dynamics discussed above (Giddens 1991). Giddens discusses particular challenges of establishing a sense of "self" in modernity due to the pace of "reflexivity" which originated from Enlightenment principles (Giddens 1991: 21). According to Giddens, the methodological principle of "doubt" upon which modern science is based leads to constant scientific skepticism and re-evaluation about what is known (Giddens 1991). This constant reflexivity extends to the concept of the self, which is open to revision in light of new findings and challenges (Giddens 1991). The problem is that this constant reflexivity ensures that one can never actually achieve certitude about any acquired knowledge (Giddens 1991: 21).

Giddens's formulation applies to our understanding of how the identification process works. In the above data, we saw how new challenges to what was believed to be normative expressions of technology force a participant to re-examine the cherished ideas that helped him formulate a sense of self. The participant faces a two-fold problem in that the criticizer may not actually be invoking normative expressions to challenge the participant's identity as a legitimate member of a group of technologists. The criticizer may simply label his criticisms as normative in order to create his own identity vis-a-vis the participant. The second problem refers to Giddens's observation that as the pace of technology changes and new products and systems are introduced, established ideas about what is true, acceptable, and/or desirable about using these systems must constantly be re-evaluated. To the extent that a participant creates a sense of self in accordance with particular views about technology, then that participant's identity will face continual challenges and threats as these technologies change. Identity formation in modernity becomes a continual project of re-evaluating alignments and beliefs to certain ideas which are identified with certain prestige groups. Argumentative forms of talk thus

become loci of identity crises in which participants must respond to challenges to views about technology, and thus ultimately to the self, or risk having their identity constructed as members of undesirable "out groups."

Good Versus Evil on the 'Net

In their work on argument as sociability, researchers point out that participants who engage in ritual or sociable arguing do so in ways that protect the social identity of speakers (Schiffrin 1984; Labov 1972; Modan 1994). In studying opposition in Jewish discourse in particular, Modan quotes Lehman-Wilzig's observation that in the Talmudic tradition, an orientation toward argument is rooted in the idea that " 'Both opinions are the words of the living God'" (Modan 1994: 502; Lehman-Wilzig 1991). In such a model, speakers' opinions merit respect, even if opposition arises. Modan notes that "coexistence of opposing views can be seen" at the root organization of Judaism in which "the Orthodox, Conservative, Reform and Reconstructionist traditions have remained under the rubric of Judaism rather than breaking off to form new religions" (Modan 1994: 502). According to this view, speakers believe that it is their "right" to express themselves "freely and spontaneously" in ways that cooperatively tolerate opposition (Modan 1994: 504). Modan contends that the roots of this oppositional tradition extend beyond discussions of religion itself, but into more generalized oppositional discussion.

In the present data, speakers often invoke ideas about goodness, evil, God, and the devil in order to characterize their opponents' views on technology. Yet, during these performances of technical affiliation, notions about cosmology do not promote open discussion rooted in valuing opposing ideas. Rather, such cosmological associations label opposing views as evil, or as existing outside acceptable moral codes. Once participants or their ideas are labeled as associated with the devil, defending their ideas becomes

difficult until participants move outside of cosmological pronouncements and focus on the particular attributes that their preferred technologies actually exhibit in the world.

In his work on studying artificial life researchers, Helmreich noted that even though many such researchers considered themselves to be atheists, they nevertheless relied on Western Judeo-Christian cosmologies in conceiving and executing their creation of artificial life (Helmreich 1998). Similarly, MUD creators often label themselves as "immortals" or "gods" who have designed a world with independent participants. These participants have a certain amount of free will to make choices about their conduct and to suffer the consequences as determined by the gods of the MUD. Online and offline participants tend to extend this metaphor further, such that any person working with certain technologies that involve creation (such as writing a computer program to complete tasks or authoring a Web page) must make so-called moral choices about which technologies to use and why.

In some cases, participants are able to make a logical or argumentative connection between a technology's attributes and the reasons why the technology may be perceived as less "moral" or "good." For instance, many participants who have a democratizing view of the Internet eschew what they see as Microsoft's monopolistic business practices. Many (but certainly not all) participants feel that such practices contribute to a wide distribution of expensive, low-quality products that are bundled and sold in ways that remove consumer choice. Similar to participants in Modan's vision of oppositional discourse, these participants believe they have a duty to expose such immoral beliefs and practices (Modan 1994). As in the community that Modan studied, many participants on the Internet believe they have a strong responsibility to take stands on opinions "that they believe to be wrong" in order to maintain the integrity of the Internet (Modan 1994: 504).

However, in many instances the connection between the actual attribute(s) of a technology and a participant's characterization of those attributes as "immoral" or "evil" is not particularly well established during an oppositional encounter. In these instances,

participants tend to move away from actual data or evidence (even when talking about Microsoft), and move toward the more difficult to prove cosmological realm when characterizing a particular technology as "evil" or as associated with the "devil." When participants do not establish a logical connection between technology and morality, it becomes more difficult and perhaps pointless to try and refute cosmological accusations.

Yet, as noted in the previous discussion on innuendo, leaving an accusation unanswered does not dispel misrepresentations of a participants' beliefs about technology. Once an idea is branded as evil, then defending that idea outright places a defendant in the position of siding with the devil. Invoking the cosmological realm tends to constrain the possible moves the next speaker can logically make. For instance, if someone says "X idea is from Lucifer," then a participant's next strategic move will not likely be of the form, "I like X," or "I believe strongly in X," lest they be branded on the side of the devil. A series of conversational moves will quite likely be required in order to leave the cosmological realm and focus on actual attributes and their impact in the world. Labeling ideas or technologies as "evil" does not necessarily make opposition impossible. However, it may make opposition difficult, and it can ultimately be used to caricature opponents in ways that situate them lower on the techno-social hierarchy than their accusers.

Participants may construct serious or humorous portrayals of technology's good and bad attributes. Humorous characterizations demonstrate that participants are clearly aware of their practice of labeling technologies as good or evil. Yet, even if such characterizations are executed in playful, self-aware terms, they nevertheless serve an important purpose, which is to construct opposition in ways that characterize the believers of such opposition as ridiculous at best and morally reprehensible at worst. In examples (6) to (10) from MUSH B, participants use humorous terms to portray the moral character of the opposition.

(6)

<Public> Sean says, "EWWW!~"
<Public> Sean says, "EVIL MAC!"
<Public> Sean says, "KILL IT! KILL IT!"

(7)

<Techies> Isaac still thinks it's funny that searching for 'evil monoply' brings up Microsoft's homepage.
<Techies> Austin says, "or "more evil than evil itself""

(8)

<Techies> Gordon says, "our techies suck sometimes, s'why i'm looking to move on"
<Techies> Isaac chuckles.
<Techies> Isaac ahs. "Well, that's the trouble. Most of them are Windows mis-trained, too."
<Techies> Gordon requested a linux box a month ago, they've never used it so i have to wait for them to finish evaluating it
<Techies> Gordon says, "MCSEs"
<Techies> Isaac says, "Doh."
<Techies> Gordon says, "don't get me started ;)"
<Techies> Isaac nods. "Not the ideal people to have as your core techies."
<Techies> Isaac says, "The only thing going for them is that they're cheap."
<Techies> Gordon says, "precisely, had one guy who's an ex-Solaris admin, he's turned into a proper C word now"
<Techies> Gordon says, "He's turned to the arse side of the force"

(9)

<Linux> Roy says, "Microsoft is Jesus."
<Linux> Roy says, "Repent or be doomed to life without stable DVD support."
<Linux> Jim ewws. "No, Microsoft is Lucifer... used to be great, then fell desperately around the release of Windows 95."
<Public> Jessie has disconnected.
<Linux> Roy looks at Jim. "One of you will deny Microsoft three times, the other betray Microsoft."
<Linux> Jim lols.
<Linux> Kurt will deny microsoft more then three times.

(10)

<Public> Cathy says, "Linux: Would YOU have a penguin running your computer? :)"
<Public> Scott says, "Better a penguin than a guy like Bill Gates and a company like Microsoft"
<Public> Cathy says, "Why?"
<Public> Scott says, "because I'm permitted to dissect the penguin and make whatever changes to its anatomy I want."
<Public> Cathy says, "I am not stopped in any way from pulling apart Windows?"
<Public> Scott says, "and give it cybernetic implants and it'll work for me instead of spending most of it's time organizing its few tidbits of information (a la microsoft, bill)"
<Public> Jim says, "Besides, it's cuddly. Do YOU want to cuddle Bill Gates?"
<Public> Scott grins at Jim
<Public> Scott points at Jim. "Wut he said"
<Public> Cathy says, "Where in my licensing agreement does it say '13.2. For the continuing validity of this agreement, you must cuddle William Gates II (hearafter referred to as 'Bill')'?"
<Public> Scott says, "Article 666, clause 666 of the EULA"
<Public> Cathy giggles,
<Public> Cathy says, "You're insane. :)"
<Public> Scott says, "insane, realistic, what is difference?"
<Public> Jim rotfls.

In (6), during a discussion of various operating systems, Sean notes that the Macintosh is “evil” and should be killed. That his tone is playful is indicated in the “EWWW!” in line 1 which is a way of expressing mild disgust, his capital letters and exclamation points showing emphasis, and his call to “kill” the Macintosh, as if it were an insect to be stamped on or something threatening to be exterminated. These ideas about the Macintosh computer being “evil” do not include any reasoned arguments about specific attributes, but merely attack the Macintosh in cartoonish form. In (7), Isaac notes that searching for the term “evil monopoly” brings up Microsoft’s homepage on search engine lists. In his reply, Austin goes a step further and characterizes Microsoft as “more evil than evil itself,” by suggesting that phrase as an additional search term. In (8), Gordon muses that technologists who reject “good” operating systems (like Unix, of

which Solaris is one flavor) in favor of Microsoft Windows have turned to the "arse side of the force." In line 15, Gordon is invoking a cosmology from the *Star Wars* films, in which there is a good side and a "dark" side to a mystical entity known as "the force." By replacing "dark" with the term "arse," Gordon makes a humorous suggestion that techies who sell out to Microsoft are no longer good (or even powerfully evil, as the "dark" side of the force is), but merely asinine. Within these examples, the use of cosmology eschews reasoned arguments in favor of moral jibes about technology use.

In (9), Roy takes the somewhat unusual position of casting Microsoft as "Jesus," rather than casting it in the usual guise of "evil." In line 2, Roy suggests that people "repent or be doomed to life without stable DVD support." Note that Roy is making this pronouncement over the Linux channel, which was a channel devoted to Linux questions and discussion. Since Linux is a competing operating system to Microsoft Windows, and many people listening to the channel feel very strongly about using Linux rather than Windows, Roy is presumably preaching to an audience that he knows is predisposed to reject Microsoft. His cosmological metaphor to such an audience seems geared to stir up emotions. One interpretation of Roy's suggestion in line 2 is that people should "repent" and join the Microsoft camp, since a number of Digital Video Disc (DVD) chip manufacturers have announced their support for Microsoft's version of DVD technology (Merritt 2001). According to this view, if Microsoft extends its presence in the DVD arena, then those who have eschewed Microsoft and instead use other devices will find themselves without "stable DVD support." In lines 3-4, Jim proposes that Microsoft is not Jesus, but rather "Lucifer," since Microsoft used to be "great" but then fell in quality during the release of Windows 95. In lines 6-7, Roy invokes the biblical story of Jesus's denial and ultimate betrayal, to indicate the opposition that Microsoft will face. In line 8, Jim laughs out loud, indicating the playful reception of Roy's metaphor. Finally, Kurt registers his opposition to Microsoft in line 9 by noting that he intends to "deny microsoft more than three times." Kurt stays within Roy's metaphor to express his opposition.

In (10), Scott indicates in lines 3-4 that he prefers the Linux platform (which is often represented by the symbol of a penguin) to Microsoft. Example (10) begins with reasoned arguments about why Linux is or is not superior to Windows (in lines 6-7, 8, 9-11). For instance, in lines 6-7, Scott notes that an advantage of Linux is that users can make changes to the very core of the Linux operating system. Cathy, who often defended Microsoft, does so again in line 8, wherein she provides a counter argument. She notes that it is in fact possible to "pull apart Windows" in a manner similar to that which enthusiasts can manipulate the core of the Linux operating system. Rather than respond to Cathy's argument, Jim introduces in line 12 the concept that a "penguin" is more "cuddly" than Bill Gates. By asking Cathy directly if she wishes to "cuddle" Bill Gates, Jim moves the conversation away from logic and introduces a sexualized suggestion to the only female-presenting character in the discussion. Jim's tactic is used to "win" the argument about the superiority of Linux since presumably women will not want to engage in physical encounters with Bill Gates.

In lines 15-17, Cathy demands evidence for Jim's suggestion: She asks where in the EULA it is required that she "cuddle" Bill Gates. (EULA stands for End User License Agreement wherein a software user agrees to certain conditions of use such as not illegally copying or distributing the software.) In line 18, Scott uses the playful terms "Article 666" and "clause 666" to indicate where it is stated that users must "cuddle" Bill Gates. These fictitious clauses incorporate the number 666, which is often seen as a sign of the devil. Both Cathy and Jim indicate their playful reception to this cosmological and partly sexualized characterization of technology interaction. In line 19 Cathy giggles, and in line 20, Cathy calls Scott "insane" and uses a smiley face emoticon to indicate amusement. In line 22, Jim responds by "rolling on the floor laughing." The sexual and cosmological metaphors reroute the focus from reasoned arguments about technology toward portraying pro-Windows users as having questionable sexual and technological preferences that are associated with the devil.

However, not all cosmological metaphors are sent or received as humorous and playful in tone. For instance, Denise, a female participant from MUSH B told me during our formal interview that, “There are several recurring conversations on MUSH B. The first is the Linux vs. Windows debate. The MUSH is populated primarily by people that are in the computer industry or aspire to be in the industry. For many people, Bill Gates is the spawn of Satan and Windows is his tool to spread evil. I'm a Windows user. So it gets on my nerves.”

In examples (11) and (12) below from MUSH B, use of cosmological imagery is received as a personal attack that does not create an atmosphere of open opposition for all of the participants. Because the conversation took place over the course of an hour and twenty minutes, only relevant excerpts will be examined for this analysis.

(11)

<Public> Zachary says, "MacOS is lightyears beyond anything except BeOS and the UNIX-like OSes."
<Public> Howard says, "it's API syucks"
<Public> Howard says, "it's interface is too restrictive"
<Public> Zachary says, "Seems to work just fine."
<Public> Isaac says, "Hell, I'm a registered Mac developer, Howard."
<Public> Zachary says, "In what way?"
<Public> Isaac hasn't touched a Mac in years.
<Public> Sean wonders when Isaac will say, "I'm superman."
<Public> Zachary hehs.
<Public> Isaac says, "No. I'm just a sys admin / software engineer."
<Public> Zachary is beginning to wonder when Howard will say, "I'm God."
<Public> Isaac says, "You have to be professional in my field ;p"
<Public> Howard says, "you have one mouse button, for starters, so everything is either mouse, or keyboard and mouse, as a front end user you have to use third party tools to access low level functions, e.g. file buddy, ah, i could go on, but i wouldn't expect you to understand"
<Public> Howard is not god
<Public> Isaac says, "God, root... what is difference? ;)"
<Public> Howard is a realist
<Public> Zachary says, "Try me, howard."
<Public> Howard doesn't have time

<Public> Brad just wants to know who's bright idea it was to put a menu bar shared by everything up at the top of the screen, instead of one per app WHERE THE APP IS on the window. :P
<Public> Howard says, "Zack, you live in your little world back in the mid 90's and let everyone else 'progress'"
<Public> Sean says, "Yes, Brad, thusly the statement: Macs suck."
<Public> Isaac says, "Everything sucks. :)"
<Public> Zachary agrees with Isaac.
<Public> Howard says, "cept solaris ;)"
<Public> Howard likes solaris
<Public> Charles hummmss.."my hair dryer blows actually...
<Public> Zachary says, "MacOS sucks less than the major competition."
<Public> Isaac says, "Solaris is actually good - on Sparc hardware."
<Public> Zachary says, "*coughcoughwindowscoughcough*"
<Public> Howard says, "as a front end user, i wouldn't really expect you to understand zack, so lets just finish the conversation on macs here"
<Public> Howard does like solaris lots =)
<Public> Isaac says, "Alpha. Now there's a nice architecture. :)"
<Public> Fred wonders if you feel like moving this to +jyhad or something else more suitable? :o)
<Public> Don says, "Or +techies."
<Public> Charles says, "what is solaris?"
<Public> Zachary says, "howard, as soon as you design the perfect OS that pleases everyone, I'll accept your criticisms. Until then, I will contend that every OS has its annoying quirks."
<Public> Isaac says, "It's a Unix variant, Charles."
<Public> Zachary says, "And that the presence/absence of certain features are just those: annoying quirks."
<Public> Charles ahhh
<Public> Charles is suppose to be learning that..I forgot the book in england though...
<Public> Howard says, "Zack, this could get personal, you're twisiting things, I did not say that I could write the perfect OS, or that I am god, so, just quit it"
<Public> Zachary says, "Having used both Windows and MacOS extensively, it is my opinion that MacOS is the better of the two."
<Public> Sean says, "MacOS is worse than Windows. I say this mainly because MacOS seems to me to be very plastic."
<Public> Howard says, "It's a pile of monkey jissum"
<Public> Isaac grins.
<Public> Fred says, "Okay, guys, +techies for this please?"
<Public> Don says, "Oh my god. howard. Do not put images like that in my head."

(12)

<Public> Zachary says, "The availability of apps and games on MacOS is not what it should be."
<Public> Howard says, "MacOS X is crap too, and don't start because I've seen ever revision since the first rhapsody (which worked on x86) right upto the release of MacOS X server"
<Public> Jordan finds the availablity matches the consumerbase.
<Public> Charles idles for supper
<Public> Jordan says, "The consumerbase in comparison with the PC is very tiny."
<Public> Howard says, "it's designed for kids"
<Public> Howard says, "it's all bells and whistles, no real power there"
<Public> Don does have to defend the Mac on the music end...
<Public> Don says, "Since god uses it to make his music."
<Public> Howard says, "why?"
<Public> Fred cracks his knuckles, and looks out for the next out of place techie comment on +pub so he can changag someone? Common, people. ;o)
<Public> Don says, "Er, my god, that is. ;P"
<Public> Howard says, "Sound Blaster 64 Platinum?"
<Public> Jordan says, "Sound Blaster Live! Platinum..."
<Public> Howard says, "yeah,t hat's the one, 15 quid from work ;)"
<Public> Zachary says, "This is turning into a holy war."
<Public> Howard says, "no it's not"
<Public> Jordan rolls his eyes, "I still think an Athlon 1.1GHz can wail on a dual G4 system in video & audio."
<Public> Zachary says, "Yes it is."
<Public> Zachary bahs.

Throughout the discussion in (11), Howard criticizes the Macintosh operating system (MacOS). In lines 3, 4, 14-16, for instance, Howard offers specific reasons for his dislike of the Macintosh. Zachary defends the MacOS in lines 1-2 and 5. But in line 12, Zachary introduces a cosmological metaphor, wondering aloud “when Howard will say, ‘I’m God.’” One interpretation of Zachary’s accusation is that Zachary believes that Howard has been so arrogant in the way he has expressed opposition to the MacOS that he is acting as though he is as omniscient as God. Zachary is accusing Howard of being unrealistically confident of his position and rejecting logical but opposing arguments.

In line 29, Isaac tries to lighten Zachary’s accusation by invoking the oft-used quote that there is little difference between being “God” and having “root” access to a

computer. Originating from Unix systems, the idea of having "root" access now refers generally to having "superuser" privileges that give a user top-level access to a computer's file directories (Raymond 1997: 387-8; Pfaffenberger 1997: 452). Many technologists desire root privileges because they give them full access to all the system's resources and functions, such as setting privileges for other users. Howard and Zachary do not respond to Isaac's joke. Instead, in line 18 Howard denies being God. Rather than colluding with Zachary's performance of technical affiliation, Howard interrupts Zachary's characterization of him and in line 20 label's himself a "realist." Nevertheless, as discussed in the previous section on innuendo, Zachary's accusation puts Howard on the defensive, which is a far weaker tactical position during an argument. Howard must defend himself so that his opinions will be evaluated fairly and not merely dismissed as arguments emanating from someone who practically believes himself to be God.

In lines 45-47, Zachary makes another allusion to Howard's omnipotence, saying that until Howard can design the "perfect" OS, Zachary will not accept Howard's criticisms of the MacOS. Since by definition it is difficult if not impossible to design a "perfect" OS, Zachary is essentially saying he will never accept Howard's criticisms. Zachary's argumentative tactic is often used by technologists and others who wish to defray criticism of any kind by establishing the parameters of who is "allowed" to make a "valid" criticism. Zachary's statement in lines 45-47 sets up a scenario in which only a person who has designed something "better" or something "perfect" is allowed to make a criticism. Yet something better cannot be designed until participants can discover and point out what is imperfect about a technology. Of course, designing something perfect is difficult if not impossible. Thus Zachary's tactic is to portray his opponent Howard as unqualified to make criticisms.

In lines 54-55, Howard makes it clear that he did not receive Zachary's accusation about being "God" with amusement. Rather, he views it as a potentially "personal" attack and denies suggesting that he claimed to be God. Howard ends his warning in line 55

with a command for Zachary to "just quit" his attacks. Far from resembling a tradition in which all opinions are seen as valid and worthy of respect, participants use cosmological metaphors to caricature an opponent and devalue his oppositional views. By claiming that Howard thinks he is "God," (clearly a preposterous attack that Howard rejects), Zachary casts doubt on all of Howard's opinions. Zachary constructs a scenario in which all of Howard's opinions must be taken with skepticism, since they emanate from someone who has a self-aggrandizing, unrealistic view of his opinions. The attack provides a lens with which to view Howard's opposition. Zachary uses a cosmological metaphor to engage in a performance of technical affiliation which casts his opponent's opinions as completely out of proportion to reality.

A more playful attempt at invoking cosmology occurs in (12). In (12), Don makes another allusion to God in lines 12-13 and 17. He suggests that the Macintosh is so good for applications involving creating and using music that God Himself uses it to create His music. Don's comments, set in playful tones, set off a discussion about music applications. After Don's comment that God prefers the MacOS to make music, Zachary declares in line 21 that the discussion has turned into a "holy war." The term "holy war" is heard frequently in the context of Internet technology discussions in which participants express strong opinions. Pfaffenberger, for example, defines a holy war as, "A protracted and often incendiary debate within the computing community regarding the merits of a particular computer, operating system, or programming style. The term nicely captures the inflexible and often dogmatic positions that the various participants take in the debate" (Pfaffenberger 1997: 238). During a holy war, it is generally understood that participants are not likely to change their minds or their opponents' minds even in the face of aggressive opposition (with or without reasoned arguments). The idea is that participants cling dogmatically to specific positions and frequently repeat well-known arguments during the course of the debate.

Raymond notes that "the characteristic that distinguishes holy wars from normal technical disputes is that in a holy war most of the participants spend their time trying to pass off personal value choices and cultural attachments as objective technical evaluations" (Raymond 1997: 247). Raymond's definition separates "personal" and "cultural" choices from "objective technical evaluations" (Raymond 1997: 247). Yet, the project of the anthropology of science has systematically dismantled the notion that one can make objective choices and judgments about technology in a place somehow detached from cultural values and beliefs (Haraway 1989; Latour 1987; Keller 1992; Harding 1993, Martin 1990; Traweek 1988, Hess 1995, Helmreich 1998). How does one decide, for instance that a particular technical attribute is desirable or undesirable, unless one has a cultural lens with which to judge the attribute's merits? For instance, the cultural value of writing "elegant" which is to say "parsimonious" software code drives judgements about which programming language might be superior for a particular task. That code should be parsimonious is a cultural value. Obviously, no objective evaluation can be made without cultural judgments to frame decisions. That decisions can and should be made objectively is itself a cultural view, as researchers in the anthropology of science have pointed out (Haraway 1989; Latour 1987; Martin 1990). Raymond's distinction between cultural versus objective criteria as the defining characteristic of "holy wars" has severe theoretical limitations for understanding the dynamics of agonistic debate on the Internet (Raymond 1997).

Closer to the position here is Pfaffenberger's characterization of these debates as "incendiary" and "inflexible" (Pfaffenberger 1997: 238). The debates tend to move away from reason and towards an agonism meant to situate certain participants as higher on the techno-social hierarchy than others. The purpose of taking a side in "holy war" is to perform technical affiliation and show one's own understanding and allegiance to certain views that participants code as normative during the conversation. Participants may use either humorous or serious cosmological scenarios to caricature the opposition as "evil"

or on the side of the devil for their technology choices. The techniques may be effective because they make preposterous innuendoes that may be difficult or pointless to counter since they make no logical connections about a technology's attributes and morality. Nevertheless these cosmological metaphors label opponents in unfortunate ways and create effigies of those who express non-normative views about technology. Rather than "delay" or "disguise" opposition, the cosmological metaphors dramatically highlight and formulate bipolar, "black and white" opposition between so-called good and evil technologies and those who use them (Goodwin 1990: 145; Tannen 1998). Such opposition does not protect speaker's integrities, but rather divides speakers into those who express agreement with normative views and those who are unwilling, incapable, or unfit to accept online norms. The technique uses cosmological metaphors as a particular style of the imagined community that participants call into being while aligning themselves within it, and simultaneously excluding their interlocutors.

Arguing with Agonism

Certainly many conversations observed during the fieldwork could be called sociable arguing in which participants offered interesting and reasoned arguments about various aspects of technology. The concern is not with these types of encounters, but rather with agonistic arguments that separate complex issues into cartoonish bipolar representations and caricature opponents using accusations that the accuser may not really believe or know are false. This type of conflict fits into a larger trend that Tannen has observed in U.S. culture (Tannen 1998). Tannen is concerned with what she sees as an increasing amount of "agonistic" opposition, which is a kind of "programmed contentiousness" or "a prepatterned, unthinking use of fighting to accomplish goals that do not necessarily require it" (Tannen 1998: 8). Tannen is not calling for an end to "negativity, criticism, or disagreement" (Tannen 1998: 26). Rather, Tannen is questioning

the automatic or knee-jerk use of certain kinds of adversarial forms (Tannen 1998: 26). However, in her discussion of computer-mediated communication (CMC), Tannen attributes online aggression to the so-called anonymity of computer interaction (Tannen 1998). The contention here is that performing technical affiliation through arguing has specific social purposes and does not require anonymity to succeed. Rather, the act of performing technical affiliation is an attempt to decrease levels of anonymity between interactants by situating them in various social configurations.

Tannen argues that "flaming" or "vituperative messages that verbally attack" are the result of the "anonymity not only of the sender but of the receiver" (Tannen 1998: 239). She provides the persuasive example of the driver who is cut off in traffic and aggressively insults the offender (Tannen 1998: 239). Should the driver recognize the offender, they might feel a "rush of shame" which is "evidence that anonymity was essential for [the] expression—and experience—of rage" (Tannen 1998: 239). She suggests that antagonism may be defused if groups make an effort to "get to know each other personally"(Tannen 1998: 239). She argues that communications that are not "face to face" may isolate interactants and increase the "likelihood that their encounters will be agonistic" (Tannen 1998: 240).

Tannen's argument about the so-called anonymity of computer-mediated interaction is in line with a number of scholars' work on the negative effects of non-face-to-face communication. Some studies, for example, have shown that anonymous computer environments promote disinhibited behaviors such as flaming (Kiesler et al. 1984; Kim and Raja 1991; Dery 1993). Dery, for instance, says that the "wraithlike nature of electronic communication—the flesh become word, the sender reincarnated as letters floating on a terminal screen—accelerates the escalation of hostilities when tempers flare; disembodied, sometimes pseudonymous combatants tend to feel that they can hurl insults with impunity (or at least without fear of bodily harm" (Dery 1993: 559). Tannen and others disagree with studies that touted the anonymity of computer-mediated

communication as promoting more egalitarian interaction. These optimistic studies posited that anonymity would enable participants to judge ideas on the basis of their merits, rather than on participants' social identifiers (such as race, gender, and physical appearance) (Kiesler et al. 1984; Van Gelder 1990). More recent feminist work in computer-mediated communication has also challenged the utopian vision of the Internet as an anonymous, gender-neutral forum for the fair evaluation and exchange of ideas (Haraway 1991; Herring, Johnson and Di Benedetto 1995; Cherny 1985; Tannen 1994; Turkle and Papert 1990; Hall 1996). Evidence suggests that participation in online groups does not become increasingly democratic when members avoid overt status-identifying behaviors (such as stating one's occupation or title) (Sutton 1994; Hall 1996). Hall noted, for example that "body-free interaction" in online environments has promoted "exaggerated cultural conceptions of femininity and masculinity" (Hall 1996: 148).

Scholars who believe that online communication promotes egalitarianism, and scholars who feel that online communication promotes asocial aggression often share two theoretical misconceptions. The first is that online communication is inherently and completely anonymous and the second is that anonymity is the cause of the type of behavior being evaluated. Using Bourdieu's formulation, these conceptions about "the computer" being a totally "anonymous" medium can be considered "doxa," or unstated, yet shared assumptions by both orthodox and heterodox camps (Bourdieu 1977: 167-171). Both orthodox views (which see anonymity as liberating) and heterodox views (which challenge that view and see anonymity as promoting aggression and isolation) make unquestioned assumptions about the nature and degree of anonymity online. Both types of studies tend to use phrases such as "the anonymous nature of the computer," (emphasis added) which are problematic because they take for granted the idea that interacting on a computer with someone else will necessarily be a totally anonymous encounter. This kind of assumption does not take into account the myriad social

arrangements found on the Internet. For instance, sending a friend email is not an anonymous encounter.

The doxa of anonymity that lies behind assumptions about the positive or negative effects of computer-mediated interaction deserves close theoretical reconsideration. Assumptions and conclusions about online anonymity should be made with caution and only after systematic evaluation of the social particulars of specific online arenas. Anonymity is not a singular concept that applies to all groups at all times. Many levels of anonymity exist. *Webster's* dictionary offers at least two definitions. The first is "having or giving no name," a conception that most scholars use when thinking about anonymous computer-based interaction. The second, however, describes anonymity as "marked by lack of individuality or personality." Many interactions on the Internet are not anonymous, since people know with whom they are exchanging messages. In addition, in the second sense of anonymity, many online interactions are not completely anonymous, because they contain social identifiers that distinguish one online persona from another.

Feminist scholars have dismantled ideas about online egalitarianism precisely because social identifiers leak into online interactions much more readily than many people originally supposed (Tannen 1994; Hall 1996). According to a number of studies, members of online groups easily recognize and act upon subtle social cues such as gendered ways of communicating (Herring, Johnson and Di Benedetto 1995; Cherny 1985; Tannen 1994; Turkle and Papert 1990; Hall 1996). Nardi has pointed out that people examine email headers and tend to give more credence to messages from prestigious technology companies rather than from online service providers such as America Online (personal communication). I have observed in person how technologists in Silicon Valley use explicit hierarchical information to evaluate messages. Emails originating from addresses that end in .net, for instance, which signal the emailer's affiliation with a company working on Internet networks will likely receive more immediate respect and attention than someone with an email address from America

Online (AOL). Since many people who were first exposed to the Internet using the AOL service are considered latecomers to the 'Net, technologists tend to devalue messages originating from AOL users.

Further, email is not a one-way technology as Tannen suggests, since people can and do respond to it. It is asynchronous, but not one-way. Email is only one type of computer interaction and it is important not to over-generalize about "the computer's effects" on the basis of one type of exchange: email. Many types of computer-based interaction exist, such as real-time chat and online conferencing that are synchronous. Comparing asynchronous and synchronous communication in terms of encouraging flaming behavior is an empirical question that should be approached as such.

Tannen suggests that non-face-to-face encounters are likely to be "isolating" and aggression may be reduced by in-person contact (Tannen 1998). Yet she provides several examples throughout her discussion which include agonistic face-to-face encounters (such as hazing in schools, and girls and boys at play) (Tannen 1998). Similarly, agonistic arguing of the type found in performances of technical affiliation frequently appears in many in-person technical contexts. The reason I originally became interested in these phenomena is that I observed them during my seven year employment at a research firm in Silicon Valley. I observed how coworkers who knew each other well and interacted in informal and formal meetings used these agonistic techniques on a daily basis in order to jockey for social position within the company and among one another. I observed these phenomena not only in the company I worked for but also at conferences, meetings, and many other face-to-face contexts in which the interlocutors knew each other by name and/or were very familiar with each other.

This type of agonistic interaction among technologists is such a widespread and recognized cultural trope that it has been spoofed even on mainstream television comedy shows such as *Saturday Night Live*. In a series of skits called "Nick Burns: Your Company's Computer Guy," a computer expert named Nick Burns hyper performs

technical affiliation by helping his coworkers with their computer problems only after mercilessly insulting their limited technical knowledge. After trying to explain the technical problem to a confused coworker, Nick inevitably yells, "Move!" and chases the coworkers from their chairs so he can skip the computer lesson and address the problem directly. Although his jibes gain him techno-social caché among his technical colleagues, he is roundly disliked by the people whom he patronizingly helps.

It is important to understand that levels of anonymity are not everywhere the same for every participant in every encounter. For instance, many of the participants in the MUDs observed here held "MUD Meets" or face-to-face get-togethers in which people traveled sometimes great distances (such as between the United States and Great Britain) to socialize. Participants of both MUD A and MUSH B often posted their pictures on Web sites that also disclosed their real names, where they were from, and other personal information. Participants often disseminated emails with attachments (of cartoons, articles, and other materials they wished to share). These emails contained personal identifiers such as the sender's name and where they worked or went to school. Some participants disclosed their real name in bulletin board discussions about the MUD. One might protest that these photographs and name disclosures may be false. For instance, someone might post their friend's photograph on the Web site instead of their own. Although falsification of personal information of this type is certainly possible (and obviously does happen), such an elaborate ruse in the environments studied here would be increasingly difficult to maintain over time, given that many participants visited each other in person, and some people recruited offline friends and coworkers into the MUDs.

Any claims about whether in-person contact decreases agonism would have to be supported by research in specific contexts. Systematic studies would be required to determine if performances of technical affiliation became less agonistic after participants have met and socialized with each other offline. In the present data, meeting people in person was no guarantee that the participants would refrain from bragging and jockeying

for position during MUD Meets. (I have observed agonistic encounters in contexts such as academic and technical conferences, which are in-person, non-anonymous, and two-way communication venues). In the excerpt from a formal interview below, a participant made it clear that she was very disappointed with the behavior of MUSHers she met face to face. (This was a MUSH Meet for participants from a previous MUSH she had participated on, not MUSH B). Lori, a 31-year old female, noted that unlike their interaction online, the MUSHers' in-person conversation was "tedious" and revolved around bragging and posturing.

Lori says, "The first one I went to had [about 12] people from [a previous MUSH] with whom I RP'd[3] quite a lot. When I met them iRL,[4] I found them tedious for the most part. Somehow after I'd met them I wasn't much interested in RPing with them anymore and my character took a radical departure from that playgroup shortly thereafter. It was for a weekend in Chicago and those of us that didn't live there [about 8] stayed in one hotel room. We did go to a museum together on Sunday but the rest of the weekend we sat around in restaurants/coffee shops/the hotel/someone's apartment and talked about [the MUSH]. It was so stultifying I wanted to scream."

And later I asked, "What were some of the things you found tedious about their conversation?"

Lori says, "OMG.[5] If I had to hear one more discussion about who is better at fencing I was going to kill them. Because of course they all think they are just too cool for being able to fence. Similarly, I was sick of hearing about RenFaires[6] and who had the coolest dress that pushed their breasts up the most. And how nice those boobs looked when they were fencing. Ok, so the fencing really got to me because I did actually think it was cool until I heard these people talking about it."

An exercise in systematically comparing levels of online agonism before and after sustained in-person interaction is beyond the scope of the present study. However, my initial hypothesis about such a study would be that in many technical environments, in-person meetings would have little to no influence in determining the agonistic levels of debate. I base this initial hypothesis on my observations of certain individuals in both MUD A and MUSH B who were friends offline but who nevertheless engaged in vitriolic

and aggressive forms of verbal attack in order to jockey for techno-social position. I also base this hypothesis on the aforementioned observations of workplace interaction, in which people who knew each other well and considered themselves friends outside of the office frequently engaged in agonistic argument during face-to-face encounters to achieve specific social ends.

Levels of anonymity may be reduced in ways less obvious than meeting people offline. MUD administrators have ways of tracing certain information about the people who log onto the MUD. For instance, some MUDs require a "verifiable" email address from all participants who wish to join the MUD. People may not join these MUDs using false or shell email accounts such as those from Yahoo or Hotmail services. The idea is that should these participants become disruptive on the MUD, users can simply close out and create another account, thus making it more difficult to trace them. With a verifiable email address (from a company or school), MUD administrators may be able to contact the network system administrator where the email originated and notify them that the individual using that email account has become disruptive elsewhere on the Internet. The company or school administrator may then choose to revoke that individual's Internet connection privileges.

Even without a verifiable email address, other methods exist for discovering personal information. For instance, administrators may be able to identify the network provider that a participant uses to log onto the MUD. This information may provide clues as to a generalized region where the participant lives. MUD administrators can and do use these clues to pinpoint abusers of the system, by for instance, disconnecting an unruly participant and any subsequent user of that service provider from logging on. If a person connects through the Internet via a digital subscriber line (DSL) service or through a T1 line, then MUD administrators would even have access to their computer's permanent IP (Internet Protocol) address, thus tracing a character who logs on to a specific computer. A disruptive person whose character was deleted but then subsequently logged on from this

specific computer would be traceable. There are certainly ways to subvert all of these tracing tactics. Nevertheless, they chip away at a potential abuser's anonymity.

In addition to the techniques mentioned above, MUD participants use information about the abuser's online persona to catch out disruptive posers. One participant (who was traced by methods mentioned above to a certain city in Canada and whom I will call John) kept trying to log on to MUD A even after he had been banned for misbehavior. John tried to reconnect at different times using different character names. But the technical traces to John's Internet account and the information that MUD A members had about John's online behavior created suspicion each time he tried to reconnect as someone else. Time and again, participants recognized him after his specific type of online behavior (including specific boasts, expressions, and peculiar typing errors) left little doubt about who had actually logged on under a new online name.[7]

The point here is that in communities like MUD A and MUSH B, participants log on daily and form social identities that the other participants come to know. Interlocutors then impute various social assumptions and expectations to those participants. Although people might not know that John is in real life Bob Jones who lives at 123 Maple Street, they certainly have social ideas and expectations about his online persona, and they will ostracize John from the community if he violates social rules. In one example, Timothy, a long-term member of MUSH B became frustrated with newbies who logged on to the MUSH to ask a question, and then leave without contributing or giving back to the MUSH B community. He created a posting that angrily scolded newcomers who exhibited this behavior. Later, he was concerned about the tone of his message and asked other participants for their opinion. Some people criticized his tone. People may not know Timothy's real name, but he was nevertheless an individual, recognizable social entity on the MUSH who was quite concerned how others perceived him. He displayed keen awareness and sensitivity to the effects of his peers' criticism. For long-term

participants, levels of anonymity slowly dissipate in social communities like MUD A and MUSH B, given the intense daily interaction of many community members.

On the other side of coin, the idea that people automatically know volumes about other people simply by virtue of face-to-face contact is theoretically flawed. When Goffman wrote about the differences between "virtual" and "actual" identities he was not talking about the Internet (Goffman 1963). He was speaking of the misguided assumptions we make about people we meet *in person* (Goffman 1963; emphasis added) He conclusively demonstrated that people make myriad social assumptions about other people that turn out to be completely false (Goffman 1963). People may be completely unaware that they are interacting with aspects of someone's virtual rather than their actual identity unless certain non-visible information is revealed (Goffman 1963). People choose to present various facets of their selves as they see fit during a social encounter (Goffman 1963). Goffman noted that it is not a matter of whether or not people have hidden stigmas, because everyone does, but rather, how many do they have and how intense are they in degree (e.g. are they more or less easy to keep hidden) (Goffman 1963). His point is that we all interact with other people's virtual identities across social encounters (Goffman 1963).

Scholars have also shown that even the most seemingly obvious visible physical identifiers (sex and social race) are not as straightforward as many suppose. Since racial characteristics are not based on biology,[8] people rely on cultural clues to determine social race (Kottak 1997). People may be mislead by cultural cues which can easily be manipulated or misread when they try to determine someone's social race. Similarly, the vast literature on transsexualism and other gendered "posing" suggests that assumptions we make about gender on the basis of in-person visual clues may or may not be accurate (Butler 1990; Garfinkel 1967).

People often lament the lack of bodily and non-verbal cues in online environments. Such laments are logical, because unless one has a videoconferencing unit

attached to their computer, they will miss information such as facial expressions, body language, and many other physical, cultural cues. However, such laments often smuggle in two misconceptions. The first is that body language somehow always provides an accurate portrait of a speaker's inner thoughts and affiliation to what they are hearing. The second is a hidden underestimation of the blatant social identity cues that are exhibited in online verbal expression. Many clues may be gleaned about a variety of a speakers' personal attributes (such as whether and to what degree they are familiar with certain technical tools) by examining their online discourse. The point is not whether someone's online identity "matches" their offline identity, because even in face-to-face encounters, one deals with sets of "virtual" identities anyway (Goffman 1963). The point of this discussion is to de-romanticize certain conceptions of face-to-face encounters and unpack some scholars' assumptions that online anonymity is an all or nothing proposition that causes aggressive online behavior. As mentioned above, anonymity may be defined as "lacking individuality or personality." Yet, as argued above, people observed in the present data tend to maintain consistent and quite recognizable personalities with social duties and expectations that remove total social anonymity.

If agonistic instances of performing technical affiliation exist for people who know one another offline as well as on, then it is hard to justify the notion that it is anonymity itself that causes or enhances such agonism. Although Tannen used the example of how a boss sent angry emails to illustrate how "one-way" communication promotes agonism, the example also challenges the notion that anonymity causes online aggression (Tannen 1998: 240-241). In this example, the boss was cordial in person but vitriolic in email to his coworkers (Tannen 1998: 240-241). The boss certainly did not rely upon anonymity to release his bilious messages (Tannen 1998: 240-241). One might engage in an interesting thought experiment: Would the "one-way"[9] nature of "the computer" prompt this (or any) boss's underlings to send angry emails to him? Such a hypothetical scenario suggests that the employees probably do not have the same option

to release vitriolic emails to their boss as vice versa, which suggests that the social context, rather than the nature of the medium, drives the character of the interaction. This example is potentially an illustration of how performances of technical affiliation are being adopted beyond immediate technical milieu, for similar social positioning purposes (The last chapter will deal more thoroughly with how non-technical professionals are adopting performances of technical affiliation for social ends).

Rather than resulting from anonymity, the contention here is that performing technical affiliation is actually a means for reducing levels of anonymity between interactants. The social purpose of performing technical affiliation is to identify and compare each participants' knowledge about a particular technical or techno-social phenomenon. Once a participant performs technical affiliation and another participant ratifies this performance, more information becomes available about each interactant's knowledge and social position in online techno-social hierarchies. Participants can "fake it" and pretend to know less than they actually do (hence their online knowledge would fail to match their "real" knowledge), but such an action would situate them in a one-down position to their challenger. The temptation would be great during such an online encounter to demonstrate as much as possible about what they actually knew so they may be perceived by their interlocutor and others in a comparatively favorable light.

In the present data, many conversations existed that were not agonistic, suggesting that it is not "the nature" of "the computer" that promotes any particular type of interaction, but rather the social motivations of the computer's users in particular social situations that prompt agonism. A host of conversations from the random samples verify that participants often held cordial technical discussions without descending into knee-jerk agonism. Many informants I interviewed clearly distinguished between what they observed as sociable arguing (which they called "conversations" or "discussions") and pre-programmed debates that did little to expose new information.

Several participants from MUSH B commented on arguments that “turned sour” when people became more interested in social posturing than in discussing ideas. Denise, a 32-year old female participant noted that, “Sometimes arguments emerge on the channels that get really heated, too. Sometimes to the point that it is no longer intelligent debate but simply disrespectful and hateful argument.” Charles, a 24-year old male, called debates about operating systems (e.g. Linux versus Windows) “petty and pointless,” and “typical power posturing.” He stated that, "The whole Unix/Mac/Windows debate—i.e., this is better, those things suck—is identical to the Religion debate really. That is trashing, being denigrating without any real reason, or just taking things too far.” Charles recommended that if a debate gets out of hand, administrative staff should intervene, “At least to ask to take the 'debates' out of public forums.” Cathy, a 20-year old female, characterized the difference in type of argument by stating, "Well, in a real debate, you hear strengths, weaknesses, fixes, etc. Gives you a good opportunity to advertise the strengths of your OS/system, hear other peoples’ experiences with it, hear about shortcomings of the system...But far too often, they just descend into slinging matches, and that's sad.” She said that although she generally enjoyed debates about operating systems in MUSH B, “Lots of them ...just smack another system/OS for no reason.”

Several participants from MUD A had similar reactions to technology debates that veered away from argument and toward insult. Richard, an 18-year old male who had significant duties on the MUD but sometimes found himself at odds with some of the other members of MUD A, had the following to say during our formal interview:

<Patricia> Why do you suppose so much technology jargon is annoying?
<Richard> Not so much annoying, as pointless and boring.
<Richard> There's just no soul in that kind of discussion usually
<Patricia> That's very interesting.
<Richard> Yes
<Patricia> How do those discussions lack “soul”? I'm interested in your view on that.

<Richard> They tend to be little more than people trying to prove that they're better than everyone else by spouting out almost meaningless series of numbers.
<Patricia> *nods*
<Patricia> What kinds of numbers?
<Richard> Size of their hard drive, amount of RAM etc...
<Patricia> *nods*

Arthur, a male in his thirties was a high-ranking member of MUD A's administrative staff, and was responsible for helping to code the world of MUD A. As a high ranking member, he perhaps did not feel the need to jockey for social position using methods such as agonistic performance of technical affiliation. Although the types of arguments or "holy wars" about operating systems did not emerge as frequently in the MUD A random sample as they did in the MUSH B sample, Arthur nevertheless had observed many of these interactions on MUD A. As a relatively older member (both age wise and number of years of participation) on both MUD A and the MUD community in general, he was able to provide perspective on argument trends he had observed. He shared the following comments during our interview:

<Patricia> Do you enjoy the tech talk that goes on?
<Arthur> Most of the time, no. I enjoy it when it pertains to something brand new (or unknown to me). But most of the time it is the classic "IBM vs. Mac," "UNIX vs. Win-32," or "Nintendo vs. Playstation" type of conversation. I tire of that very quickly.
<Patricia> nods.
<Patricia> What is tiring about it?
<Arthur> If you watch too much "Crossfire" on CNN, you eventually tire of that, too. :) Its really the same kind of scenario...party hard-liners blindly repeating rhetoric without being willing to listen to the other side's view.
<Arthur> Although it doesn't happen all the time, many of the tech' discussions on the MUD degenerate into arguments. Eventually somebody insults another person, and then a staff member has to step in before things get out of hand :)
<Patricia> nods.
<Arthur> Your research may prove me wrong, but that's my general impression.

Tannen's analysis is extremely persuasive in that it keenly identifies a trend toward agonistic encounters in numerous and key facets of U.S. culture (Tannen 1998). Tannen correctly states that agonism is likely to continue as long as vitriolic, oppositional interaction bestows rewards upon those who use it (Tannen 1998). For instance, in academia, scholars tend to be rewarded on whether they can disprove (rather than corroborate) previous research, preferably the work of a well-respected scholar in the field (Tannen 1998: 268-269). Tannen notes, "When there is a need to make others wrong, the temptation is great to oversimplify at best, and at worst to distort or even misrepresent others' positions...Straw men spring up like scarecrows in a cornfield" (Tannen 1998: 269). Similar to the argument here about performing technical affiliation, Tannen sees the agonistic trend as fueling simplistic black and white, or bipolar types of opposition that reduce an issue's complexity and therefore obfuscate true understanding in a disagreement (Tannen 1998).

Tannen's observations apply to performances of technical affiliation—which form only a subset of online arguing—not because of the inherent anonymity that the computer offers, but rather because participants believe they gain techno-social rewards from such expression. In my opinion, performing technical affiliation is as common in face-to-face encounters as they are online. Participants who jockey for social position use agonistic techniques such as simplifying their arguments (often reducing them to meaningless bipolar terms) and caricaturing their opponents (in terms of their technical knowledge and ability), in an attempt to increase their position within techno-social hierarchies. As long as participants positively ratify such techniques, performers of technical affiliation will quite likely continue to use them. Part of the responsibility of participants in these encounters is to refrain from passive acceptance of the techniques. If they object to these techniques, one response is to call attention to and interrupt performances of technical affiliation that interlocutors believe reproduce false norms about technology and degrade the quality of online social contact.

The previous discussion showed how identification processes may be complicated by the effects of reflexivity in modernity (Giddens 1991). As technologies change, participants are increasingly faced with challenges to their knowledge and opinions about them. Creating coherent characteristics of an imagined community and performing alignments to it correspondingly becomes more difficult. Attempts to create a sense of self vis-a-vis others through alignments to ideas about technology enter a reflexive spiral that is inherently unstable and open ended. Establishing a sense of self ultimately involves constantly managing aspects of the self through micro-interactional encounters. As Brubaker and Cooper point out, it becomes less important to consider specific identity traits and more important to study the processes and strategies that participants use to identify with certain groups, while constructing the identity of others outside of those groups (Brubaker and Cooper 2001). As the chapter discusses, participants may use a range of argumentative techniques to challenge their interlocutor's identity while simultaneously constructing their own. Studying the dynamics of these interactional identification process—such as performing technical affiliation—offers possibilities for understanding how discourses come to be coded as "normative" and how participants use such discourses to construct social hierarchies.

From an anthropology of science perspective, we see that examining the dynamics of performing technical affiliation challenges researchers' meta-narratives about how online talk works. By studying a community in which members often meet face-to-face, we see that anonymity cannot be faulted as the cause of agonistic arguing. Rather, such agonism stems from an identification practice that tries to reduce levels of anonymity between participants and situate them socially in specific ways. Further, studying the lens of performing technical affiliation also contributes to the anthropology of science by showing how identity making and social hierarchy constructing practices may complicate participants' understanding of how certain technologies work. By engaging in bipolar argumentation, participants potentially divert resources away from exploring technical

processes and focus attention on simplistic or oft-repeated narratives that cast technologies as morally superior or inferior. As long as such strategies are ratified by interlocutors who are trying to achieve their own sense of self, they will likely continue. But when some of the dynamics and costs of performing technical affiliation are exposed, it becomes possible to interrupt such performances, a subject to which we now turn.

Notes to Chapter V

[1]According to the Web page, http://www.pcwebopedia.com/TERM/a/applet.html, an applet is "A program designed to be executed from within another application. Unlike an application, applets cannot be executed directly from the operating system. With the growing popularity of OLE (object linking and embedding), applets are becoming more prevalent. A well-designed applet can be invoked from many different applications. Web browsers, which are often equipped with Java virtual machines, can interpret applets from Web servers. Because applets are small in files size, cross-platform compatible, and highly secure (can't be used to access users' hard drives), they are ideal for small Internet applications accessible from a browser."

[2]Http://www.wdvl.com/Multimedia/Shockwave/

[3]RPd stands for "role played" which means assuming fantasy characters and interacting as those characters. RPing stands for "role playing."

[4]IRL stands for "in real life," which usually refers to offline, face-to-face contexts.

[5]OMG stands for "Oh my God."

[6]RenFaire stands for Renaissance Faire, which is an annual festival with a medieval theme. Participants may attend the Faire in Renaissance-era costumes, and watch or possibly engage in activities such as jousting and fencing. Participants also usually walk among a number of booths that sell novelty items and snacks.

[7] Administrative staff of MUD A told me in informal interviews that they used a variety of statistical behavioral measures (such as time to task) to track suspected abusers of the system. Regrettably (but understandably), the administrators were loathe to disclose details of their behavioral tracking systems for fear that my study would inadvertently disseminate clues about how to subvert them.

[8]Kottak points out that racial classifications have historically not been based on genetic material but on phenotype, and using phenotypes presents highly problematic classification problems. For instance, which traits should be "primary" in assigning people to different races? Historic priority has been given to skin color, but the "'color based racial labels'...don't accurately describe skin color, nor are the labels consistently applied." For instance, "many people in southern India have dark skin, but scientists have been reluctant to classify them as 'black.'" The problem with trying to use classifications with combinations of features is that "the number of combinations is very large, and the amount that heredity (versus environment) contributes to such phenotypical traits is often unclear." For these reasons, biologists consider race a cultural concept that does not conclusively map to existing genetic patterns (Kottak 1997).

[9]Characterizing email as a "one-way" form of communication is not quite precise. Although email communication is asynchronous, in that people are not

communicating in real time, people can and do respond to email messages. Email messages often involve a series of exchanges. In this sense, I see email as a two-way communication conduit.

[10]The original article appeared in American Journal of Sociology, 29, in 1924.