

Computer Mediated Communication: An Overview

Abstract

Computer Mediated Communication (CMC) takes many forms, including e-mail, listservs, newsgroups, bulletin boards, conferencing, distance education, chats, and MUDS. It is text-based, yet shows many characteristics more commonly found in the spoken language. Thus it is an interesting combination of the less formal oral language and the more formal written language. Early research predicted that CMC would fail to communicate more than a simple message and that complicated tasks or discussions would not take place due to the poverty of the medium (lacking such things as tone of voice and facial expressions). However, CMC is proving to be a much richer medium, as current research is showing. Language has a way of filling in the blanks, be it a child learning their first language or a creole language developing a complete and fully functional language grammar out of a simple pidgin. Online communities develop their own cultures too. Using examples taken from the above mentioned types of CMC, this paper examines and illustrates many of these unique language characteristics.

Donna E Cromer
Associate Professor
Centennial Science and Engineering Library
University of New Mexico
Albuquerque NM 87131
dcromer@unm.edu

Introduction

Computer-mediated communication is the term used for the more and more common practice of using a computer keyboard, or typing, to communicate electronically in a number of different arenas, including e-mail, listservs, newsgroups, bulletin boards, computer conferencing, education (especially distance education), chats, MUDS/MOOS, and others. It refers to both work and task related and interpersonal communication. It can be either synchronous or asynchronous. One formal definition (December, 1997) is: "Computer-Mediated Communication is a process of human communication via computers, involving people, situated in particular contexts, engaging in processes to shape media for a variety of purposes." Other scholarly definitions are discussed by Ferris (1997).

The whole phenomenon has become an interesting and fruitful area of research, especially in the linguistic and cultural aspects of the online world. In the real world, both language and culture are inherent parts of communication among humans. At first glance, one would assume that in the electronic world communication would be minimal, since it lacks so many of the communication channels available in the real world.

As research continues, some of the earlier predictions are not holding up. Some of these relate to the 'equalization phenomenon' in the cyberworld, where it was presumed that differences in gender, status, and age would disappear (there is the standard joke: On the Internet, no one knows you're a dog); and media richness, in which it was assumed that e-mail could not accomplish complicated tasks because of the lack of richness in the medium of communication (Ngwenyama and Lee, 1997). There are no things such as tone of voice, facial expressions, or hand gestures. The media richness theory presumed a hierarchy from richest (face to face) to most impoverished (e-mail).

As mentioned above, there are many different arenas in use for electronic communication. Two of the most popular are listservs and newsgroups on Usenet. There is an extraordinary number of these groups, discussing just about anything under the sun, and if you can't find what you want, you can start your own. The Liszt site indexes 30,000 newsgroups (Liszt, 1998b) and 90,095 mailing lists (Liszt, 1998a). At Dejanews, the archive of Usenet, there are over 50,000 forums indexed (Dejanews, 1998; Smith and McLaughlin, 1998).

Much of the current research on online communication analyzes listservs and newsgroups because:

- 1) the data are easy to obtain,
- 2) there are lots of topics, and
- 3) in the case of newsgroups in particular, there are few if any concerns over privacy issues, since the newsgroups are completely open and public.

There are also other standard language corpora available for analysis and comparison—sets of language data from various written forms and transcribed spoken language data. It is not a trivial matter to prepare a language corpus for analysis. At least so far, much of it has to be coded by hand by humans, to identify things like person, tense, aspect, noun phrases, proper nouns, etc.

Language Characteristics

The language of computer-mediated communication can be viewed as a new variety or dialect of English. It has characteristics of both written and spoken language. The communication often flows as if spoken, yet is typed and written (Collot and Belmore, 1996; Voiskounsky, 1998; Yates, 1996).

Some of the more common characteristics of written language are:

- 1) more complicated syntax and the use of subordinate clauses, e.g., 'The woman, whose hat had been blown away, ran down the street.'
- 2) higher lexical density, which means a higher percentage of highly meaningful words.
- 3) greater vocabulary.
- 4) low use of pronouns, especially low use of first and second person, i.e., 'I' and 'you.'
- 5) more use of the past tense.
- 6) usually grammatical and with correct spelling.

Some of the more common characteristics of spoken language are:

- 1) simpler syntax, e.g., 'The woman chased her hat.'
- 2) lower lexical density, i.e. more use of words like 'that,' 'it,' and 'and.'
- 3) high use of pronouns.
- 4) less use of the past tense.
- 5) more use of slang, first names, jokes, and interruptions.
- 6) more emotional.

There have been a number of studies done comparing the language characteristics of computer-mediated communication with spoken and with written language. One analysis found that CMC, in comparison with other standard languages, is more like written in the number of words used and the lexical density (Yates, 1996, pp. 35,37). But it is more like speech in the use of pronouns, especially in the high use of first and second person and the low use of third person. In fact, CMC uses more first and second person pronouns than either writing or speech (Yates, 1996, p.42).

Another analysis found much less use of the past tense in CMC. In this study, CMC compares best in some ways to genres like public interviews and letters, personal and professional (Collot and Belmore, 1996, p. 21). This study, and anyone who has read very much online communication, also found a general laxity in spelling and grammar.

As for affect and emotion, there is usually very little of this in written language and much evidence of this in spoken language. Yet people communicating online have developed conventions to get affect and emotion back in—in the form of emoticons such as :-) and things like <eg> for 'evil grin.' Communication is a powerful human drive and we try to make communication as rich as possible.

One more interesting feature of CMC is that, so far at least, it is mostly happening in the English language. There are many involved in CMC whose native language is other than English. And, as in other arenas such as international scientific and business communication, English has become the lingua franca of CMC. One primary reason for this is that CMC originated in the English-speaking world, plus the standard equipment has been for some time ASCII characters, providing only a limited number of characters.

One author even speculates, going beyond the notion of CMC as simply a new variety of English, to the idea that a kind of pidgin English may develop because of all the non-native English speakers (Voiskounsky, 1998, p.32). A pidgin arises when people of different language backgrounds must communicate. The language that results is greatly simplified and different from any of the starting languages. But he doesn't go so far as to propose a creolized form of the pidgin, which normally would arise in a situation when children have only a pidgin as their native language, which then redevelops into a full and normal language. No children could exist with CMC as their only form of communication!

Gender Characteristics

Another interesting feature of CMC concerns gender. Some of the early theorists presumed, or maybe just hoped, that gender differences would have a good chance to disappear without the obvious real world gender characteristics. They haven't gone away, but what is happening is a bit different from what might be thought.

One prominent stereotype is that males are primarily concerned with the exchange of information and that females send e-mail primarily to promote and maintain interpersonal relationships. This stereotype becomes even more significant in today's context, when it is thought that women's use of computer networks is deviant from the norm, which is the male use of a tool for information exchange (Herring, 1996c, p.81).

But in an analysis of two lists, one with a higher percentage of men subscribing and posting, the other female dominated, the above stereotype did not hold up (Herring,

1996c, p.104). Yet gender differences did appear. In another analysis and comparison of eight lists, with a range of male/female ratios, gender differences also showed up. The lists that were studied are primarily academic and serious in nature and used for professional purposes (Herring, 1996b, p.117).

What these studies show is that men and women do typically have different posting styles, although not exclusively. Many posts are actually similar, but at the extremes, the differences are significant. To some extent, these differences reflect a different set of values. Women evoke an ethic of politeness and consideration for the wants of others, especially their desire to be liked. Men evoke an ethic of agonistic debate and freedom from rules or imposition (Herring, 1996b, p.118).

The extreme form of the agonistic debate is flaming, personal put-downs characterized by a challenging, adversarial, or superior stance, name calling, profanity, and a propensity to post long missives and to post often. The other extreme is characterized by expressions of support, appreciation, often presented in a hedging style.

At the extremes in these studies, men are much more interested in debate for debate's sake, while women tend to be supportive and not as interested in engaging in prolonged debate. Another effect is that the list norms influence all posting behavior. For example, on a list with mostly women, men's posts tend to be less agonistic (Herring, 1996c, p.104).

Also of note, is that an analysis of several standard netiquette, or Internet behavior, guides shows that these are very much skewed to the male behavior tendencies. One could assume that this is primarily due to the fact that the early days of the Internet were mostly inhabited by men. This can cause women to feel uncomfortable and has spawned a number of women-only groups (Herring, 1996b, p.135).

I am familiar with both a listserv (HIGHLA-L, 1998) and a newsgroup (alt.tv.highlander) that discuss the same TV show. Both have been around awhile, since 1994 for the listserv and even earlier for the newsgroup. Some interesting features and differences between the two may be related to some of these characteristically male and female online behaviors. The TV show is Highlander: The Series, which on the surface would seem to appeal mostly to men because of lots of swordfighting, violence, and action. But the show also has a lot of appeal for women. So, contrary to the norm, both the listserv and the newsgroup have a high percentage of women participating, probably a majority in both cases, in fact.

The norms of behavior on the listserv appear to be very male oriented; they fit the standard netiquette guides quite well. Debate is encouraged, and while flaming is prohibited and is in fact rare, discussions can get very heated. The list is owned and semi-

moderated by a woman. I think the difference in male/female approaches to appropriate behavior concerning debate is at the root of a very predictable cycle. Every 6-8 weeks a large discussion about posting behavior arises, with one side claiming that people are being mean and flaming for no reason, and the other side saying that just because someone doesn't agree doesn't mean they are flaming or being flamed. This list usually has around 1200 subscribers. A number of other lists have split off from the 'Big List', as it is called. One that I participate in is much smaller (around 120) and consists of only women. The norms for this group and the Big List are very different, with the smaller women-only list conforming much more to typical female behaviors—lots of supportive and appreciative posts, me-too's (posts that simply agree with a previous post without adding anything new) are not banned, and off-topic posts are not a cause for swift retribution.

The newsgroup has a very different culture, partly due to the differences arising simply from the fact that a listserv is a much more closed environment than a newsgroup. In the early days of the group, the topics were mostly about the swordfighting and martial arts styles used, and mostly posted by men. A few women posted here and there. Then a roll call began: "Who are we?" Surprise, surprise, many many women posted back. It was as if the women realized that there was power and support in numbers, and today, the group has more women than men posting. There are lots more posts about the relationships between the characters and about the characters themselves, posts with detailed analyses of things such as the symbolism of serving or not serving drinks, with fewer posts about swords or fighting techniques. Another big difference between the newsgroup and the listserv, perhaps related to the openness of newsgroups, is that off topic posts are tolerated, and in fact, can become endless sources of play and amusement. On HIGHLA-L, however, off-topic posts are forbidden.

To regroup on the gender issues—earlier theorists proposed that gender differences would disappear in the cyberworld; now, some even propose that gender has become emphasized or exaggerated in some cases (Hall, 1996). I think the jury is still out, but I have hopes that the extremes will be ameliorated, especially as more women get onto the Internet and become active participants in cyberculture. In fact, some of the results of these studies show that both men and women participate in discussions to exchange opinions, beliefs, understandings, and judgments in social interactions with other human beings, with the pure exchange of information taking second place.

"Indeed, the era since the advent of computer networking might better be termed the "Interaction Age" rather than the "Information Age," since it is in the potential for interaction with others that the primary appeal of computer networks appears to lie." (Herring, 1996c, p.104)

To conclude, the world of computer-mediated communication and the virtual communities developing there exhibit linguistic and cultural characteristics both carried over from the real world and unique to the cyberworld. Two websites where cyberculture can be explored are:

<<http://www.sscnet.ucla.edu/soc/csoc/>> and
<<http://otal.umd.edu/~rccs/>>

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