# Chapter XVIII CMC and the Nature of Human/ Machine Interface

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### **ABSTRACT**

Computer mediated communication (CMC) is fundamentally different from other modes of informational exchange. The presence of those with whom one communicates is not completely known. Their identities are in question, easily created, and changed by CMC users themselves who are not constricted by geographical or political boundaries. CMC represents a new form of communication—a "cyborg discourse" consisting of dynamic interplay of words, symbols, and metaphors. Participants in CMC engage in a unique human/technology interface that operates in a disembodied environment. It appears as a world without a history, dominated by connections. This chapter seeks to briefly describe and assess CMC's philosophical significance and its influence upon communication theory. Once regarded as either the advent of a blissful utopia or the death of human intercourse, CMC has come to be seen as a phenomenon with wide-ranging possibilities, one that has recast communications as a coding problem.

### INTRODUCTION

Computer mediated communication (CMC) represents more than a mere technological advance over what has gone before. It cannot be accurately assessed by only measuring the speed and efficiency with which it is capable of communicating messages, or the diverse array of modes that it can employ in reaching its audiences. Surely, CMC is capable of bridging huge geographical distances, and creating communities of persons

where there had before been only groups of isolated individuals. But, it has also fundamentally altered the nature of communication by permitting communicators to create their own identity and reality. Such an eventuality may be perceived as being either liberating or disorienting. The presence of other communicators is sensed rather than known; communication consists of a dynamic interplay of words, symbols, and/or metaphors; and multiple identities may be created and transported across international boundaries. A new form of disembodied communication is facilitated in cyberspace. What are the consequences of communicating in such an environment? What becomes of the communicator's sense of self? How are we changed by living in a world dominated by visual and verbal connections? In a broader sense, can it still be truly said in the words of Alexander Pope that "the proper study of mankind is man" or must our attention turn toward the "electronomadic cyborg" (Mitchell, 2003)? There are no easy or definitive answers to these questions, and they raise important issues associated with the philosophical basis of CMC. Addressing these matters is an array of social scientists, literary critics, and cultural theorists who analyze CMC in an attempt to determine its impact on communication and communicators. As a group, they find much promise in CMC's ability to efface traditional, restrictive boundaries, but also express concern about the disconcerting speed at which communication now occurs (Lewis, 2001) as well as the mechanization of interpretation traditionally performed by the researcher (Lindlof & Taylor, 2004). Change entails disruption, and the promise of change is always in the hands of those implementing it. These agents will determine the impact of future CMC upon our lives. It is the objective of this chapter to assess what cyborg discourse has wrought so far and point toward what is likely to occur in the coming years.

### BACKGROUND

In 1985, social scientist Donna Haraway first published her "Cyborg Manifesto," an essay that changed the way in which many regarded CMC. She did not invent the term "cyborg." That distinction is generally credited to neuroscientist Manfred Clynes in his discussion of human adaptation to space (Clynes & Kline, 1960). But, Haraway introduced the cyborg concept to social theory, paving the way for a wider discussion

and analysis of what became known as cyborg discourse. While many assessments tended to regard CMC as either a communicational utopia where participants were able to transcend the limits of one's body or a subtly sinister means of communicational alienation, Haraway offered a more complex view. She embraced the effacement of the man/machine boundary as an opportunity to escape history and all its agonizing conflicts (Haraway, 1985). After all, medicine already regarded body and machine as coded devices, mechanization had fundamentally altered the nature of industry, and war was being prosecuted with the assistance of command-and-control-communication-intelligence devices. Yes, technology has its dehumanizing aspects, and many bemoan this, but it holds too much promise to be demonized. Instead, Haraway believed that we should accept responsibility for the social relations of science. Modern communications is dominated by cybernetic systems theory which, when applied to devices such as the telephone, computer, databases and weaponry, becomes a science concerned with translating the world into a coding problem.

Haraway's manifesto pre-dated the World Wide Web and the laptop computer, but its image of the cyborg—half man, half machine—was to achieve iconic status. Initially condemned as "a blissed-out, technobunny, fembot" (Haraway, 2004) by colleagues who could not fathom her embrace of technology, Haraway's analysis of communication in cyberspace paved the way for those who recognized in CMC a means to accelerate one's creative processes. One need only come to terms with CMC, and adjust one's nature to it. Mexican anthropologist Lourdes Arizpe describes how one must find new words, symbols and metaphors in order to communicate in cyberspace (Arizpe, 1999). These are used to interact with others whose presence is sensed rather than known. In the process, images are created and contours perceived as a new reality is pieced together. Text-based CMC can be viewed as a shortcut, bypassing face-to-face communication.

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