

## Chapter 5.9

# Global Culture and Computer Mediated Communication

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### ABSTRACT

In this chapter, we discuss how culture influences computer mediated communication (CMC). We use an Input-Process-Output (I-P-O) model as a theoretical framework to analyze relationships between culture and CMC. We describe three dimensions of cultural variability—individualism/collectivism, low vs. high context of communication, and task- vs. relationship-orientation—and describe how these dimensions influence people's reliance on features of CMC. A review of the literature to date suggests that cultural factors do indeed shape how people use CMC. More specifically, auditory and visual cues appear to have more importance for members of collectivistic, high-context, relationship-oriented cultures than they do for members of individualistic, low-context, task-oriented cultures. However, further

research is needed to clarify relationships between cultural dimensions and CMC, to understand the role of moderating variables such as gender of participants, task, and group composition, and to provide design guidelines for new tools to support intercultural communication and CMC in developing regions.

### INTRODUCTION

One of the great benefits of the CMC tools covered in this volume is that they allow people to converse across space and time. Today, people connect with others from around the world by participating in chatrooms and discussion lists, by joining global game communities and virtual worlds, by authoring and reading blogs with an international scope, and by a variety of other

means. In the work domain, firms are increasingly taking advantage of CMC tools to establish global teams with members from a diverse set of nations (e.g., Carmel, 1999; Churchill & Bly, 2000; Olson et al., 1998). Bridging nations via technology does not, however, guarantee that the cultures of the nations involved are similarly bridged (Olson & Olson, 2000). Mismatches in social conventions, work styles, power relationships and conversational norms can lead to misunderstandings that negatively affect the interaction. For example, an individual from a task-oriented culture such as the United States or Canada may focus exclusively on getting things done, overlooking the social niceties expected by his/her conversational partner from a relationship-focused culture such as China, Japan or Latin America. Similarly, an individual from a low-context communication culture, who relies primarily on verbal language to express his or her thoughts, may ignore facial expressions or tones of voice that are intended to be communicative by his/her partner from a high-context culture.

As the examples above suggest, features of different CMC tools (e.g., e-mail, Instant Messaging [IM], teleconferencing, video conferencing) may make it easier or harder for people to bridge their cultural differences by providing or failing to provide auditory, visual and other sources of information. But how can we characterize these differences between CMC tools and use them to decide what tools will work best for a given set of people performing a given set of tasks? For members of Western cultures, years of research have led to a number of well-developed theories that can be used to motivate such decisions (e.g., Clark & Brennan, 1991; Daft & Lengel, 1984; Postmes, Spears, & Lea, 2002; Short, Williams, & Christie, 1976; Daft & Lengel, 1984; Clark & Brennan, 1991; Walther, 1992, 1995; Postmes, Spears & Lea, 2002). Much less is known about CMC in intracultural (culturally homogenous) groups from nonWestern cultures or in intercultural (culturally heterogeneous) groups, making

it harder to predict the suitability of different media for different purposes or to design new CMC technologies to facilitate intercultural collaboration.

There are reasons to believe that what we know from research using Western participants will not generalize straightforwardly to other cultures. Cultures vary along a number of dimensions that may impact group processes and outcomes, such as *individualism vs. collectivism* (the extent to which people prioritize their personal benefit vs. that of the larger group; e.g., Hofstede, 1983; Triandis, 1995), *low- vs. high context of communication*, (how much contextual information is required for communication; Hall, 1976), and *task vs. relationship orientation* (whether people focus on getting work done or on establishing rapport with their partners; e.g., Triandis, 1995). These and other cultural dimensions may interact with features of media to create different effects on group processes and outcomes than have been found in studies using Western participants. For example, if expressions and intonation are important parts of communication in high context cultures, standard IM, which doesn't support seeing or hearing one's partner, should be less suitable for communication than it is in low context cultures. Consistent with this argument, recent research does in fact suggest that people's cultural background affects CMC (e.g., Anderson & Hiltz, 2001; Kayan, Fussell, & Setlock, 2006; Reinig & Mejias, 2003, 2004; Setlock, Fussell, & Neuwirth, 2004; Setlock, Quinones, & Fussell, 2007; Zhang, Olson, & Olson, 2004; Zhang, Sun, Chintakovid, Ge, Shi, & Zhang, 2006). Although these studies vary widely in terms of what technologies and cultures are studied and what research methods are used, we can use the results to begin piecing together a theoretical framework for understanding relationships between culture and CMC.

The objectives of the chapter are to provide an overview of research in the area of culture and CMC to date. We first present a conceptual framework for understanding how culture and

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