# Chapter 5.1 "Is it a Boy or a Girl?" Anonymity and Gender in Computer-Mediated Interactions

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## ABSTRACT

This chapter examines the research on sex differences and gender identification in computer-mediated interaction (CMI), and presents a pilot study of synchronous, anonymous, one-to-one interactions, to understand the extent to which a person's "real life" sex can be identified in CMIs as well as the stylistic and linguistic cues that "mark" someone as "male" or "female." Although previous research has reported sex differences in a number of different variables (e.g., number of words, disagreements), analysis of the transcripts in this study revealed only one significant difference, in that men corrected themselves more often than women. Furthermore, participants correctly guessed the sex of their partner 62.5% of the time, felt approximately 65% sure of their guess, and used gender stereotypes to make their assessments. Implications for anonymity and CMI research are discussed, focusing on the conditions under which sex differences and gender stereotypes become relevant in on-line interactions.

## INTRODUCTION

Over the past two decades, computer-mediated interaction (CMI) has become an accepted part of our professional and personal lives. A survey of internet use revealed a nearly 130% growth of internet usage in North America between 2000 and 2007, totaling over 248 million users (Internetworldstats, 2007). Its rise in popularity and potential to challenge commonly held beliefs about communication have

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spurred a large body of research on text-based CMI. Early scholarship celebrated its potential to screen out a user's identifying information, such as his/her age, race, physical appearance, or sex (Chesebro & Bonsall, 1989; del-Teso-Craviotto, 2008; McCormick & McCormick, 1992; Parks & Floyd, 1996) and has highlighted a number of benefits, including better decision-making, increased communication satisfaction among discussants, the ability to receive online therapy/ support, and general relief from fear of retribution (Bronco, 2004; Hayne & Rice, 1997; Valacich, George, Nunnamaker, Vogel, 1994; Wallace, 1999). There are undesirable results as well, such as libel, impersonation, online fraud, spam, and hate mail (Teich, Frankel, Kling, & Lee, 1999).

One way that computer users have taken advantage of anonymity in CMI is to impersonate a member of the opposite sex or to experiment with their gender identity in on-line interactions (Danet, 1996; Witmer & Katzman, 1997). Indeed, in a survey of 823 internet users, Samp, Wittenberg, and Gillett (2003) found that 28% of the respondents had pretended to be a member of the opposite sex. In these instances, users "manipulate" the communication context to conform to the identity they wish to assume (Myers, 1987), often by employing gender-stereotyped language to "mark" themselves as "male" or "female." Thus, gender in CMI can be seen as a performance that can be altered to suit communicative goals. As such, some CMI users might be left questioning the gender identity of their interaction partners.

According to Scott (1998), "because so much of our interaction with others involves identified sources, many communicators are uncomfortable with anonymous sources and their natural tendency is to attribute a source to all messages" (p. 398). This may be especially true with biological sex, as individuals have a need to classify people as male or female (Danet, 1996). As Herring and Martinson (2004) explain, "It is important to know an interlocutor's identity in order to understand and evaluate the interaction; this is especially true for gender, which is conventionally associated with different norms, roles, and communication styles in most human cultures" (p. 425). Despite the apparent anonymity of CMI, some scholars believe that CMI users leave gender "traces" during a text-based interaction that competent communicators could decode, with varying degrees of certainty, to determine the "real life" sex of anonymous users (Sierpe, 2005). In a study of an on-line text-based game, for instance, Herring and Martinson (2004) found that players who were trying to portray themselves as a member of the opposite sex would use stereotypic content to convince others of the "truth." Yet, an analysis of the players' postings revealed stylistic cues at the word and sentence levels (e.g., message length), performed unconsciously, that revealed the players' sex. Two questions arise from this dilemma. First, to what extent does CMI mask the sex of its users? Second, what are the "real" and/or perceived cues that may reveal the sexof anonymous CMI users?

To answer these questions, a number of researchers have sought to identify differences between men and women's on-line communication (e.g., Baron 2004; Guiller & Durndell, 2006; 2007; Herring, 2004; Herring & Paolillo, 2006; Palomares, 2004; 2008; Postmes & Spears, 2002; Reid, Keerie, & Palomares, 2003; Selfe & Meyer, 1991; Sarch, 1996) as well as people's ability to correctly identify the sex of CMI users (e.g., Cornetto & Nowak, 2006; Herring & Martinson, 2004; Koch, Mueller, Kruse, & Sumbach, 2005; Nowak, 2003; Savicki, Kelley, & Oesterreich, 1999; Thomson & Murachver, 2001). The present chapter reviews these lines of research and presents a pilot study that examines the extent to which one's sex is masked during a synchronous, on-line interaction between two anonymous chat mates. For the purposes of this chapter, the term sex will be used when categorization is based on the self-identified biological characteristic of the CMI user (e.g., male vs. female), and gender will be used when categorization is based on other

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