Chapter 1.23

Computer–Mediated
Communication Research

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ABSTRACT

This chapter asks “What is meant by computer-mediated communication research?” Numerous databases were examined concerning business, education, psychology, sociology, and social sciences from 1966 through 2005. A survey of the literature produced close to two thousand scholarly journal articles, and bibliometric techniques were used to establish core areas. Specifically, journals, authors, and concepts were identified. Then, more prevalent features within the dataset were targeted, and a fine-grained analysis was conducted on research-affiliated terms and concepts clustering around those terms. What was found was an area of scholarly communication, heavily popularized in education-related journals. Likewise, topics under investigation tended to be education and Internet affiliated. The distribution of first authors was overwhelming populated by one time authorship. The most prominent research methodology emerging was case studies. Other specific research methodologies tended to be textually related, such as content and discourse analysis. This study was significant for two reasons. First, it documented CMC’s literature historical emergence through a longitudinal analysis. Second, it identified descriptive boundaries concerning authors, journals, and concepts that were prevalent in the literature.

INTRODUCTION

Computer-mediated communication (CMC) involves a wide number of characteristics involving human communication. It also includes systems, methods, and techniques that are typical of online environments. Therefore, one would rightfully expect definitional difficulties both technological and methodological. Wallace (1999) extensively surveyed the literature concerning CMC and found relatively few definitions. While differences abounded in the definitions found, the one constant was the use of the computer as an intermediary device. The centrality of the computer and communication layers human characteristics and technological issues.
Levinson (1990) suggests that in order to understand a device or a technique, not only should we take a microscopic view through research and examination, but we should also take a more macroscopic view. A survey of the scholarly communication might help provide a different perspective. Hopefully, it would reveal some of the larger areas of inquiry concerning online research in general, and computer-mediated communication specifically. This macroscopic survey would enable researchers and scholars to more efficiently coordinate their own activities with outlets and concepts that have the most pressing need for their contributions. It has the additional benefit of documenting CMC’s developmental features that can be compared with future research or differing methodologies.

Similar to other such studies, the purpose of this chapter is to provide an overview of the CMC scholarly literature, and to “identify its component features in providing a tangible means of identification” (Dick & Blazek, 1995, p. 291). Likewise, it is not to determine the magnitude that CMC occupies as a discipline, field, specialty, or subspecialty area. For purposes of literary description, the term “field” is not a cataloguing designate, but rather a convenient moniker under which CMC scholarship resides. CMC is often described in the literature as a field. However, designates of specialty, or subfield are probably more accurate.

Simply put, the statement of the problem is: “what are trends in computer-mediated communication research?” Definitions and descriptions of current literature on the subject reflect views that are selective and often disparate. Rather than revisit debatable definitional issues, an arguably more objective approach will be used as the focus of this inquiry. Specifically, what authors, journals, concepts, and research issues possibly populate the CMC domain?

Certainly, a number of conceptual problems would be introduced with any kind of predictive examination (Hargittai, 2004). Therefore, exploratory and descriptive procedures seem more appropriate than postulating hypotheses. With this in mind, the original question concerning CMC has, as one possible answer, a bibliometric analysis into the nature of the field. Bibliometrics is the “... mathematical and statistical analysis of patterns that arise in the publication and use of documents” (Diodato, 1994, p. ix).

Library and information science have long used bibliometrics for this kind of analysis. They have a body of literature supporting their validity and reliability. Moreover, bibliometric procedures provide the means upon which relationships of theoretical inquiry can be based. Borgman & Rice (1992) state that: “Bibliometric data are particularly useful for studying longitudinal trends in scholarly disciplines because of the massive datasets that can be utilized. Virtually no other method provides as comprehensive coverage of a topic in scholarly communication” (p. 400).

Journal articles appear to be reasonable and available artifacts for identifying this area. This is done for three reasons. First, their affiliation with the bibliometric theory of problematic network analysis provides support for their representation of scholarly activity. (Coutial, 1994; Coutial, Callon, & Sigogneau, 1984). This theory views scholarly communication and literature as a series of problematisations that reflected the underlying intellectual discourse. Journal articles are seen as the primary artifact from which to extract elements of that discourse. Second, analyses of journals do not consume the financial resources inherent in more exhaustive treatments. Third, their online availability makes this current analysis easier to replicate and contrast when used as a benchmark upon subsequent research.

Research questions. One advantage of surveying the field is to let the “field” define itself as it exists in the extant literature. In this regard, almost 40 years of archival data was examined by combining the results of a previous survey (Wallace, 1999) with this 2005 examination. Hopefully, this will offer a more comprehensive look at how CMC
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