

## 6 CHAPTER ONE

very moment. However, asynchronicity has long been confounded with text literacy. Now we realize that text-based communication, supported either asynchronously or in real time (as practiced in ICQ—an online instant messaging program, MOOs—Mud Object Oriented, MUDs—Multi-User Dungeons, Palaces, and other Net-based chat systems), is but one form of communication. In an advanced, Net-based context, voice, sound, and video become as easily formatted, stored, and retrieved as text. Already, early versions of asynchronous voice conferencing (for example, see [www.wimba.com](http://www.wimba.com)) and asynchronous “virtual people speaking your email” animations of voice messaging (i.e., <http://www.lifeix.com>) are becoming available in addition to synchronous audio and video conferencing. Because the Net so aptly supports both synchronous and asynchronous communication, it should be no surprise that e-research utilizes this capability to provide a wide variety of research methods and tool capacities. Research applications can be customized to take advantage of either synchronous or asynchronous formats—or both. For example, online focus groups allow the researcher to gather groups of subjects from widely disbursed geographic locations. These groups can be conducted synchronously using voice or text formats so that instant feedback is provided to both researchers and participants, and the immediate presence can be used to build common understandings and ideas. Alternatively they can be conducted asynchronously, permitting reflective interactions that are not dominated by the participants who think and communicate most quickly. E-research also utilizes the distributed data and information processing capacity of the Net. Stand-alone data processing applications (including statistics programs, registration systems, and programs that monitor network activity) are all becoming “Net-enabled” and thereby can be applied to locations and times that are noncontingent with the behavior or process being studied. Thus, e-researchers are able to use research tools, monitor activity, and collect data without traveling long distances or coordinating local time schedules. E-research permits the exploration of new fields of knowledge. As more social and economic interaction takes place on the networks, new fields of human endeavor are created. Researchers can now study the ways in which students learn online or how online education and civic groups make decisions and conduct business. These new human activities grow in economic and political importance daily. These fields of study are not readily accessible to researchers who cannot access or who lack the skills to proficiently use the Net. Thus, this text is a guide that can be used for both instruction and motivation to acquire and effectively use the new tools and techniques of networked research. If, as Benedikt (1991) argues, cyberspace “has a geography, a physics, a nature and a rule, of human law” (p. 123), then obviously it is an environment that can provide insight into human behavior and nature, through examination of the cultural and sociological constructs that humans create within this context. Thus, cyberspace as an evolving and extremely intricate human context attracts the researcher. It is unclear how many of the research tools that have been developed, tested, and normed in real communities will be as useful in virtual contexts. Likely, existing tools will need to be modified to maximize their usefulness in this new milieu. Moreover, it is certain that