Conducting Ethical Research in Virtual Environments

Lynne D. Roberts
University of Western Australia, Australia

Leigh M. Smith
Curtin University of Technology, Australia

Clare M. Pollock
Curtin University of Technology, Australia

INTRODUCTION

The rapid growth of the Internet has been accompanied by a growth in the number and types of virtual environments supporting computer-mediated communication. This was soon followed by interest in using these virtual environments for research purposes: the recruitment of research participants, the conduct of research and the study of virtual environments. Early research using virtual environments raised a number of ethical issues and debates. As early as 1996, a forum in the *The Information Society* (vol. 12, no. 2) was devoted to ethical issues in conducting social science research online. The debate has continued with more recent collaborative attempts to develop guidelines for ethical research online (Ess & Association of Internet Researchers, 2002; Frankel & Siang, 1999).

BACKGROUND

The basic principles of ethical research with humans are integrity, respect, beneficence and justice (National Health & Medical Research Council, 1999). Based on these principles, many professional associations provide ethical guidelines, or codes, for the conduct of research. However, these codes have typically been developed for use in offline settings, prior to consideration of research being conducted online[1]. While these codes contain guiding principles for research generally, the translation of these principles into actions for conducting research in virtual environments is open to interpretation. The process of translating ethical guidelines into ethical practice online involves a deliberation of the options available to the researcher and the likely impact on research participants, their communities and the research process. Central concerns in this process are maintaining respect for individuals, their online identities and the ownership of words.

PUBLIC VS. PRIVATE SPACE

Research online can take place within a range of virtual environments that vary in terms of purpose, synchronicity, access, number of users and norms. A major issue in developing ethical research procedures for use within a particular virtual environment is determining whether the setting represents a private or public "space". Various attempts have been made to distinguish between the public and the private in virtual environments (see, for example, Lessig, 1995) but little agreement has been reached. There are currently no clear guidelines for researchers on what constitutes private versus public space in virtual environments, yet the distinction is important as it affects the rights of participants to be advised of the research and to give or withhold their informed consent.

The defining of public versus private space cannot be reduced to the single dimension of accessibility to the virtual environment. Interactions that occur within publicly accessible virtual environments may be perceived by participants to be private. Newsgroups can be accessed without restriction, yet newsgroup postings can be, and frequently are, high in self-disclosure and are perceived by many users to be private (Witmer, 1997). Similarly, support groups on sensitive issues may be conducted in publicly accessible sites with participants adhering to norms of confidentiality and privacy (Elgesem, 2002).

Some ethical codes exempt naturalistic observations and archival research from requiring informed consent where no harm or distress is likely to come to those researched and where their confidentiality is protected. King (1996) highlighted the potential for psychological harm to members of online groups where research is conducted and published without the prior knowledge and informed consent of participants. Where there has been the expectation of privacy within a group (however misinformed that expectation may be), the individual may feel violated upon hearing of, or reading, the results of that research.

Where the presumption is made that online communication occurs in public space simply because it is accessible without restriction, an anomaly may result in how research participants are treated in equivalent settings in on- and off-line research. For example, research on support groups off-line requires the informed consent of research participants, while similar research online may occur without the knowledge or informed consent of the participants, on the grounds that all postings are public documents (see, for example, Salem, Bogat & Reid's 1997 study of a depression support group).

Table 1 summarizes possible dimensions against which the public/private nature of a virtual environment can be assessed. Virtual environments where all dimensions fall on the left-hand side of the continuums may be deemed as public environments for research purposes and subject to guidelines for research in public settings. Virtual environments where all dimensions are on the right should be deemed as private environments, requiring informed consent from research participants. The difficulty arises with the majority of settings that do not fall clearly into public or private spaces. Researchers do not have the right to define virtual environments as public or private to meet their own research needs (Waskul & Douglass, 1996). Rather, account should be taken of the size and nature of the online forum and the intrusiveness of the study. Consideration should be made of the likely effect of the request to conduct research and the research itself on research participants and their communities. The process of requesting consent to research may in itself alter group dynamics (Sixsmith & Murray, 2001).

INFORMED CONSENT

Research conducted in virtual environments that have been conceptualized as private settings requires the informed consent of research participants. Obtaining informed consent in virtual environments is more problematic than in off-line research as participants are frequently geographically dispersed. In addition, research participants may be reluctant to divulge details of off-line identities required for the signing of consent forms. A range of options has been suggested for obtaining informed consent in online research (Bruckman, 1997; Flicker, Haans & Skinner, 2004; Jacobson, 1999; Roberts, Smith & Pollock, 2004; Smith & Leigh, 1997) and these have been summarized in Table 2. Selection of a method for obtaining informed consent will necessarily be dependent upon the type of virtual environment, the level of anonymity required by research participants, and their access to high-level computing facilities. Regardless of the method used, the information about the research should be presented in a format that the research participants can keep and refer back to at any time before, during, or after their research participation. Care needs to be taken to fully inform potential research participants of the possible consequences of their research involvement (Reid, 1996).

In addition to seeking consent from research participants in virtual environments, it may be advisable to also seek the consent of gatekeepers of the community and advise the community as a whole of the research being undertaken. Advising communities of a research project requires the public identification of the researcher. In some circumstances, the decision to research within a particular virtual environment may be made after the researcher has been either an active participant or "lurker" within that environment. We recommend that researchers make their researcher status overt as soon as the research process begins. This may include identifying as a researcher in pseudonyms (Roberts et al., 2004), descriptions (Allen, 1996) or objects (Reid, 1996); linking between research and social identities (Roberts et al., 2004); and posting information about the research.

Advising communities of a research project may take ongoing effort in public virtual environments without membership boundaries. Identifying oneself as a researcher once within an online group does not mean that absent or future members of the group are also informed of the researcher's role (Sixsmith & Murray, 2001). There may be a need to re-identify researcher status and restate and clarify the role of the researcher on an ongoing basis.

PROTECTING ANONYMITY AND CONFIDENTIALITY

Individuals typically adopt a pseudonym (or pseudonyms) for use in virtual environments, providing a level of anonymity. While it has been argued that research involv-

Table 1. Dimensions of public and private space in virtual environments

Accessibility:	Accessible to all	➔	Restricted membership
Users' perceptions:	Public	➔	Private
Community statement:	Research permitted	➔	Research prohibited
Topic sensitivity:	Low	➔	High
Permanency of records:	Public archives	➔	Private logs only

Related Content