**Developing a geographers' agenda for online research ethics**

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**Abstract:**

This paper explores and advances the debate surrounding online research ethics. The use of internet mediated research using online research methods has increased significantly in recent years raising the issue of online research ethics. Obviously, many ethical issues of onsite research are directly translatable to the online context, but there is also a need for existing ethical principles to be examined in the light of these new virtual research strategies. Five key issues of ethical conduct are commonly identified in the literature pertaining to online research ethics: informed consent, confidentiality, privacy, debriefing and netiquette. These are the issues that are most commonly discussed in procedural ethical guidelines for online research. However, this paper proposes that given the recent increased formal regulation and research governance over research ethics in many countries, it is important that discussion of such issues continues as an embedded part of professional self-regulation and procedural ethical guidelines are used as creative forums for reflexive debate rather than simply being routinely applied by bureaucratic ethics committees. Finally, in problematising the role of procedural online ethical guidelines, the conclusions explore how geographers can contribute to the future debate about online research ethics.

**Key words:** Online research ethics, informed consent, confidentiality, privacy, netiquette, debriefing, research governance.

**Developing a geographers' agenda for online research ethics**

## I. Introduction:

Ethics is on the agenda in geography and much time and effort has been spent in recent years exploring a variety of ethical issues and approaches. This tranche of work has proliferated in debates surrounding pedagogy (Epprecht, 2004; Hay, 1998; Howitt, 2005a; Jarosz, 2004; Kearns et al., 1998; Israel and Hay, 2006; Matthews, et al., 1998; Vujakovic and Bullard, 2001), political commitment and social justice (Beaumont et al., 2005; Cloke, 2002; Davies, 2006; Hay and Foley, 1998; Valentine, 2005), not to mention the spatial implications of ethical commitments and the general moral progress of the discipline (Cutchin, 2002; Lee and Smith, 2004; Smith, 2000; 2001). More recently the development of more relational modes of understanding ethics and responsibilities has been the focus of attention (Barnett, 2005; Brock, 2005; Noxolo et al., submitted; Popke, 2003; 2006). This broad range of research has resulted in Richards (2004) arguing that ethics may be the arena that can draw together human and physical geography and this has become most apparent in the arena of research ethics. Here there has been a proliferation of work exploring moral obligations to the environment (Armstrong, 2006; Baldwin, 2004; Hillman, 2004; Richardson, 2004) and the ethics pertaining to research amongst specific social groups, such as children, indigenous groups and those with disabilities (Gibson, 2006; Howitt, 2005b; Skelton, 2001; Valentine, 2003). But whilst this interest in research ethics is certainly vibrant, the geographical community has remained notably silent about the issue of online research ethics, a form of ethics specifically pertaining to research mediated through the internet using online research methods.

This is perhaps surprising given that Warf (2004: 44) proposes that cyberspace is one of the key 'cutting-edge' issues for the geographical community and more so given the burgeoning research interest in the impact and implications of new media and information and communication technologies (ICT) on everyday life (Graham, 2005, and many others). So although there has been a small but growing expansion of geographical

projects utilising internet mediated research (Barker, 2005; Holdsworth, 2006; Holloway and Valentine, 2000; Madge and O'Connor, 2005; O'Lear, 1996; Parr, 2002), little has yet been written by geographers about the ethical issues involved in such research[i]. But this silence is notable among other social scientists more generally, again surprising owing to the increased formal regulation and research governance over the management, monitoring and sanctioning of research ethics in many countries. In the UK, for example, the Economic and Social Research Council (ESRC) has recently developed a 'Research Ethics Framework' to provide 'clear and practical guidelines on the principles and process of ethics review within UK social science research' (ESRC, 2005: 27) but this document completely fails to discuss the ethics associated with internet mediated research despite the fact that this ethics framework was explicitly developed in response to 'advances in information and communication technologies', amongst other issues (ESRC, 2005: 27). Similarly, in Canada, the Tri-Council Policy Statement on 'Ethical Conduct for Research involving Humans' developed by Canada's three national funding agencies also does not yet explicitly address the ethics involved in internet mediated research (Kitchin, 2003). In the US there are only a few tentative explorations of the challenges that internet mediated research poses to current Institutional Review Board practices (Johns et al., 2004; Penden and Flashinski, 2004)[ii].

This paper therefore aims to address this gap in the literature on online research ethics. Its focus is on online research methods (ORM) which include online questionnaires, virtual interviews of various types, virtual ethnographies and online experiments, to mention a few. These have been collectively termed internet mediated research (IMR) or online research practice (ORP). As Mann and Stewart (2000: 8) so aptly recognise: 'Because online research practice is still in its infancy, the critical researcher will be confronted by quandaries at almost every point in the research process.' Thus the debate surrounding online research ethics is a 'work in progress' and the ethical challenges are not simple. Indeed, it is clear that many nuances to this debate will evolve as internet mediated research becomes a more mainstream and sophisticated methodology.

The focus of this paper is to explore and advance the debate surrounding online research ethics and my argument goes as follows. The use of internet mediated research using online research methods has increased significantly in recent years raising the issue of online research ethics. Obviously, many ethical issues of onsite research are directly translatable to the online context, but there is also a need for existing ethical principles to be examined in the light of these new virtual research strategies[iii]. Five key issues of ethical conduct are commonly identified in the literature pertaining to online research ethics: informed consent, confidentiality, privacy, debriefing and netiquette. These are the issues that are most commonly discussed in procedural ethical guidelines for online research[iv]. However, this paper proposes that given the recent increased formal regulation and research governance over research ethics in many countries, it is important that discussion of such issues continues as an embedded part of professional self-regulation and procedural ethical guidelines are used as creative forums for reflexive debate rather than simply being routinely applied by bureaucratic ethics committees. Finally, in problematising the role of procedural online ethical guidelines, the conclusions explore how geographers can contribute to the future debate about online research ethics.

**II. Exploring online research ethics:**

There is mixed opinion as to the success of internet mediated research (Hine, 2005; Illingworth, 2001; Madge and O'Connor, 2002; Stewart and Williams, 2005). There are, however, several commonly suggested general advantages of online research. It is proposed that it enables the researcher to contact a geographically dispersed population and so can be useful in internationalising research without adding costs to the funding body. It is also stated to be useful in contacting groups often difficult to reach, such as the less physically mobile (disabled/in prison/in hospital etc) or the socially isolated (drug dealers/terminally ill etc) or specific online communities. Savings in costs have been recommended (for example, costs associated with travel, venue, data entry for questionnaires, transcription of interviews). Moreover, according to Denscombe (2003: 51), the quality of responses gained through online research is much the same as

responses produced by more traditional methods, warranting 'guarded optimism' about the validity of this new methodology.

But is there anything special about the online research environment that necessitates the development of a set of ethical guidelines specifically pertaining to the virtual venue? Or can we directly translate ethical principles from onsite research[v]? It has been suggested that online research ethics raise many interesting debates as the computer stands 'betwixt and between' categories of alive/not alive, public/private, published/non-published, writing/speech, interpersonal/mass communication and identified/anonymous (cf. Bruckman, 2004; Turkle, 1984). These categories, of course, are not simply dichotomies, but the boundaries between them are blurred and fuzzy. It is the blurring of these boundaries that complicates the direct application of onsite ethical practices to online research. For example, there is still no internationally binding legal agreement as to whether online messages constitute private correspondence or published public texts and whether lurking is a defensible online research technique or if seeking consent is required in all virtual venues. As Jones (2004: 179) suggests: 'At present for most internet researchers it is likely that gaining access is the least difficult aspect of the research process…What has become more difficult is determining how to ensure ethical use is made of texts, sounds and pictures that are accessed for study.'

Thus according to Hine (2005: 5): 'Online research is marked as a special category in which the institutionalised understandings of the ethics of research must be re-examined', supporting the argument that at minimum we do indeed require discussion about the ethical practices specifically pertaining to the online environment. Indeed, given that ethics at its simplest is a moral philosophy that involves '…how we systemize, defend and recommend ideas about what is right and wrong, *given the particular cultural context*' (Thurlow et al., 2004: 85, emphasis added), it might not be too extreme to suggest that the particular cultural context of the internet might demand some new thinking about what constitutes ethical enquiry. Indeed, according to the Association of Internet Researchers (AoIR) Ethics Working Committee (quoted by Ess, 2002a: 180), online research can entail greater risk to individual privacy and confidentiality, greater

challenges to a researcher in gaining informed consent and greater difficulty in ascertaining participants' identities. Hewson et al. (2003: 51) concur, proposing that ensuring that pre-existing ethical standards are properly met online can be more difficult, due to the novel features of the internet environment.

Given the relative infancy of internet mediated research, it is timely to review the key issues that are emerging in the literature with respect to online research ethics. These are informed consent, confidentiality, privacy, debriefing and netiquette and these are each discussed in detail below. Some of these issues closely reflect the basic ethical principles of onsite research but in other instances, specific issues arise from conducting research via the internet. It must be reiterated that many of the ethical issues discussed below are still under discussion: online research practice is above all else a living process so new ethical problems and issues continually arise. As Johns et al. (2004: 109) correctly observe, there are still widespread differences of opinion as to what constitutes appropriate online ethical conduct[vi].

**III. Informed consent including withdrawal and deception:**

Informed consent in conventional onsite research involves treating the participants of social research with respect, using clearly easily understood language to inform them of the nature of the research, the time needed to be involved, the methods to be used and the way in which any findings might be used, before gaining their consent to take part (cf. Mann and Stewart, 2000; Vujakovic and Bullard, 2001). Any potential physical, economic or psychological risks (for example, distress, embarrassment, loss of esteem) must be explained and attempts made to militate against these. If this is not possible, the research should be abandoned for these risks should be no greater than those encountered in normal daily activity for the research participants. According to Matthews et al. (1988: 316) this should also involve 'cultural safety' (cf. Dyck and Kearns, 1995) '…whereby those taking part in a project should not feel threatened or challenged by the researcher who, through inadequate preparation, insensitivity or simple ignorance, may comment unwisely on implicit cultural, ethnic or religious beliefs.' Similarly, any benefits or

compensation that might be received should be clearly explained, both to the individual and also in terms of the 'greater social good'. Particular care must be taken with informed consent if the research includes potential vulnerable individuals such as children. Permission must be obtained from parents or guardians for individuals under 18 years old. Gaining consent should never involve coercion. All participants should be made aware of the complaints procedure and be able to withdraw from the research at any point.

Clearly these principles should also apply in the online environment. Participants must be made fully aware of the purpose of the research project. Generally written information about the aims of the project, the roles of the participants and any potential risks should be provided, either as an email, on a dedicated website or bulletin board, or by conventional mail. If gaining consent virtually, a consent form can be provided as an email attachment or on a project website but getting the participants to sign it may not be straightforward. Ideally the consent form would be downloaded electronically and the signed form returned via surface mail or fax to the researcher. In practice this may discourage respondents so an alternative consists of including a tick box ('I accept') on an email or web attachment that the respondent can return online to the researcher. Alternatively, sending participants a password via email and needing this password to join the research project is an option and this can also ameliorate problems with potential hackers. However, without written signed consent any project formally convenes European data protection legislation (Mann and Stewart, 2000: 49).

Moreover, some concerns have been raised about verifying the identity of consenting participants in internet mediated research. For example, it has been suggested that gaining informed consent online can be more problematic than for onsite research because it is potentially easier for participant to deceive the researcher, particularly regarding their age. In the virtual anonymous realm, how can the researcher verify the participant's identity? In practice, however, according Hewson et al. (2003: 52), this type of fraudulence is both rare and easily detected. Moreover, these issues are also present in onsite research, for example postal questionnaires (Johns et al., 2004: 117). However, this

does suggest that particular care must be taken in gaining informed consent when using internet mediated research with minors and here there are several useful case studies to draw on (Bober, 2004; Stern, 2004). Despite this, overall, Bruckman (2002a) concludes that the manner in which to gain consent varies with the nature of the research project. She suggests that consent may be obtained electronically if the risks to subjects are low but otherwise consent must be obtained by a signature on paper returned by surface mail or fax.

The above points relate largely to gaining consent for online questionnaires. The situation with respect to online interviewing is more straightforward. When using chat facilities or conferencing facilities for virtual interviews, it is likely that the interviewees have been through some sort of process of self-selection and so informed consent can be gained during this process (as detailed above). Indeed, consent should not be left until the actual interview is about to occur as giving consent requires some prior thought from the participants, the form may take some time to download and time is required for the researcher to receive the written signed form (if considered necessary).

The ability to withdraw from the research at any time is a further central tenet of informed consent. Withdrawal from an online questionnaire can be facilitated by locating an exit button next to the submit button. Withdrawal from a virtual interview can be achieved by locating a withdraw button available at all times in the chat window. But during virtual interviews the sudden withdrawal of a participant can be met with confusion: does the interviewee no longer wish to participate? Is there a technical problem with the internet connection? How should the interviewer follow up this withdrawal to find out? How many follow up emails to determine where the participant has gone would be considered spamming or intrusive? These are issues still to be decided upon. However, as Johns et al. (2004: 116) suggest, withdrawal is also significant in onsite research and infact, a participant may feel freer to withdraw from an online project as there are less face-to-face social pressures.

So while the issue of informed consent shows many similarities to onsite research, there are also some differences in the virtual realm. This is a particularly thorny issue regarding not gaining informed consent for participant observation in the online environment. Deception involves researchers deliberately concealing the purpose of their study. In theory any research should not involve deception but in practice there is a contested debate over the issue. Some researchers, for example Denzin (1999), argue that postings on bulleting boards are public so there is no need to proceed without disclosing research activity while Glaser et al. (2002) concede that there are occasions when disclosing research activity would jeopardise important research aims. For example, in their research they (Glaser et al., 2002) collected data from chat rooms associated with white racist groups. They wanted to discover the circumstances in which individuals advocated physical violence against ethnic groups. They covertly conducted semi-structured interviews with 38 participants through these chat rooms. They did not seek informed consent arguing that revealing the researchers' identity and purpose of the research would have deterred open expression of views. Glaser et al. (2002) were able to gain approval of the ethics committee at Yale University on the grounds that the respondents' statements were made in a public form, the deception was necessary for the research to be undertaken, and the respondents' identities were carefully protected.

Similarly, Langer and Beckman (2005) argue for the legitimacy of covert internet research on sensitive topics, suggesting that existing onsite ethical guidelines with regard to informed consent may need to be revised. Chen et al. (2004: 164) propose that 'lurking' is an important research act prior to gaining informed consent, in order to understand the topics and tone of exchanges in a mailing list or newsgroup before becoming involved. But although lurking as socialisation into the online culture of a group may be considered an important prerequisite for research, Chen et al., (2004: 164) also found that moderators and group leaders generally disapproved of lurking as a data collection method, so that observation without participation was generally considered unethical research practice. Eysenbach and Till (2001) support this view, contending that researchers 'lurking' in online communities might be perceived as intruders and may in fact damage some communities. They therefore suggest that the online researcher must

tread very carefully in order to respect their participants' lives. But as Hine points out (personal communication, November 2005), the issue of deception is often not clear-cut: 'A researcher may set out to tell everyone concerned about their research, but as new participants join a forum and as existing participants forget, the research can effectively become more covert as time goes on. The issue can be particularly troubling in online forums with high turnover, like chat rooms.' Vigilance regarding informed consent is therefore essential throughout the research process.

So clearly informed consent is high on the ethics agenda for online researchers. Overall while there is still much debate, there is an emerging consensus regarding informed consent. Generally speaking for private or semi-private sources (mail, closed chat rooms) informed consent is considered essential whereas in open access forum (newsgroups, bulletin boards), it is suggested that informed consent may not always be essential. Ess and the AoIR Ethics Working Committee (2002: 5) recommend that the greater the acknowledged publicity of the venue, the less obligation there may be to protect individual privacy and the right to informed consent. A second key issue emerging out of the online ethics debate is that of confidentiality.

**IV. Confidentiality issues including data security and subject anonymity:**

Clearly online research should aim to ensure the confidentiality of participants, as with onsite research. However, online research adds additional issues of concern with respect to confidentiality. These revolve around whether collected data is securely stored and if participants' identities are protected.

Regarding data security, ethical issues arise in using online research methods. For example, messages posted to a bulletin board or a chat room can be copied and distributed without the knowledge of the writer, and the content of the message easily altered. Online questionnaire software may contain undetected bugs or viruses while guessable passwords for synchronous interviews might compromise data security. Also, despite efforts to protect anonymity of internet communication, for example though

encryption, according to O'Dochartaigh (2002: 82) it is still possible for security agencies and governments to trace most forms of internet communication back to an individual. Emails can also be stored by servers for many years. Hackers may also potentially be able to access computer files with respondent responses, which is of particular significance if conducting studies dealing with sensitive, personal or illegal subjects.

In these cases data security can be improved by the use of web-based questionnaires rather than email questionnaires, or the respondent can be encouraged to complete the questionnaire on an anonymous machine in a library or internet café and then print it off and post it to the researcher. But this anonymity is clearly not possible in the situation of a synchronous virtual interview and particular care must be paid regarding confidentiality if the researcher uses this virtual method. Encryption can ensure email messages can only be encrypted by the intended recipient but equally it may complicate a research project because all participants must use email software that shares the same encryption capability and the researcher and participants must have the necessary technology to use the software. Additionally, encryption is illegal in some countries and may be viewed suspiciously by some governments. These issues may all act as a disincentive on participation levels (Mann and Stewart, 2000: 43). A further general way to increase data security is to regularly back up research data and store it in the most secure location possible. These problems with data security lead Mann and Stewart (2000: 43) to argue that although researchers can promise confidentiality in the way that they use data, they cannot promise that electronic information will not be accessed and used by others. Care should therefore be taken in making promises about confidentiality but equally researchers should be confident that if all reasonable precautions are taken to secure data, in most cases of research this should be sufficient.

Subject anonymity is a further issue relating to confidentiality. Prior to the start of the online project the researcher must decide whether the subject's identity is to be disguised, and to what degree. According to Bruckman (2002a), subject confidentiality can range from no disguise, light disguise, moderate disguise to complete disguise. In no disguise pseudonyms and real names can be used with the permission of the individual and the

individual's claim to copyright over their words is respected. In contrast, complete disguise involves no naming of groups, pseudonyms and other identifying features are changed (such as places, institutions, user names, domain names), verbatim quotes are not used if search mechanisms could link these quotes to the person in question and some false details might be introduced deliberately so that a subject might not recognize themselves. In this way someone seeking a subject's identity would be unable to do so. Clearly the level of disguise depends on the research project, the researcher's ethical philosophical position and recommendations from ethical committees. In some instances following these procedures might ensure more thorough protection of research participants than is available through face-to-face means (cf. Johns et al. 2004: 119), particularly owing to the added anonymity of the virtual realm. For example, in Coomber's (1997) research with drug dealers, respondents were concerned that they might be traced and be subject to criminal investigation. The researcher was concerned that he might be required by law to hand over email addresses of those who had completed his survey to the police. In reality this did not occur and Coomber was able to protect the identity of respondents through hiding the origin of responses.

AoIR (Ess and the AoIR Ethics Working Committee, 2002: 7) has produced some general guidelines on the issue of informant confidentiality, stressing that this varies with the nature of the research venue. It is suggested that generally if internet participants are understood as subjects (e.g. chatrooms, MUDs), then a greater sense of confidentiality is required. If the participants are understood as authors (weblogs, webpages, emails to large lisservs) then there is less obligation to confidentiality. Indeed, authors of weblogs/webpages may not want subject confidentiality and not to refer to material by direct quotation and specific name would be considered infringement of copyright. Thus in order to respect individuals who share their ideas on public lists, the names of these participants should be properly attributed (cf. Barnes 2004: 212). Bassett and O'Riordan (2002) explore this through a case study of an online lesbian activist site, and suggest that 'protecting' participants through subject anonymity may well work to reinforce broader social marginalization of the lesbian community. A third issue that has arisen out of discussions of online research ethics is that of privacy.

**V. Privacy and the public/private debate:**

According to Spinello (2001: 140): 'Privacy is under siege as never before thanks to the power of digital technology.' Thus Thurlow et al. (2004) suggest that privacy is the most important ethical issue for online researchers. On the internet there is no clear agreement about what is public and what is private in '…conception, experience, label or substance' (Waskul and Douglass, 1996, quoted by Bruckman, 2004: 101). This problematisation of the simple binary division between public and private internet space has led to a vibrant debate surrounding privacy issues. For example, is a researcher ethically justified in using publicly available information as data for a research project, even if this was provided by the internet user for private consumption? Should a researcher be able to 'data mine' from newsgroup postings and individual webpages? There is much debate over such issues but Hewson et al. (2003: 53) conclude that data that have been made deliberately and voluntarily available in the public internet domain (including on the WWW and newsgroups) should be accessible to a researcher providing anonymity is ensured. Hacking into individual's files or email accounts is clearly unacceptable.

But this issue is not clear-cut. Chen et al.'s (2004) research on using mailing lists and newsgroups for research purposes elicited responses from a variety of sensitive/controversial mailing lists. Many of the responses included animosity towards the 'research paparazzi' in cyberspace. A member of a miscarriage support group for example stated: 'We are bereaved, frequently openly grieving, and therefore fragile. Just asking questions about our current situation or experience can reopen wounds to a significant extent' (quoted in Chen et al., 2004: 160)[vii]. Another response from a devilbunnies newsgroup reported: 'Such endeavors are almost universally seen as an intrusion into the world we've created…' (quoted in Chen et al., 2004: 161). Other responses about online researchers were more welcome. For example, the owner of a mailing list for women who were second wives responded: 'I have a positive feeling towards researchers and journalists- I believe the second wife/second family situation is a serious one and needs as much support/exposure as it can get' (quoted in Chen et al., 2004: 164). So it is important to remember that the specific venue of research is important when considering the privacy issue. Cyberspace is a differentiated and

heterogeneous space and so privacy issues will vary in different virtual venues (Madge and O'Connor, 2005).

Additionally, expectations of privacy are perhaps the significant issue and different venues may have different expectations. Barnes (2004: 206) argues that many social messages exchanged over the internet can foster the illusion of privacy because correspondents do not see the numerous people reading their messages, including lurkers to sites, so individuals often believe they are communicating with a small group rather than a large audience. For example, many people communicating in public chatrooms or discussion groups perceive their conversations to be taking place in a private setting. In contrast, public lists, such as academic discussion groups, require proper citation to be given to materials used in their discussions (Barnes, 2004: 220). So a key issue facing the online researcher is whether the individual or group considers their correspondence to be public or private. Ess and the AoIR Ethics Working Committee (2002: 7) suggest that if the participants of the research believe that their communications are made in private, or if they are understood as subjects participating in private exchanges via chatrooms/MUDs or MOOs, then there may be a greater obligation for the researcher to protect individual privacy. But if the research focuses on publically accessible archives and inter/actions by authors/agents are public and performative, (for example e-mail postings to large listserves or USENET groups, production of weblogs and home pages), then there may be less obligation to protect individual privacy. Barnes (2004: 219) notes that the situation for discussion lists is complicated- they may be considered both public and private and here she cautions that the researcher must respect the specific privacy guidelines of the online group. Indeed, many discussion groups now state their privacy or citation policy when you join them and the online researcher should check the welcome message of public discussion lists for guidelines on how to properly cite email messages.

The privacy debate has recently moved on with Bakardjieva and Feenberg (2001) arguing that 'alienation' not privacy is the core ethical problem of online research. For these researchers (2001: 236) alienation is the '…appropriation of the products of somebody's

actions for purposes never intended or foreseen by the actor herself, drawing these products into a system of relations over which the producer has no knowledge or control.' Berry (2004) explores the issue in more depth, arguing that privacy is infact a misleading and confusing concept to apply to the internet, with non-alienation being more resourceful in addressing ethical issues. On this basis he argues for the principles of 'open source ethics' to be applied in online research which includes a more participatory and democratic research method. A further feature pertaining to online research ethics is that of debriefing.

**VI. Debriefing and feedback procedures:**

Onsite ethical guidelines generally expect the researcher to debrief the participants after the research process. In onsite research this might involve a face-to-face meeting or a written report to explain the results of the study and to invite comment and queries. At this point the researcher can determine whether the participant has suffered any harm from the research process and can take measures to address this, if necessary. In internet mediated research this debriefing might involve an email to all participants or setting up a dedicated website to locate any published materials, both including a contact address and invitation for comment. Whilst there is no guarantee that the participant will read the email or visit the website, lack of participant involvement in the debriefing process is not confined to online research but also takes place in onsite research. This debriefing situation is complicated in cross-national online research projects. Distance is likely to restrict face-to-face debriefing and this may be picked up by ethical committees. Anders (2000, quoted by Mann and Stewart, 2000: 55), for example, was required by her ethics committee to make sure that she could organize counseling in the state and country of her research participants if necessary. Moreover, particularly in the situation of cross-cultural research, debriefing must be sensitive to the cultural make up of the online research venue and the cultural values of its participants.

Chen et al. (2004: 171) go further, arguing that this debriefing should also include the sharing of research results, so that the online community is made aware of the

information that has been gathered from them. This sharing of research results can promote more egalitarian research relationships and can result in corrections to the researcher's analysis and interpretation of data. In this manner, sharing research results 'repel the feeling of being used by the researcher for selfish gains' (Chen et al., 2004: 172). As Breuder (personal communication, 2005) so aptly observes, since the amount of online research conducted is increasing rapidly, often too little is done to build a long-term positive research environment. Many researchers are far more concerned with 'harvesting' cheap participants than with providing an equitable research environment. This leads Breuder (personal communication, 2005) to suggest: 'Apart from things that should be standard, like a thorough debriefing and the possibility for the participant to provide feedback, one way to go seems to be to provide detailed individual feedback, for example, on questionnaire results. This has its own ethical problems and, unfortunately, ethics committees at this stage are often reluctant to agree to it. Still, apart from monetary reward, it seems to me nearly the only way to achieve what is ethically prescribed: equal gains on both sides of the research process.' This issue clearly requires much greater attention and here online researchers have much to learn from the literature on participatory geographies (Hickey and Mohan, 2004; Kindon, 2003; Pain, 2004). A final issue of concern, one more specifically pertaining to the online environment, is that of netiquette.

**VII. Netiquette including flaming and online harassment:**

Research etiquette on the internet requires special consideration, raising some differences compared to etiquette required by more conventional research approaches (Hall et al., 2004: 243). Netiquette is the term used to describe the code of conduct between those communicating on the internet. It is concerned with internet courtesy and protocols and is directed at preventing aggressive and insulting behaviour. It includes often unspoken rules about what is considered appropriate, polite and respectful behaviour online. Netiquette is inevitably flexible, as different types of online venues will have different rules and conventions. Some examples of netiquette can be found in Mann and Stewart (2000), Rinaldi (1996) and Scheuermann and Taylor (1997).

Such guidelines for netiquette have implications for online researchers. Hewson et al. (2003: 116) suggest that netiquette demands that postings to a newsgroup or discussion forum should be relevant- but most researchers' invitations to join a research project will not be relevant to the intended discussion. This raises ethical issues for the online researcher. The best practice is to approach the moderator of the list or newsgroup or discussion forum directly to get permission for the invitation posting but to be sensitive to the fact that such an invitation may be considered spamming and unacceptable to the online community.

Based on their research with newsgroups, Hall et al. (2004: 244-247) recognize six further issues of importance where netiquette is concerned. First, the importance of the subject header used in any posting to a newsgroup, to ensure no misunderstandings between the researcher and newsgroup members occur. Secondly, self-identification and self-presentation of the researcher are critical, as readers will form their evaluations about the credibility of the research and the researcher based on these presentations. A formal verifiable means to disclose the identity of the researcher, for example through a link to an institutional website, can increase the credibility of the researcher's claimed identity and shows respect and courtesy to members of the newsgroup (see Madge and O'Connor, 2002). Thirdly, the researcher must be familiar with the common language used on the specific newsgroup, including jargon, abbreviations, acronyms, emoticons and common grammatical rules. The ability to 'speak' the newsgroup's 'language' shows respect to the rules and conventions of the group. Fourthly, the researcher should always ask appropriate questions, not ones that could have been answered by a library or archive search, and to do this the researcher must acquaint themselves on the subject matter of the online community before asking for help. Fifthly, the specific culture of the newsgroup should be attained through online acclimation or reading FAQs and archives, prior to 'jumping in' in order to understand the nuances of group interactions. Finally, the researcher has an obligation to be 'up front' about the purpose, nature, procedures and risks of the research.

In addition to netiquette, online research also raises issues with respect to flaming and online harassment. Flames are hostile and aggressive interactions online. This can include vicious verbal attacks and derogatory, obscene and inappropriate language. Verbal disagreement can escalate to mutual abuse, threats of violence and what has been termed 'flame wars'. Overall O'Sullivan and Flanigan (2003) suggest that flaming is extremely complex because the expectations and experiences about what is acceptable and normal behaviour varies between individuals, culture, geographic location and with time. That said, online researchers must ensure that their research project never incites research participants to flaming because flaming is not just aggressive and unpleasant but it may also be potentially libelous (although international laws have been slow to catch up with the implications of cyber libel). Moreover, if a researcher acts inappropriately or unethically, they may find themselves subject to flaming.

Additionally, a small minority of people are also involved in systematic sexual, racial or homophobic abuse online. As with offline interactions, such harassment is totally unacceptable and online harassment is subject to the same laws as elsewhere, with laws courts having the potential to deal with the matter ultimately (O'Dochartaigh, 2002: 83). In my opinion, the online researcher has an ethical obligation not to collude with online harassment for the purpose of the research project. Cyberstalking is also an uncommon but significant (for those victims of it) feature of online interactions. Here, too, the researcher will have to consider several controversial ethical issues. What is the moral responsibility of the researcher to inform victims (and perpetrators) of cyberstalking? What can a researcher do if they become subject to cyberstalking? (see Tavani and Grodzinsky, 2002, for details).

These five issues discussed above have formed the backbone of debates surrounding the conduct of online research ethics and they feed into procedural ethical guidelines for online research. There is, however, mixed opinion as to the general utility of such procedural ethical guidelines for research, and this debate is explored below in the light of virtual research strategies.

**VIII. Online ethical guidelines: saviour or menace?**:

The development of procedural ethical guidelines has been considered important for some social science researchers and forms the backbone of some ethical endeavors. So according to Mitchell and Draper (1982: 3, quoted by Kearns et al., 1998: 298, emphasis added), ethics involves '…the study of standards of right and wrong, or the part of science involving moral conduct, duty and judgment…a concern about *explicitly developing guidelines* to aid in determining appropriate conduct in a given research …situation'. Frankel (1989) is in favour of this development of procedural ethical guidelines, arguing that a profession acts as a moral community and a code of ethics can act as an anchor for that community. DeLorne et al. (2001: 273) agree, suggesting that codes of research ethics have several benefits for research communities and society at large: they can protect research participants from harm, provide a consistent set of expectations regarding the actions of researchers, encourage ethical behaviour, provide guidance to researchers in making decisions and protect researchers against legal and moral problems. Thus according to Hall et al. (2004: 240), procedural ethical guidelines are important, for 'trial and error' approaches do not enhance our understanding of online ethics, nor do they eliminate distress as a result of ethical misconduct.

However, the general purpose of procedural ethical guidelines are not without critics and currently represents an area of lively deliberation. Hammersley (2006), for example, argues that the strict application of ethical guidelines is questionable as disagreements over ethical practice are common, owing to differing philosophical positions, varying conflicts of interest of different groups within society, because different ethical principles can clash and because ethical guidelines must always be interpreted in context. This suggests that procedural ethical guidelines and increasing institutional regulation can only be considered *part* of the ethical research process and in reality, practical judgments about ethical decisions rarely amount to the straightforward application of such guidelines (Hammersley, 2006: 5). Hay (1998) further calls for the need to repudiate institutional claims to moral authority and the prescriptive approaches to ethics commonly allied with those claims. In doing so he encourages a move away from heteronomous approaches towards a re-personalised ethics which encourages critical

autonomous thought about ethical behaviour and situated reflexivity. This suggests the need to create and support ethically informed practice by researchers (rather than to simply develop procedural ethical guidelines) sensitive to creating paths to justice, respect and beneficence (cf Hay, 1998: 6). Without researcher commitment to ethical conduct, no amount of rules, regulation or guidelines will yield ethical practice. In sum, procedural ethical guidelines must presuppose an ethical researcher. However, it is also clear that researchers do not work in a vacuum and they are under increasing institutional pressure to meets the demands of a growing body of ethical regulations in many different countries. Israel and Hay (2006) explore this simultaneous operation of ethical conduct in practice and regulatory compliance mediated through institutionally produced procedural ethical guidelines. This has led, they suggest (2006: 144), to 'an adversarial culture' between researchers and regulators. Accordingly, they suggest social scientists have to negotiate the competing claims of ethical conduct and regulatory compliance but in doing so they urge researchers to engage constructively with the local and national regulatory bodies that create procedural ethical guidelines. Israel and Hay (2006) are therefore suggesting that researchers need to have the skills and ethical knowledge to negotiate and transform procedural ethical guidelines with regulatory agencies/participants and not just take these guidelines on board as internally embedded regulatory mechanisms.

Bearing in mind these important critiques of regulatory ethical procedures, my position is that *at this moment*, it is still worthwhile considering the guidelines for online research ethics that have been produced to date as they can provide a 'baseline' from which to reflect on ethical online praxis and to develop a 're-personalised' online ethical researcher. This endeavor is particularly important for online researchers for several reasons. First, owing to the relatively novel status (about a decade old) of internet mediated research, the debate about online ethics is still in its infancy and so some baseline might be useful to online researchers (even if that baseline is continually contested and transformed by them). Secondly, owing to the 'cheap and quick' feature of some internet mediated research strategies, there is genuine concern that the 'glowing attractiveness' of internet fieldwork may result in 'shoddy cowboy research' (Dodd, 1998: 60) and so without any guidelines, ethical misconduct might proliferate. Thirdly, in

a time where prescriptive guidelines for onsite research are becoming increasingly common, there is the risk of the internet becoming a kind of 'free for all' research space, where the usual rules of confidentiality, privacy and debriefing need not apply. Finally, the development of ethical guidelines for online research has also been important in the process of legitimizing internet mediated research as a robust and valid methodology (particularly to ethical review bodies).

Moreover, given that early online researchers showed little common agreement on ethical issues (Cavanah, 1999; DeLorme et al., 2001; Elgesem, 1996; Eysenbach and Till, 2001; Schrum, 1997; Sharf, 1999; Szabo and Frenkl, 1996), I believe the development of guidelines has been an important *stage* in the online ethics debate. The forum on 'The Ethics of Fair Practice for the Collection of Social Science Data in Cyberspace' (Thomas, 1996), for example, illustrates the variety of ethical positions held for online social science research in the early days (see Allen, 1996; Boehlefeld, 1996; King, 1996; Reid, 1996). However, more recently there have been moves towards a growing consensus as to what ethical research practice online might entail (Buchanan, 2004; Ess, 2004; Mann and Stewart, 2000) and greater recognition of the similarities between online and onsite research ethics (Ess, 2002a; Thomas, 2004). These important moves have culminated in the Association of Internet Researchers (Ess and the AoIR Ethics Working Committee, 2002) making recommendations to inform and support researchers, organisations and academic societies responsible for making decisions about the ethics of internet mediated research. But their document is very careful to stress ethical pluralism, cross-cultural awareness, and guidelines not recipes.

So although there *is* an emerging consensus about ethical research practices online, this consensus also holds in tension that such practices are contextual and so must inherently be flexibly applied. This flexibility is essential because of the variety of online research methods available, the great range of research topic investigated and the many different disciplines that can be involved in online research. Moreover, the variety of virtual venues in which internet mediated research can occur and the varying expectations of the research subjects in those venues will further influence any ethical research practice. As

Bailey (2001) correctly observes, research ethics are relational and contextual, suggesting that different online methods and different online venues will produce different research relationships and so online research ethics will vary with methodology as well as virtual research context. Moreover, it is clear that there are different ethical philosophical frameworks (deontological, teleological, virtue etc)[viii] so as Ess and the AoIR Ethics Working Committee (2002: 4) correctly observe, there is more than one ethically defensible response to an ethical dilemma: ambiguity, uncertainty and disagreement are inevitable. Thus Ess (2002a: 181-184) argues that while we are witnessing a convergence in general approaches to online research ethics, this is simultaneously augmented by an 'ethical pluralism' in which there is a continuum of legitimate ethical choices available to the online researcher. So while shared agreements on the basic norms and values of ethical online research are emerging, the actual *practice* or *application* of these will depend on precedents of previous researchers, personal ideological ethical position, disciplinary background, online research venue, institutional context, government and funding institutions, ethical committees and specific cultural interpretations and laws.

This suggests, therefore, that procedural ethical guidelines can act no more than as part of a process of ongoing critical debate about internet mediated research, a debate that will go well beyond formal institutional boundaries. Moreover, since there is no one, fixed, normative set of ethics for online research it will be impossible to develop a universally applicable set of formalized codes that can be applied as a simplistic template or imprint for research governance purposes. Rather, ethical guidelines might be more fruitfully thought of a springboard for critical reflexivity rather than a prescriptive set of rules (cf. Johns et al., 2004: 108) which will need to be creatively flexible given the ever changing nature of cyberspace. And finally, in problematising the role of online ethical guidelines, what new avenues of ethical enquiry are suggested for the online researcher? How can geographers contribute to this future debate about online research ethics?

**IX. Conclusions: A geographers' agenda for online research ethics:**

According to (Hine, 2005: 9): ‘New technologies might…provide an opportunity for interrogating and understanding our methodological commitments. In the moments of innovation and anxiety which surround the research methods there are opportunities for reflexivity. Seizing these moments for reflexivity depends, however, on not taking the radical capacities of the new technologies for granted, nor treating them as poor substitutes for a face-to-face gold standard.’ A moment for such reflexivity exists now as the technological artifact of the internet opens up possibilities for a ‘research ethics frontier’ (Kitchin, 2003: 397). We can mould the contours of this frontier and I would propose it is currently an important moment to do so, given recent increased governance and research regulation, the growth in ethics committees and institutional review boards and the resultant pressures to comply with procedural ethical guidelines. If care is not taken to intervene in the debate, it is possible that ethical guidelines for online research could become routinely applied by bureaucratic ethics committees through institutional regulation and training rather than becoming embedded within a culture of scholarship and knowledge based on openness and professional accountability (cf Boyd et al., 2006). My position is that if procedural ethical guidelines for online research are to be of *any* use to researchers and society alike, they must be applied intelligently, reflected upon sincerely as part of an ongoing research process and must be considered critically in context of each specific research project.

In sum, given the growth and impact of the internet in recent years, it is both timely and of utmost significance that online research ethics are given some consideration. But online research ethics are probably best characterised as new variations of old problems: many of the issues and problems of conventional onsite research still apply in the virtual venue. Issues of power between researcher and researched (who defines the research parameters/who decides on the methods/who ‘tells the story’) and structural power relations of the academy (who funds the research and how this alters the research agenda/where and how the findings are published and disseminated/whose lives are changed by the research) are often similar to conventional onsite research projects. Additionally, as with any research project, it is easy to spout high ideals in theory but hard to achieve in practice, as research ethics are complex, messy and negotiated through

the research process, often with unforeseen consequences and many imperfections (Bailey, 2001). As Thomas (2004: 200) so rightfully reminds us 'ethical conundrums are never easily solved, and dialogue, critique, constant vigilance, and accountability seem far preferable to more rules and increased oversight.' It must be remembered too that ethical issues are often superficially considered by more conventional onsite researchers so care must be taken not to have higher expectations for online researchers than we do for onsite researchers!

But, in embracing this reflexive moment, I would go further than this too. I wish to suggest that (just at the point of hegemonic incorporation), it is time to unsettle the normativity of procedural ethical guidelines, to question whether internet mediated research would in practice really get regulated through institutional regulation, and to ask whether more ethical research would actually be the result of increased regulatory control? My personal preference would be to promote a more fluid way of thinking ethics, ethics as process, ethics in motion, ethics as a tapestry weaving its web through a constant process of reiterative dialogue (including dialogue with regulatory bodies) that will in practice produce more ethical researchers and more ethical research (than any set of formalized codes ever could!). And in thinking through these threads of an ethical online tapestry, how, specifically, how might a geographers' agenda for online research ethics develop?

Here, there is much work to be done but I believe there are three important strands of future enquiry. First, if online/offline worlds are mutually constituted, and we carry our 'real-world' assumptions, norms and behaviours into cyberspace, then we can clearly draw on onsite ethics for online research practice (see support for this viewpoint from Boehlefeld, 1996; Jones, 2004; Thomas, 2004). But, further than this, if there is a dialectical relationship between cyberspace and geographical space, then a consideration of online ethics may actually challenge conventional onsite understandings of ethics. For example, it begins to challenge the human-subjects paradigm so dominant in the offline geography-ethics nexus, but as Bruckman (2002b) suggests, this is not the only model from which to consider ethics. Other models, such as the humanities approach, might be

more relevant for internet mediated research and this approach has the potential to radically alter the analysis of ethical enquiry (see Bassett and O'Riordan, 2002 and White, 2002, for example). As Ess (2002a: 179) explains, the human subjects model makes the analogy of persons (= human subjects) in space. This leads to very different ethical enquiries than a humanitarian model in which analogies of textuality and persons as authors emerges, resulting in a 'hybrid model of relational ethics that incorporates text, space and bodies' (Bassett and O'Riordan, 2002: 233). Internet mediated research may therefore result in rethinking the human-subjects ethical paradigm which presents challenges to conventional onsite researchers too.

Secondly, geographers have much to contribute in thinking through the dynamic spatialities involved in online research ethics. Geographers, with their sensitivities to flows and inequalities between places, are well-placed to examine variations in the technologies of the internet and the ethical situations that rise from its use, showing how these alter in different socio-cultural settings according to varying global relations of power, flows of money, ideas and people, locally grounded power relations and often subtle variations (and similarities) in cultural values. Moreover, since the internet has the potential to 'compress' physical distance for some, it directly challenges ethical enquiries based on the premise that distance reduces the feeling of responsibility[ix]. Internet mediated research therefore has the potential to challenge the static boundaries of thinking geography, collapsing local and global in the ethical field, complicating both scale and presence and absence by bringing together face-to-face relationships immediately, therefore potentially heightening responsibilities and giving potential for global research alliances of knowledge and power. As Popke (2003: 304) argues, 'Our responsibility is unconditional, and holds equally to those who are 'distant' as those who are located near.' Through internet mediated research it may then become increasingly difficult to deny interdependence and co-presence and thus a moral responsibility for others (but this does not necessarily mean we will choose to act morally given the parochial, self-interest and individualism neo-liberalism encourages). This is particularly because internet technologies are not all powerful, simple, deterministic or top down impositions but can be used in transgressive, resistive, creative and participatory ways to

expose and dismantle inequities. So I would propose that an exploration of geographies of responsibilities through internet mediated research is a fascinating future subject of online research ethics.

And finally, I would like to suggest that geographers are particularly well-placed to seize this reflexive moment to think through how and why online research ethics might be (re) imagined through a postcolonial frame. This is important, for as Carey (1997: 57 quoted in Christians and Chen, 2004: 21) notes: 'For all the vaunted capacity of the computer to store, process and make available information in densities and quantities herefor unknown, the pervasive tendency to monopolize knowledge in the professions and data banks continues unabated.' A new starting point for online research enquiry grounded in postcolonial politics and sensitivities may be one way to avoid such monopolisation of knowledge. Such a project might involve making transparent how northern research management practices feed into a certain notion of online ethics which might support the status quo of social science as imperialism (Ake, 1979). It might involve thinking through how internet mediated research might be destabalised and provinicialised through a reorientation of its ethical terms of reference to encompass a multi-polar world (Radcliffe, 2005). It might also move towards a politics of engagement and intervention to produce contextualized notions of online ethics which have political accountability and open up spaces for productive alliances (Bessio, 2005).

But to saturate oneself in postcolonial online ethics, geographers may have to refute the universalism of Eurocentric based ethical endeavors and to consider whether procedural ethical guidelines are indicative of a (hidden) ethical colonialism (cf. Pitt 2004, but used in a different context by him), or perhaps more accurately, the post-colonial form and legacies/realisation of colonialism. In other words, geographers can play a role in acknowledging that present day internet mediated research is only possible through past and ongoing (neo)colonial relationships in which power, prestige, technical infrastructure and the ability to define research agendas are linked to the spatial delineation of difference which was so instrumental to colonial projects, and have continued to have lasting impacts into the present (Popke, 2003: 311). Thus the myopias of online research

often map onto more familiar geographies and spatialities of inequality and normative assumptions and expectations of what ethical practice is, may well have flowed from colonialism into present day ethical guidelines. And in attempting to move beyond this ethical colonialism geographers may have to listen to and draw on non-western philosophical traditions and indigenous ethics (see for example, NHMRC, 2003, Rose, 1999 and Smith, 1999 but see Briggs and Sharpe, 2004 for a critique) which will involve making some serious emotional investments and acute attention to the multi-scaled, multi-faceted and complex nature of ethical enquiry in place. This may also require changes to the neoliberal ideological focus of the academy and what it values (Raghuram and Madge, 2006), for example, a shift from a focus on funding, academic publications and short term projects towards projects involved in engagement and longitudinal projects to develop long term relationships and commitment to particular people and issues (Cloke, 2002): to genuinely move beyond an unequal relationship of academic imperialism mediated through particular spatial divisions of labour and mobility of neoliberal capitalism. But caution must be taken here too: postcolonial online ethics must avoid becoming an 'academic hobby' and remain ever attuned to the politics of 'giving voice' by constructing knowledge from the historical, political and methodological circumferences of 'the subaltern' (Chilisa, 2005).

In exploring online research ethics through the frame of postcolonial critique, I believe that geographers can 'think outside of the ethical box' (Thomas, 2004: 198) and this in my opinion, is the exciting future for online ethical research enquiries.

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**Notes**

[i] Hence the interdisciplinary review nature of this paper: there is a lack of geographic material to draw on.

[ii] As Jankowski and van Selm (2005: 203) correctly observe, the vast majority of internet mediated research is presently conducted in the Anglo-American context, hence the focus here on ethical research governance in the UK, US and Canada.

[iii] Here I have opted to use the term onsite rather than offline/conventional/place-based/ traditional, but also recognise that many researchers will use a multi-sited methodology which includes both online and onsite methods and locations.

[iv] The distinction between procedural ethics and ethical conduct is employed in this paper (following Israel and Hay, 2006: 140). Procedural ethics are typically associated with compliance and regulatory institutional mechanisms, whereas ethical conduct refers to everyday ethics in practice throughout a research project. Ideally the two would be synonymous but this rarely occurs in practice.

[v] 'We' refers to academic geography researchers, the presumed main audience of the paper.

[vi] The ethical discussion below begins with a presumption that researchers seek to follow the Belmont Principles (Department of Health, Education and Welfare, 1979) involving four core values of justice, beneficence, non-maleficence, and respect for others. It assumes that researchers do indeed seek to be honest and inclusive (cf. Schrum, 1997: 120) and this involves from the outset respect for the interests and values of the research participants: an ethics of care (cf. Capurro and Pingel, 2002). Moreover, this discussion also starts with the presumption of the human subjects ethical model, rooted in medical and social science approaches.

[vii] As an anonymous reviewer pointed out, this paper generally focuses more on research with 'vulnerable' groups. This is a reflection of the online research literature to date. However, as the reviewer notes, it is important to consider how our approaches to online research ethics might change if we are dealing with those who are powerful, capable, highly skilled and – just perhaps – ruthless, violent or unjust? What might be the place of ethics in work intended to expose such individuals and organizations and inequities they uphold? Much work remains to be done on this subject.

[viii] According to Thomas (1996: 108-109) deontological positions are based on 'rule following' and precede from formally specified precepts that guide how we ought to behave whereas teleological (sometimes called consequentialist and associated with utilitarianism) perspectives operate from the premise that ethical behaviour is determined by the consequences of an act, which on balance will result in the greatest social good, or the least social harm. Ess (2002a: 179, 182) suggests that generally the EU follows

deontological approaches, whereby the rights of individuals are protected whatever the consequences, whereas the United States broadly follows utilitarian approaches, whereby possible benefits gained (e.g. to society) at the cost of compromising those individual rights might be considered. Ess (2004: 254) also identifies virtue ethics as classical, Western, feminist and Confucian, emphasising the importance of pursuing human excellence (virtue) in choices and actions.

[ix] But it may simultaneously have the potential to exacerbate social distance.