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6 Online ethnographies

The movement of ethnographic approaches online presents some challenging methodological and ethical questions. Sometimes referred to as netnographies (Kozinets 2010) or virtual ethnographies (Hine 2000), this research method explores how humans live and interact online through a wide range of different research strategies. Hine argues that ethnographic researchers start from the perspective of questioning what is taken for granted and seeking to analyse and contextualize 'the way things are' (Hine 2000: 8). In relation to the internet this means that researchers challenge the notion that the internet is the product of the features of its technology, and explore how it is constructed by the way in which people inhabit, utilize and actively make it.

This interaction between social and technological conceptions of the internet forms a key context within which online ethnographies are pursued. Like other online researchers, online ethnographers need to answer a range of methodological questions such as how to gain access to the population that is being researched, how research participants are engaged, encountered and related to, and what is the blend of observation and participation being used. However, many of the strategies that served ethnographic researchers in the exploration of geographically situated communities need to be reframed. Furthermore, the diffuse, networked nature of online relationships can make communities difficult to identify, delimit and analyse. On the other hand, the technological and social practices of the internet mean that personal and community data are more open and easier to access than ever before. People tend to exhibit heightened self-disclosure when engaging in computer-mediated communications (Joinson 2005). For ethnographic researchers used to a careful process of building trust and mutual respect as part of data-gathering strategies, this self-disclosure and access to vast amounts of naturally occurring data can raise some uncomfortable possibilities.

This chapter examines the practice of online ethnographers, and looks at how far these practices are simply the translation of offline techniques and how far they represent a reimagining of ethnographies in a new context. The chapter asks whether data mining of online populations can be justified, and whether this kind of analysis of online material can be described as an ethnographic study. Furthermore, it examines how the growth of social tools to support community interactions and user generation of content can be utilized by the online ethnographer.

The chapter begins by presenting a case-study exemplar, before moving on to identify key texts and lessons from the literature. The advantages and disadvantages of the method are then explored, and strategies for overcoming challenges identified.

case study**Undertaking fieldwork inside and outside of World of Warcraft**

Ethnographic research can take a wide range of forms, and so it is difficult to offer a case-study that is in any way typical. The diversity of different kinds of ethnography is one of the most striking things about the research that has been published within this area. Before beginning the main case-study it is perhaps worth briefly sketching a couple of other mini case-studies which demonstrate the range of different approaches to online ethnography or fieldwork. Nelson and Otnes explored cross-cultural weddings through an examination of online wedding messages boards (Nelson and Otnes 2005). The researchers archived about 400 posts from three separate wedding message boards, and analysed and coded the posts as the basis of their study. The posts covered sixteen countries and one year. Research was primarily observational, although researchers did participate in the message board conversations to some extent.

A very different approach to data collection can be seen in Fields and Kafai who investigated young people's participation in an educational virtual world (Fields and Kafai 2009). Where Nelson and Otnes sought breadth, Fields and Kafai sought depth, focusing the study on twenty-one young people who attended an after-school club where the game was played. Their study utilized a wide range of data collection techniques, piling up data of various kinds to form an immersive 'thick' description of the experience of the young people.

Data collection approaches included fieldnotes, onsite observations of the club in action, video capture of the club, interviews, recordings of the game play and logfile data provided by the owners of the gaming site (with the young people's consent). Fields and Kafai's study immediately throws up two crucial issues that ethnographic researchers have to face. Firstly, the level of surveillance that was undertaken clearly requires careful negotiation and ethical consideration by the researcher. Secondly, it highlights how the vast amount, and diversity, of data that is generated by a relatively small number of participants can pose considerable analytical challenges.

Many of the issues raised by Fields and Kafai are also explored in Bonnie Nardi's work on World of Warcraft (WoW) (Nardi, Ly and Harris 2007; Nardi and Harris 2006). WoW is a Massively Multi-player Online Game (MMOG) in which players interact within a highly complex environment based on the fantasy genre. The work of Nardi *et al.* explores issues around collaboration, social interaction and social learning within the gaming environment. They situate their work within the tradition of participatory and immersive ethnographic fieldwork. Putting this simply, it means that they play the game as well as, and as part of, studying it.

Nardi *et al.*'s involvement with WoW is long-term and regular, and their understanding of the environment is grounded in this experience. Their ethnographic fieldwork is therefore based on reflections on the experience of playing, on observation and on interactions with other players within the WoW environment. They then supplement this with a number of interviews conducted outside the WoW environment (a mixture of online and face-to-face interactions).

The work of Nardi *et al.* raises a number of interesting methodological issues. Their studies demonstrate the complex interactions between online and offline social networks. In some ways, the WoW studies seem to connect to an older ethnographic tradition in which the researcher travels to an unfamiliar culture, participating in life there and building up an ethnographic narrative of the place/culture. However, Nardi *et al.*'s work shows that WoW networks frequently comprise individuals playing in the same room, belonging to the same family or closely connected in other ways not related to WoW. Observational research that treats online environments as contained communities runs the risk of missing some of this complexity. Nardi *et*

al's decision to participate in WoW, but also to step outside it, clearly led to the creation of a different kind of ethnography that was centred online but not wholly constrained by the online environment.

The above case-studies demonstrate some of the complexities that ethnographic researchers are likely to need to work through. Questions about the nature of online spaces and their intersection with onsite spaces run to the heart of online ethnographic approaches. These issues are discussed further throughout this chapter.

Ethnographic methods

Chapters 4 and 5 concentrated on particular research strategies (surveys, interviews and focus groups). However, online ethnographies do not provide a direct equivalent to these approaches. Ethnographic methods are eclectic and utilize a wide range of different research strategies. Many ethnographic researchers utilize surveys, interviews and focus groups amongst a wide range of other methods. In onsite research we might expect ethnography to make use of one or more of the following research strategies:

- Participant observation, especially seeking to notice things like patterns, common behaviours and rituals. Participant observation also seeks to notice the gaps between what people say and what they do. Sometimes some of this observation might be recorded using photos, videos, research diaries and other means.
- Interviews, including group interviews and focus groups.
- Surveys to gather both quantitative and qualitative data.
- Network analysis (such as observing and recording the relationships that exist within a community or a family).
- Topographic observation and analysis.
- Examination of documents and written and print culture.
- Material culture observation and analysis.
- Historical analysis.
- Data analysis.

Ethnographic research is defined, not by the use of a particular research strategy, but rather by an ethical and methodological approach to the research that is frequently holistic, embedded in the place where people are, and conducted over the long term.

Ethnography is a complex approach with a rich tradition of methodological discussion. Good starting points for investigating the approach can be found in Brewer and Hammersley and Atkinson (Brewer 2001; Hammersley and Atkinson 2007). It is important to recognize that ethnography describes both a research method (fieldwork) and a genre of writing. It is therefore extremely valuable to read a range of ethnographic writing in order to understand the approach. Good introductions would include Malinowski, Read, Fortun, Williamson and Dean (Malinowski 1922; Read 1980; Fortun 2001; Williamson 2004; Dean 2009), although this selection hardly does justice to the wide variety of ethnographic writing.

Many ethnographers would describe their method as being 'fieldwork', because it is the process of examining people and phenomena where they occur that is distinctive about ethnography. However, as Hine notes, 'the concept of the field site is brought into question. If culture and community are not self-evidently located in place, then neither is ethnography' (Hine 2000: 64). This problematicization of the idea of the 'field' is an essential issue for online ethnography, as has already been discussed in relation to the work of Nardi *et al.* in WoW. However, given this, the researcher may question how far it is possible to divide online ethnographies from other ethnographies. It would be possible to see distinctions between researching online communities and how geographical (or other) communities interact online. However, the distinction is rarely as clear-cut as this, and researchers are likely to find that they need to approach online ethnographies with a range of flexible methodological tools. In the literal sense no one lives online, and individuals remain in physical space whilst they interact online. As Garcia *et al.* argue, "'Virtual reality" is not a reality separate from other aspects of human action and experience, but rather a part of it'. So where should the ethnographer be whilst conducting fieldwork? (Garcia, Standlee Bechkoff and Cui 2009: 54.)

Orgad argues that 'capturing both sides of the screen' (triangulating) can increase the validity of interpretation of data (Orgad 2005). Fields and Kafai's study shows how this kind of multi-site and multi-method approach can be powerful (Fields and Kafai 2009). However, it is not always practical or relevant to research in this kind of intensive manner. Kozinets poses three questions for researchers in considering the blend that they might seek in relation to online or onsite ethnographies (Kozinets 2009: 66):

- How integrated or separate are the online and offline lives of the individuals and communities that are being studied?
- How important is the observation of offline behaviours? Kozinets gives the example of an online community in which people discuss their pets. In this case it might be important to observe how they interact with their pets as well as how they discuss this online.
- How important is it to be able to identify and verify the identity of community members?

The exact shape of the research methodology will depend on how the researcher answers these questions, on the research questions they are asking, on the resources available and on the level of access granted by participants in the research. All of these factors will influence the particular blend of research strategies that are used and help the researcher to balance the amount of activity that is online with alternatives such as face-to-face, telephone or postal data collection.

Choosing a fieldwork site

Traditional ethnography is often highly concerned with geographical space. Fieldwork practices often involve immersion in the life of the community being studied. However, online ethnography challenges some of these notions about what comprises a fieldwork site and necessitates the reinvention of ethnographic fieldwork practices.

One of the key methodological questions that online ethnographies need to address is where the boundaries are drawn in relation to the online community. This chapter has already discussed the issue of how far communities can be said to exist wholly online or offline. It is clearly possible to make arguments from a range of perspectives, but increasingly the distinction between online and offline communities is being blurred. Ellison, Steinfield and Lampe argue that the more recent generation of online community tools (such as Facebook) have a far greater relationship to existing (and often geographically proximate) social networks than the earlier communities described by Hine (2000) and the other early online ethnographers (Ellison, Steinfield and Lampe 2006).

In addition to the way in which online networks are overlaid with onsite relationships, they are also multi-modal (Markham 2004). Online interactions frequently take place across a wide range of different platforms with

conversations being conducted across blogs, micro-blogs, social networking sites and other media. Drawing the boundaries for an ethnographic study is considerably more complex than deciding on an online or offline focus. Hine argues that 'technologies are not research sites in themselves and that it is a mistake to think that a given technological platform necessarily delivers a meaningfully bounded research site' (Hine 2005: 111).

People are active in an ever increasing range of different kinds of environments. As discussed in chapter 5, these environments both replicate existing forms of communication and make new forms of communication possible. An incomplete list of the ways in which people interact and form networks of associations online might include some of the following:

- Audio/video sites.
- Blogs.
- Chat rooms.
- Forums (bulletin boards, discussion boards).
- Lists, listserves or email lists.
- Micro-blogs.
- Photograph sharing.
- Playspaces, sometimes referred to as MMOGS, MMORPGS, ARG, MUD and MOO (see Glossary).
- Presentation sharing.
- Social bookmarking.
- Social networking sites.
- Social news.
- Virtual worlds.
- Wikis.

Inevitably, this list will continue to grow and shift as technology, and cultural responses to it, develop. In some cases online communities may exist entirely contained within one or other of these sites, but increasingly communities exist, in the words of Weinberger, in 'small-pieces, loosely jointed' (Weinberger 2003). In other words web communities are frequently not confined to a single technological platform; nor is it easy to identify the boundaries of the communities in a straightforward way. Researchers can use search tools to identify communities for ethnographic research by finding out where particular issues are being discussed. Sometimes online communities and social media are poorly represented in conventional search tools and it may be useful to use tools like Google's

Blog search or Realtime search to access appropriate communities more quickly. Kozinets argues that communities that are identified as appropriate for ethnography should meet most of the following criteria (Kozinets 2009: 89):

- Relevant.
- Active.
- Interactive.
- Substantial.
- Heterogeneous.
- Data-rich.

Each of these different sites provides the ethnographic researcher with a range of different signifiers to observe and explore. Chapter 5 looked at how conducting research in a text-based environment differed from the use of multi-media environments. Ethnographic approaches are likely to encounter similar issues, but with still further complexity. Online spaces utilize a wide range of technologically based signifiers which are conveyed through audio, video, text, images, avatars and many more means. However, the way in which these elements are assembled is a question of technology (how the environment is set up) and culture (what the participants do to shape the environment). So an environment like Second Life offers participants particular technologies to enable interaction (avatars, text chat, etc.) but it also offers them the opportunity to shape the virtual topography and cultural milieu. Not only do ethnographers need to attend to all of these various factors, but they also need to be able to explore their creation historically and technically.

Furthermore, many online environments have further sub-divisions that allow the development of finer focuses. For example, in Carter's research on Cybercity, she was able to focus on a single neighbourhood within the environment (Carter 2005).

Gaining access

Once the focus for the study has been identified, the researcher is faced with the task of negotiating access. One of the challenges is that much personal and community data is freely available on the internet, so that the process of negotiating 'access' may become almost meaningless.

In many cases it would be possible for a researcher simply to harvest the conversations and interactions of online communities without the communities themselves being aware of it. However, Kozinets argues that online ethnographies should be participative and build on the ethical approaches associated with onsite ethnographic research (Kozinets 2009: 75). He makes the case passionately, arguing that 'if we want to write netnographies that can stand up to the standards of quality ethnography, filled with deep understanding and thick descriptions, then lurking, downloading data, and analysing while sitting on the sidelines are simply not options'. Hine also argues that researchers should recognize the value of participation, arguing that the 'shift from an analysis of passive discourse to being an active participant in its creation allows for a deeper sense of understanding of meaning creation' (Hine 2000: 23).

However, it is important to recognize the dangers and challenges of participatory approaches. Orgad reflected that 'it proved extremely difficult to strike a balance between being attentive and empathetic to informants on the one hand, while maintaining a distance and appropriate researcher-informant relationship on the other' (Orgad 2005: 56). Orgad goes on to describe her discomfort in receiving an email from a participant stating 'I just know we will be friends for life'. Participatory research by its nature blurs the boundaries between researcher and researched and makes the process of 'striking a balance' extremely difficult. Researchers are advised to think through this relationship carefully in methodological, ethical and personal terms before embarking on fieldwork, and to reflect on the approach as the situation develops. Clear boundaries and roles are important, but the complexity of human relationships encountered during participatory research has a habit of overwhelming them. These issues about the levels of participation and disclosure are picked up in this chapter's discussion of data collection. However, many of these issues are likely to receive particular scrutiny during ethical approval processes, as discussed in chapter 3.

How researchers approach online communities/networks/groups will depend on their methodological approach and their research aims. While it is difficult to generalize, the following ideas might be helpful in building trust and engagement:

- Take time to find out about the communities you are entering before you announce your project. This is likely to give you some clues as

to what approach to take and how to avoid offending or confusing people.

- Be aware that attempts to enter communities and provision of information about research projects (however worthwhile) may be perceived as intrusion or spamming. This is particularly the case in communities that have been researched before, especially if that experience was not a good one.
- Consider whether you want to lurk (watch without participating) before you announce your presence and whether you will be collecting data whilst you lurk. Shoham used this strategy as part of gaining access to the chat room community he was researching (Shoham 2004). There may be ethical issues in lurking (especially if it is the sole method of data collection), but it is also likely to enable you to be able to judge the appropriate tone of an initial post.
- Enable (potential) participants to find out further information about your project and research aims – perhaps by directing them to a website or blog. Try to avoid deluging people with information at the initial point of contact, and use accessible language when you do provide them with information.
- Think about how much time/disclosure/engagement you are asking for when you first approach. Joinson notes that participants are more likely to be engaged if trust is first established through small interactions before a more substantial request is made (Joinson 2005: 28). He refers to this as the ‘foot in the door’ principle.
- Consider whether you bring gifts when you arrive. Do you want to provide participants with useful and interesting information that is relevant to their interests as well as explaining that you will be studying them for your interest.

Data collection

Once the researcher has negotiated access, they will be able to draw on a wide range of different data sources. There is a vast number of types of data that can inform online ethnographies, many of which draw on the visual methods tradition (Mason 2005; Knowles and Sweetman 2004; Banks 2001).

While it is possible to list the variety of forms in which you can find online data, Kozinets moves beyond this to conceptualize different kinds of data, as shown below (Kozinets 2009: 98).

Table 6.1 Koszinets' typology of online data

Archival data	What happened	Transcripts of interactions, recordings
Elicited data	What you were told	Interviews and direct interactions with participants
Fieldnote data	What you saw and what you made of it	Participant observation, reflection, <i>in situ</i> analysis

Archival data

Archival data in this context describes naturally occurring data that the researcher has collected through some means for the purpose of the study. Naturally occurring data can be scooped up and downloaded through an increasing number of techniques. Some researchers record data using screen shots or screen recorders, while text-based interactions can often be downloaded directly into databases using RSS feeds or other similar protocols. Through using these kinds of archiving techniques, researchers can access a range of personal and collective forms of conversation, disclosure and publication, such as blogs, micro-blogs, posts on social networking sites, message boards, chat rooms and many other kinds of online interaction.

The exclusive use of archival data can sometimes be controversial for ethnographers, and can be described in negative terms as data mining or data extraction. When Langer and Beckman downloaded 896 posts to a plastic surgery message board for analysis, without participant permission, they devoted space in their article to justifying their 'pragmatic perspective' on covert research (Langer & Beckman 2005). They argue that the ethical positions taken by Kozinets around informed consent are impractical and overly stringent for discourse that is taking place in open public forums (Kozinets 2002).

Much of the discussion about the use of archival data without permission hinges on how the status of open data on the web is perceived. Where

data is publically available, some researchers might argue that there is no reason to treat it any differently from any other public media. Many bloggers are clearly and actively engaging with the public sphere, and researchers may feel happy with analysing their posts in the same way as a newspaper article might be examined. However, Shirky's conceptualization of the internet as a series of 'small worlds' can problematize this (Shirky 2009). Individuals are often publishing their thoughts for the benefit of their own small world or social circle, and may not have thought carefully about how this data might be reused and represented. Garcia backs up this concern by noting that across a range of studies participants say that they feel uncomfortable with covert researchers who do not reveal their identity or the reason for their engagement in the online space (Garcia 2009: 73).

The distinction between archival data and fieldnote data can often be fine. Because of the vast array of naturally occurring data produced by web users, the decision to record one thing and not another is essentially an analytic one. For example, a study that gains access to web statistics but does not undertake a content analysis of what is on those web pages is making an analytical decision about what is important (in this case where people went rather than what they said). In conventional ethnographic work, accessing such data would require the creation of fieldnotes, and would ideally entail a process of reflection and justification of what is being recorded on them.

Gathering archival data is clearly a more complex process than it initially appears. While technology increasingly facilitates the process of large-scale data mining, the researcher still has to navigate the ethical, methodological and analytic challenges of accessing naturally occurring data and using them to explore research themes or address research questions.

Elicited data

Elicited data describes the researcher's direct interactions with participants both within the research environment and outside it. Researchers will typically elicit data to help understand their observations and to enrich the understanding of archival data. So Carter describes using 'as many methods as I could to collect a wide variety of rich data. Therefore, as well as practising ethnography, I carried out other qualitative research methods including questionnaires and offline semi-structured interviews.

Towards the end of my research I also met four of my informants face-to-face (Carter 2005: 150).

Data could be elicited during participatory research, perhaps by asking for clarification about meaning in a discussion. Alternatively, data can be elicited using the kinds of strategies described in chapters 4 and 5. Many ethnographic research studies combine participant observation approaches with more formal types of elicitation. For example, Hammam combined participant observation with online interviews in his study of cybersex (Hammam 1997), Maulana and Eckhardt elicited data through interview and participant diaries, and combined this with participant observation in their study of the relationship between website and site visitors (Maulana and Eckhardt 2007), and Gatson and Zweerink undertook participant observation, synchronous and asynchronous interviews and online surveys in their study of a Buffy the Vampire Slayer fan message board (Gatson and Zweerink 2004).

Fieldnote data

The final kind of data that is gathered through ethnographies is what Kozinets refers to as fieldnote data (Kozinets 2009). As has already been discussed, the conventional practices of taking ethnographic fieldnotes are transformed by the move to the online environment as firstly the field and secondly the purpose of note taking are reshaped. The ability to record highly detailed archive data about what is being observed removes the core function of much fieldnote taking, namely to set down what is actually happening to provide a basis for analysis.

Given the availability of high-quality archival data, it is possible to see fieldnote data fulfilling two main functions. Firstly, the taking of fieldnotes allows for an initial stage of *in situ* analysis to take place. The purpose of taking notes is not to set down what is happening (which can be archived), but rather to begin the process of understanding why it is happening and making connections with other things that have happened elsewhere (observation). Secondly, the process of taking fieldnotes allows the researcher to set down their own experience and reflect on this experience (participation and reflection).

Williams argues that the process of observing and taking fieldnotes in online ethnographic research is less intrusive than in conventional field sites, as participants do not have to be distracted by the notebook or

tape recorder whilst they are going about their business (Williams 2007). However, if combined with archiving strategies, the process of observation and recording of observation is different from the taking of conventional fieldnotes and can be seen as essentially a process of proto-analysis. Leander and Mckim argue that the researcher should be attentive to the issues of time and space as well as attending to the content of what is said (Leander and Mckim 2003). Why do people decide to carry on one conversation in Twitter and another in Facebook? What are the implications of this kind of online space decision, as well as the physical spatial decisions about where to access the online conversation from (home, school, laptop, phone etc.)?

Observation therefore seeks to notice what is said, but also to attend to the context within which it is said. This context becomes even more complex as textual forms of communication are combined with visual and audio ways of communicating. Williams describes the observation of graphical MMOGs – the importance of attending to things like avatar positioning and performance, appearance, dress, facial expression and use of gesture. In many MMOG-type environments, participants also have the opportunity to shape and interact with the topography of the environment, and so this also becomes a subject for observation and analysis. While it may be possible (and useful) to record many of these interactions as archive data and code them retrospectively, observation provides a useful strategy through which researchers can bring together analyses and develop theories.

Fieldnote data also seeks to record participation in terms of what the researcher did, what happened as a result, what was discovered and how the researcher experienced it. Participation is an important part of ethnographic methods. The experiential elements of participating in an online community (where do you do it, how do you feel, what devices do you use) are all part of an ethnographic study, and researchers should think about how they are going to capture some of this data. Techniques like reflective journals or blogging may provide good ways to capture and record some of this data.

Researchers also need to think carefully through their engagement and positioning within the online community. Orgad's point about striking a balance in researcher-informant relationships has already been discussed (Orgad 2005). Kozinets goes on to make a related point about the researcher's impact on the community as a whole rather than just an

individual, stating ‘a netnographer probably doesn’t want to be leading the community, but she should not be invisible either’ (Kozinets 2009: 96). Considering the approach to participation in online conversations is an essential part of developing the methodology for an ethnographic study. As with many methodological issues, there are no absolutes, but the development of a clear methodological approach is to be advised.

Wesch particularly emphasises the importance of participation and reflection in his work on YouTube (Wesch 2008). Wesch and his students explored the process of production of online videos as the entry route to online communities. While it would clearly be possible to study YouTube through a content analysis of the vast number of videos available on the site, Wesch’s project asked researchers to become part of the community and to draw on the data of their own reflections, which in turn served as the subject matter for their participation in YouTube. The project’s findings, around what he refers to as ‘context collapse’ in asynchronous video communication, became apparent through participation and would have been difficult to access through any other means. This form of participation draws on a tradition of auto-ethnography (Reed-Danahay 1997; Etherington 2004; Anderson 2006), and requires researchers to expose themselves in potentially uncomfortable ways.

While not all research may involve the level of participation of Wesch’s work, there is clearly something to be learnt from the project’s approach to reflexivity. Wesch’s focus on YouTube allowed the experience of participant researchers to be captured almost from their entry point into the project. One area that researchers may wish to consider carefully is how their own emotional, social and intellectual journeys whilst undertaking ethnographic research can be captured and incorporated into the process of analysis and presentation.

Analysis and presentation of ethnographies

As the chapter so far has suggested, ethnographic research is multi-method and multi-modal. The process of bringing together a vast range of different and at times seemingly contradictory findings is a key skill of the ethnographer. While this challenge is not confined to the online researcher, it is true that participation in online networks can frequently lead to the proliferation of different data types and extremely rapid accumulation of datasets. Researchers may find themselves faced with mountains of text,

pictures, audio, video, moving graphics and avatars, maps of networks and the outputs of a vast array of other ways in which individuals and collectives present and organize themselves online.

Scott Jones and Watt argue that the process of data analysis has been ignored in much methodological writing about ethnography (Scott Jones and Watt 2010: 157). They note that there are debates about how far such processes can usefully be systematized without losing the attention to the particular characteristics of ethnography. This chapter has already discussed many of the challenges that are associated with accumulation of large amounts of data through online research; however, it is also important not to forget that the online environment also offers a wide range of opportunities. The online researcher is likely to be able to find a wide range of tools which can aid ethnographic processes, such as the mapping of networks, the coding of qualitative data, searching through large datasets and so on. Some of these forms of computer-assisted representation and analysis of data are discussed further in chapter 8.

It would be possible to go into much more depth in discussing the process of analysis of online ethnographic data than can be done here. However, the following ideas may be useful in considering how best to develop analytical approaches:

- Consider your approach to the anonymity of data carefully. Search engines may be able to locate the source of any phrases that you have quoted. Carter also notes that the use of screen names does not protect anonymity, as users frequently employ the same screen name across a variety of different platforms and are often as recognizable by that name as by their given name (Carter 2005).
- Consider the approach to data archiving before embarking on research. While it can be tempting to consider the web as an online repository, it is important to recognize that there are limits to search and recall technologies – for example, Twitter archives hashtags for only around ten days. Are you going to use CAQDAS? If so, how are you going to get data into it?
- Consider what kind of coding approach you are going to use and how far this will be derived from your data as the project unfolds.
- Think about how open your data analysis is going to be. Will you consult with participants about the codes you are using or the findings that you identifying?

- Consider what audiences your findings will be disseminated to and in what forms. For example, it is common practice to use a blog to present project findings and reflections on the process to participants and other researchers (Chenail 2011).

In summary

Online ethnographic research offers a powerful approach for researchers seeking to explore human experience and interactions. While this chapter has focused on online ethnographies, it has also tried to recognize that the online/onsite distinction is becoming increasingly problematic. Researchers who use ethnographic methods will need to recognize the conceptual and organizational complexity of human relationships, and to develop approaches that engage with people online and onsite in a multi-method and multi-modal way. However, despite the complexity, there are also good reasons to be excited about the possibilities of online ethnographies. In particular, the vast expansion of naturally occurring online data alongside the increasing power of tools to search and interrogate it means that ethnographers are faced with a wealth of opportunities in interacting with online communities, networks and conversations.

Further reading

Virtual Ethnographies (Hine 2000) was one of the first works comprehensively to discuss online ethnographies, and is still worth reading. More recently *Netnography: Doing Ethnographic Research Online* (Kozinets 2009) provides a good overview of the major issues and approaches in the area, while 'Ethnographic Approaches to the Internet and Computer-Mediated Communication' offers an impressive and comprehensive literature review of the area (Garcia, Standlee Bechkoff and Cui 2009).

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