



Ethnography for Investigating the Internet

Per Hetland

Department of Education
University of Oslo
Email: per.hetland@iped.uio.no

Anders I. Mørch

Department of Education
University of Oslo
Email: anders.morch@iped.uio.no

Abstract

Several concepts are used to describe ethnographic approaches for investigating the Internet; competing concepts include virtual ethnography, netnography, digital ethnography, web-ethnography, online ethnography, and e-ethnography. However, as the field matures, several writers simply call their approach "ethnography" and specify new fields of practice. In this paper, we will explore the content of ethnographic approach for investigating the Internet and the direction in which this new field of ethnography is moving, that is, whether it is the study of blended worlds or online worlds. We start by introducing the emerging field sites or fields of practice. Then, we describe how participant observation and other data collection techniques are carried out. Next, we describe how ethnographic practice is understood within the emerging field. Finally, we discuss some possible changes in the ethnographic landscape: unobtrusive methods, the communal-commercial relationship, and team-ethnography.

Keywords: virtual ethnography, communities online, online communities, Internet research

Introduction

Ethnographic approaches for the investigation of the Internet have moved from an emerging activity to an established practice. This is illustrated by the title of Christine Hine's two books, *Virtual Ethnography* (2000) and *Ethnography for the Internet* (2015). Based on these two and other related textbooks aimed at higher education, two important directions are identified:

Seminar.net 2016. (author name) This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 Unported (CC BY 4.0) License (<http://creativecommons.org/licenses/by-nc/4.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ethnography as the study of blended worlds vs. ethnography as the study of online worlds.

One of the first researchers to use the term "virtual ethnography" was Bruce Mason (1996), and it was later picked up and addressed as a research topic by Hine (2000, 2005, 2006, 2008, 2015). She understands virtual ethnography as a topic for investigation rather than a location to visit; thus, she aims for ethnography *for* the Internet. This is especially apparent in her latest textbook *Ethnography for the Internet* (2015), where she presents an overview of the different challenges ethnographers face when they wish to understand activities that involve the Internet. Robert Kozinets (2010) develops his own version of virtual ethnography, calling it "netnography", for researching online communities and cultures. Netnography is an application of virtual ethnography deriving from marketing and consumer research, which is an "interdisciplinary field that is open to the rapid development and adoption of new techniques" (p. 2). Finally, Boellstorff, Nardi, Pearce, and Taylor (2012) focus on online virtual worlds as the sites for ethnographic research, and they are less concerned with the interplay of online and offline worlds. In Hine's (2015) terminology, they are developing the ethnography *of* the Internet.

Combined, the three books define the collage of the emerging field of virtual ethnography. On the one hand, it is an ethnography that emphasizes blended worlds as the interaction between social worlds offline and online (Hine, 2015; Horst & Miller, 2012; Underberg & Zorn, 2013); on the other hand, it is a direction that focuses on social life in virtual worlds (Boellstorff, Nardi, Pearce, & Taylor, 2012; Kozinets, 2010). In between the investigation of blended vs. online worlds, several interdisciplinary fields are active. Among them, marketing and consumer research have found virtual ethnography to be surprisingly useful (Poynter, 2010), and teaching and learning is an emerging field of virtual ethnography (Guribye & Wasson, 2002; Iloh & Tierney, 2014; Warburton, 2009).

However, this article is not a review of the three aforementioned books; it is a comparative review of the emerging field. A field we found especially relevant when designing the new master programme "Communication, design and learning" fostering the collaboration with the master programme "ICT Supported Learning" at Oslo and Akershus University College of Applied Sciences. The criteria for comparing books may vary (Augedal et al., 2004; Christensen et al., 1998). We have organized this article in the following way. We start by introducing the various intellectual and substantive contexts of ethnographic work, i.e., the emerging field sites. Then, we describe how participant observation and other data collection techniques are carried out compared to "traditional" ethnography. Next, we describe how ethnographic practice is understood within the emerging field. Across these three topics, we will compare and contrast different approaches and illustrate them with examples, some from our own research. Finally, we discuss some possible changes in the ethnographic landscape.

Emerging Field Sites

In traditional ethnographic studies, the field sites were often described as a group of households, neighborhoods, local communities, tribes, cultures, and types of societies (Barth, 1969; Boissevain, 1974; Steward, 1955). When information and communication technology (ICT) enter these organizational settings, new challenges emerge that cannot be addressed simply by saying it is just another tool. Inspired by Escobar (1994), Hetland (1996) introduced the concept of the "hybrid community," which is composed of elements that originate in different domains with permeable boundaries: the organic, the technical (or techno economic), and the textual (or cultural) (Hetland, 1996, p. 6). While human beings and all other living systems certainly have a biological

basis, they are increasingly connected with technology, and this interaction is always mediated by scientific narratives (or "discourses" of biology, technology, etc.) and by culture in general (Escobar, 1994, p. 217). On this premise, Escobar suggested that the cyberspace is a unique place to study interactions of humans and technology and thus opens a new territory for ethnographic field work. However, by emphasizing hybridization, we do not intend to prioritize it over non-hybridization (Hazan, 2015). Consequently, ethnographers should venture into the border zones where hybrids and non-hybrids meet to do more empirical research. In modern society, these border zones are usually a study of a *field of practice* (Czarniawska, 2007).

Technologies are in themselves brittle but do possess (to a lesser or greater extent) interpretative flexibility. How this is understood by different relevant social groups is worked out in a process of negotiations, interpretations, and enrolment (Pinch & Bijker, 1984). Many scholars treat technology as text (Grint & Woolgar, 1992) and understand it as text in shifting contexts. For Hine (2000, p. 39), the Internet "can be seen as textual twice over: as a discursively performed culture and as a cultural artefact, the technology text." However, while the metaphor "technology as text" was central in her first book, in her most recent book, she uses the metaphor of E³ Internet, explained as follows:

For development of an ethnographic strategy for the Internet, it has seemed particularly significant that it is *embedded* in various contextualizing frameworks, institutions, and devices, that the experience of using it is *embodied* and hence highly personal and that it is *everyday*, often treated as an unremarkable and mundane infrastructure rather than something that people talk about in itself unless something significant goes wrong. (Hine, 2015, p. 32)

Consequently, she aims at ethnography *for* the Internet rather than ethnography *of* the Internet. She then asks: What are the field sites for the embedded Internet? Ethnography for the Internet is not bound by a single site, but follows phenomena across multiple sites, tracing networks (physical and online), and identifying social worlds.

When attempting to understand online culture, Kozinets (2010) takes as a starting point McLuhan and Fiore's (1967) famous prediction that the new media would "retribalize" human society into clusters of affiliation. Thus, Kozinets aims to understand the ethnography of online groups, and his point of departure is that "three decades of research have revealed that online gatherings follow many of the same basic rules as groups that gather in person" (2010, p. 25). The assumptions that online social life might be corrosive to the existing patterns of social life have been contradicted. Actually, the opposite may well be true. New media might as well be useful for developing and maintaining "weak ties" (Granovetter, 1973).

Relationship development in an online community is one in which task-oriented and goal-directed knowledge is developed in concert with social relationships and cultural knowledge (Kozinets, 2010). Kozinets describes a progression of participation in online communities. Building on several earlier studies, he suggests several types of online community participation and several types of online community interaction. However, ready-made categories or prototypes might also black box complex social relationships that the ethnographer should try to open.

Boellstorff et al. (2012) claim that one does not always find precisely bounded geographies or communities in virtual worlds. Following Marcus (1995), to engage in such ethnographic work one should "follow the people," "follow the metaphor," and "follow the artifact." This turn, from boundaries to networks of people, metaphors, and artefacts has many similarities with Hine's (2015) approach. Boellstorff et al. (2012) claim that "multi-sited ethnography may thus be useful for capturing a holistic picture of the life of a community or

activity, and the scope of the field site may itself be emergent" (p. 60). This aim for a holistic picture will in some cases lead the researcher into offline contexts because virtual and physical worlds often intertwine. Even if we are not aiming for a "holistic picture," we find the idea of multi-sited ethnography very useful. Collaborative technologies may be used to shape hybrid spaces (virtual and physical) with heterogeneous actors and agendas, and collaborative activities may be facilitated by the development of boundary objects and boundary infrastructures (Bowker & Star, 1999).

Some years ago, the first author did an evaluation of the university museums' work in digitalizing their collection (Hetland & Borgen, 2005). During this work, we discovered emergent citizen science activities that were establishing digital databases where professionals and amateurs were collaborating. When the Norwegian Biodiversity Information Centre established the *artsobservasjoner.no* (Species Observation) in May 2008 in an effort to increase public participation in biodiversity mapping, this became an interesting activity to study. One of the research problems was formulated as follows: What characterizes participation in knowledge production and collaboration in systematic biology and biodiversity in Internet-based hybrid spaces? (Hetland, 2011a). To pursue this and other questions, we choose to follow:

- Networks that connected the different digital databases
- Different academic institutions and their scientists
- Different management levels from local municipalities to the Global Biodiversity Information Facility introduced by the Organisation for Economic Co-operation and Development (OECD) Megascience Forum Working Group
- Different amateurs and their organizations
- Collaborative activities within this new digital infrastructure

Our field-study was multi-sited and was described as an actor-network that we explored through document studies, interviews, participation, and observation by building on the rules of method put forward by Latour (1987, p. 258). In summary, we followed the controversies, all the transformations that facts and technology underwent, how the controversies were debated and settled, the enrolment of human and non-human resources, the size of the network being built, and how inscriptions were gathered, combined, and tied together. The hybrid community emerged from the new boundary infrastructure, connecting extremely diverse groups of actors. The fieldwork made it very clear that building new boundary infrastructures always implies connecting multiple sites, tracing networks, and identifying emerging social worlds. This field study illustrates the multiplexity of the E³ Internet by following actors across multiple sites, tracing networks, and identifying how different social worlds are interconnected. Focusing on boundary infrastructures consequently favour studies of blended worlds, since boundary infrastructures serves multiple communities of practice both online and offline.

Participant Observation and Other Data Collection Techniques

Hine's (2015) methodology of ethnography is illustrated in three case studies. The first case study is an auto-ethnographic approach to understanding online/offline connections in online gifting networks. She uses the example to raise some points for reflection, including ethical implications, the recruitment of interviewees, the role of a survey study, and the ethnographer's ethical responsibilities.

The second case study is an "insider" study of the emerging field of bioinformatics. She developed the notion of "dance of initiatives" (Hine, 2008, p. 187) to describe the ever-shifting array of initiatives that participants face. She uses the case study to raise some points for reflection (2015, pp. 155–156), such as:

- What advantages would there be for the ethnographer to have some insider knowledge or status in the field being studied?
- What are the dangers of using search engines to access and visualize data?
- Does it help the ethnographer if he/she can master the material predecessors of the new (online) approach?
- Should an ethnographer read what is being said about the field in policy documents and public mass media?

The third case study explores unobtrusive methods while studying the television series called *The Antiques Roadshow*. The term "unobtrusive method" was first coined by Webb, Campbell, and Schwartz in 1966 and describes methods that do not involve direct interaction with the research subjects (Webb, Campbell, Schwartz, & Sechrest, 2000). Hine studies fan forums, online discussions, amateur videos on YouTube and uses the case study to raise additional points for reflection (2015, pp. 178–179), such as to what extent can web searching be treated as a form of fieldwork? How far can an ethnographer interpret observational data without interacting with participants?

Kozinets' (2010) methodology includes general methods for researching online and the specific method of netnography. In the first chapter, he presents surveys, interviews, journals, focus groups, structural network analysis, and ethnography. When contrasting ethnography with netnography, Kozinets highlights the following contrasts: netnography is far less time consuming and resource intensive, and netnography is less obtrusive. Kozinets claims that ethnography is based on adaptation or *bricolage*, while netnography "is participant-observational research based in online fieldwork" (p. 60). Kozinets contrasts netnography with virtual ethnography as Hine (2000) describes. Hine claims that virtual ethnography is necessarily partial and a full description is impossible to achieve. Kozinets (2010) claims that "there is no *really real* ethnography, no *de facto* perfect ethnography that would satisfy every methodological purist" (p. 62). Consequently, the method of netnography might not differ that much from ethnography when it comes to "reality," "authenticity," practicality, and even "adequacy" and "holism" (p. 62). However, there is one important distinction, Kozinets claims, between researching *online communities* and *communities online*. The former studies some phenomenon directly relating to online communities and online culture itself, while the latter examines social phenomena whose social life extends beyond the Internet and online interactions. Consequently, research into online communities will have a netnographic focus, whereas netnography plays only a supporting or secondary role when researching communities online. With this distinction, Kozinets introduces blended ethnography/netnography with "pure" ethnography on the one hand and netnography for studying computer-mediated fieldwork within online communities on the other. Kozinets contrasts netnography with ethnography and identifies the following differences (2010, p. 68):

1. *Alteration*, the nature of interaction is altered
2. *Anonymity*, giving a new sense of identity flexibility
3. *Accessibility*, online social interaction is a unique public-private hybrid
4. *Archiving*, with instant archiving of social communication activities

These four differences contrast netnography with conventional (face-to-face) ethnography.

Kozinets defines netnography as an adaptation of "participant-observational ethnographic procedures" and offers a set of guidelines for how to organize the fieldwork from beginning to end, starting with the research focus, the research questions, and finding the research site. The prospective researcher is advised by Kozinets to look for online communities that are relevant, active, interactive, substantial, heterogeneous, and data-rich (2010). He outlines how potential forms of learning and doing evolve when time and commitment increase. Online data collection and storage involve both the traditional "pen-and-paper" technique and online data capture. Practical advice for how to combine the different techniques in specific research designs is described in Kozinets' book, albeit somewhat simplified.

Boellstorff et al. (2012) discusses five issues for effective participant observation.

1. The researcher must be prepared so that the physical setting for his or her work, the technological issues for optimal entering the field site, or the ethnographic self-including language and technical proficiency needed to not overly burden informants with the ethnographers' inexperience. At the same time the "newbie" experience "is pivotal for ethnographers, and we should not sidestep the value we gain from watching ourselves go through that process" (p. 74). Furthermore, doing fieldwork in a social world, such as, Second Life (SL), a 3D virtual immersive environment, also includes embodiment as an avatar and similar types of presence, and these embodiments and presences carry with them various social meanings. All these preparations also signal commitment.
2. Relationships with informants need to be initiated. The authors recommend that the ethnographer should be upfront from the outset, "explaining in clear language the goals of the research, what we want to do and for how long" (p. 77) and that ethnographers simply should not conduct research on people who do not wish to be studied.
3. Participant observation also implies making mistakes. Learning from mistakes and breakdowns allows the setting to be described because "if everything runs smoothly, even the very distinction between prescription and what the actor subscribes to is invisible because there is no gap, hence no crisis and no possible description" (Akrich & Latour, 1992, p. 261). Therefore, mistakes, crises, and problems are our most important sources for understanding what is happening, according to Boellstorff et al. (2012).
4. Take extensive field notes, even if the meaning or significance is not known in advance. Audio, video, chat logs, blogs, and screenshots do not substitute for field notes, but they are important additional data.
5. Keep data organized.

In these five issues, it is also important to have an experimental attitude toward the data, engaging with different forms of self-presentation, testing, and trying out ideas in conversation with informants (Boellstorff et al., 2012).

Whereas Boellstorff et al. (2012) emphasize participant observation as the cornerstone of ethnographic methods, they also discuss interviews and other data collection techniques. Three specific ways interviewing makes sense for investigating online communities are:

1. Interviews, which "provide opportunities to learn about people's elicited narratives and representations of their social world" (2012, pp. 92–93).
2. Informants who "can sometimes be eloquent commentators about their cultures" (2012, p. 93).

3. Interviews also provide an opportunity for private discussions that can reveal beliefs and opinions difficult to access otherwise (2012, p. 93) and of course biographical data and life history narratives.

The importance of privacy also underlines the difference between front-stage, middle-stage, and back-stage settings (Goffman, 1959; Meyrowitz, 1985). Group interviews extend this and may prompt conversations that are not possible with one-to-one interviews. The authors also describe additional data collection techniques, such as chat logs, screenshots, video, and audio. Furthermore the authors underline the possibilities for historical and archival data to bring additional information to bear on the analysis of the present situation, including studying the virtual artefacts themselves. Offline interviews and quantitative data may be useful in some ethnographic research projects, especially when parts of the community meet offline.

The second author has done virtual ethnography in the virtual world Second life. SL was used as the educational platform in a teacher preparation program at a research university in the United States. It was incorporated into undergraduate, campus-based courses for role-play simulation in interpersonal problem solving. Since the first semester in 2011 when the use of SL was piloted, 716 students used SL in their teacher preparation courses (Mørch, Hartley, Ludlow, Caruso, & Thomassen, 2014).

Thirty-four students took part in seven one-hour class sessions, which were held after working hours and divided into interactive lectures of theoretical concepts, individual activities, small group activities in separate rooms, and role-play activities. The students were novice SL users before starting. Using 3D virtual immersive environments offers users the feeling of being together in a real setting. Everyone interacts during live time, while viewing a visual representation of one another as an avatar. A virtual ethnography approach was employed to collect data on how pre-service teachers engaged with the virtual world, specifically how SL made collaboration and role-play meaningful (Caruso, Mørch, Thomassen, Hartley, & Ludlow, 2014). Before the data collection started the participants were informed that researchers from our university would be observers in the virtual environment, and filled out a consent form to agree it, thus addressing Boellstorff et al. (2012) issue 2 ("Relationships with informants need to be initiated") to effective participant observation.

Data collection techniques were video-recorded observations and interviews. All sessions were observed at a distance in the virtual world and video-recorded with screen capture software. Figure 1 is a screen image of the video data showing one group of students collaborating to create a role-play scenario; an observer sits in the background observing the event (in the same virtual room but silently present, taking notes from his own location). During both the group activities and role-play activities, students practiced the interpersonal problem solving skills that are required for educating special education teachers (i.e., conflict resolution and negotiation). Afterward, some interviews were conducted with student volunteers and the teacher, using chat and voice (headset), according to the interviewees' preferences.



Figure 1: Small group collaboration in the virtual world to create a role-play scenario. An observer who sits on the sofa in the background is listening and taking notes. All data was captured on video by screen capture software and later transcribed and analyzed.

At the outset, our research design took a mixed-method approach (Tashakkori & Teddlie, 2010), taking into account multiple sources of data: spoken utterances and chat logs, automated screen capture in mp3 or avi formats, questionnaires, and interviews, all online. Questionnaires were sent to the participating students through a web-based survey after the course ended. The quantitative data served as a background to help us zoom in on the qualitative data (online interactions and interviews), which became the focus of the study.

In order to collect and manage the qualitative data (spoken utterances, chat logs, and interviews), each session and interview was stored in a separate file. We thematically categorized the data, according to an open coding (data-driven) iterative classification process, partly informed (top-down) by our research questions, which were again informed by our theoretical perspectives of role-playing and interpersonal problem solving. This way of organizing data is consistent with issue 5 in Boellstorff et al. (2012) recommendations for effective participant observation.

The data was later transcribed in its entirety using linguistic conventions inspired by interaction analysis (Jordan & Hederson, 1995). Interaction analysis was chosen because it is concerned with understanding how conversation works, especially verbal communication (textual or oral), as well as how it interacts with nonverbal communication, such as intonation, gestures, and non-verbal symbols used in chat (smileys, etc.). However, we excluded non-verbal communication from our data, since avatars in SL have limited ability to express non-verbal signals of relevance to our study. This is the big challenge when studying online communities and virtual worlds are not exempt from this. In many ways virtual worlds provide the acid test for spearheading of the development of new technology for application of ethnographic methods to the online social world.

Ethnographic Practice

Ethics is an important part of ethnography. Hine (2015) has integrated her ethical considerations in three case studies taking on board Marcus's (1998) warnings that one cannot predict an appropriate ethical stance in advance but must instead adapt to the situations while moving through the field. "Ethics becomes a constant reflexive process rather than a prior stance to be laid out

in advance" (Hine, 2015, p. 188). She also highlights some practicalities and challenges in ethnography for the Internet. One solution to moving across media and sites may be team ethnography (Erickson & Stull, 1998). Team ethnography allows for a scaling up of ethnographic interest, multiplying the capacities of a single ethnographer, and allowing the team to develop reflexive, embodied understandings of multiple aspects of a phenomena (Hine, 2015, pp. 189-190).

When doing netnography, "we are conducting a type of outreach during which we have the opportunity to enlighten, to offend, and even to do harm" (Kozinets, 2012, p. 136). Ethics is an important and complex topic and requires the researcher to handle dilemmas and discrepancies, such as the public vs. private fallacy, informed consent, concerns of privacy and confidentiality, the question of naming, and legal considerations. Kozinets (2010, p. 163) presents Hine (2000) as a role model who manages to "balance these tensions within the text." Corporations are the important actors for Kozinets, "creating and maintaining online communities" and belonging in these communities come at a price, i.e., consumers are under surveillance and commercially targeted by marketers. This is exemplified by SL, MySpace, and Facebook. Kozinets asks: "How is online community structured by corporations in ways different from how it is structured by grassroots participants?" (2010, p. 177).

Boellstorff et al. (2012) identify eight fundamental areas in which ethnographers should consider the ethics of the impacts of their research on informants: "informed consent, mitigation of institutional risk, anonymity, deception, sex and intimacy, compensation, taking leave, and accurate portrayal" (2012, pp. 130–131). When it comes to informed consent, the ethnographer has to handle the risk that private information could be made public, and it is thus important to proceed with consent and informed participation about the ongoing research. Furthermore, it is necessary to mitigate institutional risk even if the risk is limited. This also includes the different contracts that govern commercial virtual worlds. Ethnographers may also find themselves participating in secret ceremonies, observing illegal or questionable activity, or learning about politically sensitive or even perilous issues (2012, p. 136). Upholding the confidentiality and anonymity of participants is thus important, including thinking about internal anonymity and participants' "deductive disclosure." When it comes to sex and intimacy, the principle of care should be the touchstone. Sex and intimacy may also be an indicator that the ethnographer is risking *going native*, a problematic issue in ethnographic methodology. Compensation has been a much-debated issue in applied research; however, an ethnographer should be careful with gifts and strong involvement. Leaving is also an important issue, as fieldwork is seldom a lifelong endeavor. Finally, an accurate portrayal is imperative; one way to leave might be to write in the most accessible manner possible. The Norwegian National Research Ethics Committees are now developing Norwegian guidelines for ethical Internet research. One interesting concept here is "contextual integrity," which was developed by Nissenbaum (2004). The researcher has a specific responsibility for taking into consideration the context that actors communicate within. Procedures for ethical evaluation of research is thus important (Elgesem, 2002; Livingstone, Ólafsson, & Staksrud, 2013; Staksrud, 2015).

One chapter from Boellstorff et al. (2012) is a discussion about data analysis, how to move from data to analysis, how to systematize the data, and how to move back-and-forth between data and theory. They also discuss the relationship between emic and etic and that the "unique affordance of ethnographic methods is that they allow us to compare what people *do* with what they *say* about what they do" (2012, p. 170).

It is necessary to add one important caveat when it comes to ethics. Many ethnographic studies are framed as applied ethnography with the aim of informing policymakers, organizations, and institutions to take action. Two traditions are critical ethnography (Madison, 2012) and participatory action research (Chevalier & Buckles, 2013). Our own experience with applied ethnography is from the ethnography of social experiments. The ethnography of social experiments has identified a paradox—even if users are paramount for performing the experiments, their contributions are often "black boxed" and not taken into account by designers (Hetland, 2011b; Pinch, 1993; Woolgar, 1991). Carroll and Rosson (1987) identified two similar paradoxes from the designers viewpoint: that users focus on end products at the expense of prerequisite learning and that users apply prior knowledge even when it does not apply. In the early 1990s, Brown (1992) and Collins (1992) introduced "design experiments" as a new approach to studying learning phenomena. In spite of this very important turn in the ethnography of social experiments, the user paradox is still unresolved as is how ethnographers take responsibility for their own agency. The crucial question of how the experimental lessons are transformed into policy and practice is often unanswered. This question is important, since if anything like a national schoolyard should exist, it would be littered with experiments that never found resolution and closure. In this respect, it is important to remember that experiments are often transient hybrid communities, and it is important to include the different participants in transformation processes from the experimental phase to policy and practice. Rich (1997) argues that utilization "is a process—a series of events which may or may not lead to a specific action by a particular actor at a given point in time" (Rich, 1997, p. 17). Utilization is therefore viewed as a process rather than an outcome. "Use," however, has several connotations as Rich outlined as follows (Rich, 1997, p. 15).

1. Use (information has been received and read)
2. Utility (some user's judgment that information could be relevant or of value for some purpose)
3. Influence (information has contributed to a decision, an action, or a way of thinking)
4. Impact (information was used and it led directly to a decision or to action)

These distinctions are of course significant when thinking of utilization as a process rather than an outcome. The experimental activity is therefore best understood as a translation process of building networks. How the responsible ethnographer facilitates durability and extension of those networks is essential for the success or failure of an experiment and the subsequent dissemination process. Even if the study is done purely online, the application involve actors both online and offline. Consequently design experiments are also trading zones with consequences in real life (H. Collins, Evans, & Gorman, 2010).

In summary, applied ethnography involves the ethnographer both in the research process as well as the activities that follow. This also underlines the importance of treating ethics, according to Hine (2015), as a constant reflexive process rather than a prior stance to be laid out in advance.

Ethnography and Beyond

In this paper, we aimed to map the territory of ethnography for investigating the Internet. Three books have been our point of departure: Boellstorff et al. (2012), Hine (2015), and Kozinets (2010). Table 1 outlines some crucial questions that distinguish two main approaches:

Topic	Blended worlds	Online worlds
Field sites	How to follow the activities both online and offline?	How to follow activities in online communities?
Methodology	How to develop an ethnographic strategy for the E ³ Internet?	How to conduct participant-observational research online?
Ethnographic practice	How to develop an agile and adaptive ethnography?	How to develop an ethnographic practice that handles alteration, anonymity, accessibility, and archiving?

Table 1: Comparing Ethnography for Investigating the Internet, blended worlds and online worlds.

Hine (2015) distinguishes ethnography *for, of, in, and through* the Internet. She is an advocate of ethnography *for* the Internet, i.e., blended (virtual and physical) worlds, focusing on the embedded, embodied, and everyday. This does not imply that we do not find online cultures and communities in her work, but these cultures and communities are seldom constrained by the Internet. Hine therefore underlines hybridity. Both Kozinets (2010) and Boellstorff et al. (2012) delimit their approach mainly to online worlds. They, too, also recognize that activities happen in offline contexts; however, this is not their major concern.

We started out by stating that virtual ethnography is about following phenomena across multiple sites, tracing networks (physical and online), and identifying social worlds. Table 1 summarises the two main approaches. However, one may also claim that what distinguishes the two approaches is how far they trace networks. Do they follow the networks to the “bitter end” (blended worlds), or do they only follow network builders in the digital environments (online worlds)? If these are the recommendations to be drawn from the two approaches, one may alternatively claim that the two approaches define the endpoints of a continuum. New research will position itself along the continuum primarily based on the research questions one seeks to address and not based on the pre-selection of a specific methodological approach.

All the three books try to foresee changes in the ethnographic landscape. Hine turns somewhat paradoxically to unobtrusive methods. Rogers (2013) made one important attempt. He aims to present an unobtrusive methodological outlook for research on the Internet to perform cultural and societal diagnostics. Unobtrusive methods raise some important ethical questions; however, it may both be useful in itself and as an important element in triangulation. Of course, unobtrusive methods may also be crucial to avoid “survey fatigue” and similar responses. Kozinets turns, not surprisingly, to the commercialization processes and the tensions that these “communal-commercial relations” imply. As Kozinets underlines, participation in online communities often come at an important price, as the users are surveilled and commercially targeted. This topic is quite likely understudied when it comes to both communities online and offline communities. Boellstorff et al. (2012) demonstrate through their joint effort that team-ethnography may represent an important development in the future. Because the field is often multi-sited, the different sites may require different social science skills.

We think that unobtrusive methods, communal-commercial relations, and team ethnography represent important steps for the future of the ethnography of the Internet. At the same time, we can expect that a more traditional and

holistic approach to ethnography will be replaced by ethnographic studies of particular topics of interest within emerging fields of practice.

Acknowledgements

We are grateful for the funding from Norgesuniversitetet. We are also grateful for colleagues in the research group Mediate at the Department of Education, University of Oslo, especially Ole Smørðal provided constructive comments on an earlier version of this paper, and colleagues at Department of Teacher Education and International Studies, Oslo and Akershus University College of Applied Sciences for their comments in earlier discussions. Finally, we are grateful to the two anonymous reviewers and the editor for their comments.

References

- Akrich, M., & Latour, B. (1992). A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. In W. E. Bijker & J. Law (Eds.), *Shaping Technology/Building Society* (pp. 259-264). Cambridge: The MIT Press.
- Augedal, E., Hammarqvist, S.-E., Hanssen, G. S., Johnsen, Å., Koht, H., & Vabo, S. I. (2004). Offentlig administrasjon på pensum: En sammenligning av seks nyere statsvitenskapelige lærebøker. *Tidsskrift for Samfunnsforskning*, 45(1), 83-96.
- Barth, F. (Ed.) (1969). *Ethnic groups and boundaries: the social organization of culture difference*. Oslo: Universitetsforlaget.
- Boellstorff, T., Nardi, B., Pearce, C., & Taylor, T. L. (2012). *Ethnography and virtual world: A handbook of methods*. Princeton: Princeton University Press.
- Boissevain, J. (1974). *Friends of Friends: Network, Manipulators and Coalitions*. Oxford: Basil Blackwell.
- Bowker, G., & Star, S. L. (1999). *Sorting Things Out: Classification and its Consequences*. Cambridge, Massachusetts: The MIT Press.
- Brown, A. L. (1992). Design Experiments: Theoretical and Methodological Challenges in Creating Complex Interventions in Classroom Settings. *The Journal of the Learning Sciences*, 2(2), 141-178.
- Carroll, J. M., & Rosson, M. B. (1987). Paradox of the Active User. In J. M. Carroll (Ed.), *In Interfacing thought: cognitive aspects of human-computer interaction* (pp. 80-111). Cambridge, MA: MIT Press.
- Caruso, V., Mørch, A. I., Thomassen, I., Hartley, M. D., & Ludlow, B. L. (2014). Practicing Collaboration Skills Through Role-Play Activities in a 3D Virtual World *The New Development of Technology Enhanced Learning* (pp. 165-184). Berlin Heidelberg: Springer.
- Chevalier, J. M., & Buckles, D. J. (2013). *Participatory Action Research: Theory and Methods for Engaged Inquiry*. Milton Park: Routledge.
- Christensen, C. C., Døving, E., Elvekrok, I., Jakobsen, E. W., Johnsen, Å., Schei, V., & Tobiassen, A. (1998). Organisasjonsteori på norsk: En sammenlinende bokanmeldelse av syv nyere lærebøker. *Tidsskrift for Samfunnsforskning*, 39(1), 108-128.
- Collins, A. (1992). Towards a Design Science of Education. In E. Scanlon & T. O'Shea (Eds.), *New Directions in Educational Technology* (pp. 15-22). Berlin: Springer.
- Collins, H., Evans, R., & Gorman, M. E. (2010). Trading Zones and Interactional Expertise. In M. E. Gorman (Ed.), *Trading Zones and Interactional Expertise* (pp. 7-23). Cambridge, MA: The MIT Press.
- Czarniawska, B. (2007). *Shadowing and other techniques for doing fieldwork in modern societies*. Malmø: Liber AB.
- Elgesem, D. (2002). What is special about the ethical issues in online research? *Ethics and Information Technology*, 4(3), 195-203.

- Erickson, K. C., & Stull, D. D. (1998). *Doing Team Ethnography: Warnings and Advice*. Thousand Oaks, CA: Sage.
- Escobar, A. (1994). Welcome to Cyberia: Notes on the Anthropology of Cyberculture. *Current Anthropology*, 35(3), 211-231.
- Goffman, E. (1959). *The presentation of self in everyday life*. Doubleday: Anchor Books.
- Granovetter, M. (1973). The Strength of the Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Grint, K., & Woolgar, S. (1992). Computers, guns and roses: what's social about being shot. *Science, Technology & Human Values*, 17(3), 366-380.
- Guribye, F., & Wasson, B. (2002). *The ethnography of distributed collaborative learning*. Paper presented at the Conference on Computer Support for Collaborative Learning: Foundations for a CSCL Community (CSCL '02).
- Hazan, H. (2015). *Against Hybridity*. Cambridge: Polity Press.
- Hetland, P. (1996). *Exploring Hybrid Communities: Telecommunication on Trial*. Oslo: Department of Media and Communication, University of Oslo.
- Hetland, P. (2011a). Science 2.0: Bridging Science and the Public. *Nordic Journal of Digital Literacy*, 6(special_issue), 326-339.
- Hetland, P. (2011b). The User Paradox in Technology Testing. *Nordic Journal of Digital Literacy*, 6(1.2), 7-21.
- Hetland, P., & Borgen, J. (2005) Evaluering av universitetsmuseenes digitaliseringsarbeid. Vol. 27. *Arbeidsnotat*. Oslo: NIFU STEP.
- Hine, C. (2000). *Virtual Ethnography*. London: Sage Publications.
- Hine, C. (2006). *New infrastructures for knowledge production. Understanding e-science*. Hershey: Information Science Publishing.
- Hine, C. (2008). *Systematics as Cyberscience. Computers, change, and continuity in science*. Cambridge, Massachusetts: The MIT Press.
- Hine, C. (2015). *Ethnography for the Internet: Embedded, Embodied and Everyday*. London: Bloomsbury Academic.
- Hine, C. (Ed.) (2005). *Virtual Methods: Issues in Social Research on the Internet*. Oxford: Berg.
- Horst, H. A., & Miller, D. (Eds.). (2012). *Digital anthropology*. London: Bloomsbury.
- Iloh, C., & Tierney, W. G. (2014). Using ethnography to understand twenty-first century college life. *Human Affairs*, 24(1), 20-39.
- Jordan, B., & Hederson, A. (1995). Interaction Analysis: Foundation and Practice. *The Journal of the Learning Sciences*, 4(1), 39-103.
- Kozinets, R. V. (2010). *Netnography: Doing Etnographic Research Online*. Los Angeles: Sage.
- Latour, B. (1987). *Science in Action: How to follow scientists and engineers through society*. Milton Keynes: Open University Press.
- Livingstone, S., Ólafsson, K., & Staksrud, E. (2013). Risky Social Networking Practices Among "Underage" Users: Lessons for Evidence-Based Policy. *Journal of Computer-Mediated Communication*, 18(2013), 303-320.
- Madison, D. S. (2012). *Critical Ethnography: Methods, Ethics, and Performance*. Los Angeles: Sage.
- Marcus, G. (1995). Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography. *Annual Review of Anthropology*, 24, 95-117.
- Marcus, G. (1998). *Ethnography Through Thick and Thin*. Princeton NJ: Princeton University Press.
- Mason, B. (1996). Moving toward Virtual Ethnography. *American Folklore Society News*, 25(2), 4-5.
- McLuhan, M., & Fiore, Q. (1967). *The Medium is the Massage: An Inventory of Effects*. Berkeley, CA: Ginko Press.
- Meyrowitz, J. (1985). *No Sense of Place: The Impact of Electronic Media on Social Behaviour*. New York/Oxford: Oxford University Press.
- Mørch, A., Hartley, M. D., Ludlow, B. L., Caruso, V., & Thomassen, I. (2014). *The teacher as designer: Preparations for teaching in a Second Life distance education course*. Paper presented at the IEEE Computer Society.

- Nissenbaum, H. (2004). Privacy as contextual integrity. *Washington Law Review*, 79(1), 119-158.
- Pinch, T. (1993). "Testing - One, Two, Three... Testing!": Towards a Sociology of Testing. *Science, Technology, & Human Values*, 18(1), 25-41.
- Pinch, T., & Bijker, W. E. (1984). The Social Construction of Facts and Artifacts: or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other. *Social Studies of Science*, 14, 399-441.
- Poynter, R. (2010). *The Handbook of Online and Social Media Research: Tools and Techniques for Market Researchers*. Chichester: Wiley.
- Rich, R. F. (1997). Measuring Knowledge Utilization: Processes and Outcomes. *Knowledge and Policy: The International Journal of Knowledge Transfer and Utilization*, 10(3), 11-24.
- Rogers, R. (2013). *Digital Methods*. Cambridge, MA: The MIT Press.
- Staksrud, E. (2015). Counting Children. On research methodology, ethics and policy development. In H. Fossheim & H. Ingierd (Eds.), *Internet Research Ethics* (pp. 98-121). Oslo: Cappelen Damm.
- Steward, J. H. (1955). *Theory of Culture Change: The Methodology of Multilinear Evolution*. Urbana: University of Illinois Press.
- Tashakkori, A., & Teddlie, C. (Eds.). (2010). *Handbook of mixed methods in social and behavioral research*. London UK: Sage Publications.
- Underberg, N. M., & Zorn, E. (2013). *Digital Ethnography: Anthropology, narrative, and new media*. Austin: University of Texas Press.
- Warburton, S. (2009). Second Life in Higher Education: Assessing the Potential for and the Barriers to Deploying Virtual Worlds in Learning and Teaching. *British Journal of Educational Technology*, 40(3), 414-426.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. (2000). *Unobtrusive Measures: Revised Edition*. Thousand Oaks, CA: Sage Classics.
- Woolgar, S. (1991). Configuring the User: The case of Usability Trials. In J. Law (Ed.), *A Sociology of Monsters. Essays on Power, Technology and Domination* (pp. 57-99). London: Routledge.

¹Downloaded from the web 30.06.2015

<https://www.etikkom.no/globalassets/documents/publikasjoner-som-pdf/forskningsetiske-retningslinjer-for-forskning-pa-internett.pdf>