ICTs and the Internet as a Framework and Field in Ethnographic Research

Jonathan Tummons
School of Education, Durham University, UK
jonathan.tummons@durham.ac.uk

Abstract. In this article, I offer a reflexive account drawing on my role as co-investigator based on a three-year institutional ethnography: Medical Education in a Digital Age. Three problematic issues are discussed: first, the ways by which a reliance on digital technologies for communication between members of the research team impacted on the researchers’ discourse; second, the ways by which the multi-sidedness and distributed nature of the ethnography (in terms of field as well as research team) can be theorized; and third, the extent to which differing “traditions” of ethnographic methodology (such as “digital” ethnography and “virtual” ethnography) satisfactorily explicate the standpoint taken by the researchers as both individuals and as members of a research team.

Keywords: ethnography, methodology, reflexivity, technology.

Introduction: Exploring Distributed Medical Education

Hybrid learning communities are those that make use of a range of multimodal technologies to develop formal or informal learning.

(James and Busher 2013, 195)

Medical Education in a Digital Age was a three-year institutional ethnography, funded by the Canadian Social Sciences and Humanities Research Council, which was active from 2012 to 2015. The broad aims of the project were to explore the issues that surround the implementation of a new medical education curriculum that is enacted across two locations in Canada (New Brunswick and Nova Scotia). This new medical education curriculum had been designed to rest on information and communication technologies (ICTs) “from the ground up”: that is to say, the use of technology (digital video, digital learning platforms, e-learning devices and such like) has been as a means to enact synchronously a curriculum across two distinct locations, as distinct from the use of technology as an “additional” feature within a curriculum that could still be delivered were the technology not present (the provision of materials for students on a virtual learning environment (VLE) frequently rests on this model). Thus, instead of simply designating a curriculum as being an example of ‘blended learning’ through the post-hoc provision of e-learning resources, this new medical education curriculum can be understood as only being possible through the affordances offered by ICTs. Without ICTs, this curriculum could not have been written and enacted in the ways that it has been. Moreover, mindful of the distributed nature of this new curriculum, it is perhaps...
appropriate that the research team that explored this new curriculum – it’s adoption and the experiences of staff and students – should be similarly distributed and thus similarly reliant on ICTs for their work together. The research team consisted of eighteen people: the majority of the team were in Canada (though not all in the same location), and two were in the UK. Thus, both the new curriculum and the research team that was exploring it can be seen as having been able to be accomplished only because of ICTs.

Different methods for constructing data have been employed within the Medical Education in a Digital Age project, including document analysis (60 different institutional texts have been analyzed) and semistructured interviews (16 interviews have been conducted with administrative staff, academic staff and technical support staff). Document analysis and interviewing are methods that are characteristic of institutional ethnography (IE) – one of the key theoretical elements on which the project had rested. Indeed, document analysis and interviews are, arguably, more prominent in IE than in “traditional” anthropological ethnography (Smith 2005). In addition, the use of interviews in institutional ethnography constitutes a form of co-construction of meaning between researcher and the researched, reflecting both postmodernist and postcolonial discourses of educational research (Holmes and Marcus 2005; Pierides 2010). However, the most substantial data were constructed through ethnographic observations. Five members of the research team conducted a total of 108 observations across both campuses between January and November 2013. These were carried out in lecture halls, seminar rooms, staff meeting rooms and technician’s control rooms. The majority of observations lasted for between one and two hours, reflecting the typical length of lectures and seminars in the curriculum. The data from the observations has been analyzed by different members of the research team, a process that has been facilitated through the use of qualitative data analysis software (Tummons 2014), drawing on a conceptual framework derived from Spradley (1980), which centered around the spaces where observations took place, the actors, the activities and objects involved, the time, the goals behind the actions and the feelings of those involved.

At the same time as the fieldwork was being conducted, a number of interesting and important methodological and epistemological questions began to emerge. What is the nature of the relationship between the different members of the research team – the ethnographers – and the field that they are researching? How does the team actually do its work? How is the field constructed or described? What kind of ethnography is being enacted here? Do the theoretical tenets of institutional ethnography do enough to explain or make sense sufficiently of the work that is being done within the Medical Education in a Digital Age project? Or, to put it another way, what might a reflexive critique – here understood as requiring a critique of the structural preconditions that shape the practices of and the relationships between the researchers and the researched (Crang and Cook 2007) – of the project shed light on in terms of method, of methodology and of epistemological and ontological assumption?
Problematic Issues in Ethnography: Unpacking Research Methodology

Unless you, as institutional ethnographer, self-consciously attend to your own research stance, you may leave behind the problematic of the everyday world...

(Campbell and Gregor 2004, 52)

Unpacking issues such as those outlined above is both complex and messy. This is because such issues have particular qualities that can be categorized as problematic. By “problematic” (appropriately, a concept drawn here from institutional ethnography) I mean to draw attention to problems or questions that may not yet have been posed but which are latent in the experiences of a social actor (Campbell and Gregor 2004; Smith 2005). Consider, for example, the role of ICTs in enabling the research team to complete our work. It is and has been taken for granted that ICTs were needed in order to allow the team to do their work as an integral element of the ethnography. And, as has been seen in other similar ethnographies, problems can and do emerge relating to the time needed to learn how to use the technology, the reliability of different ICTs and so forth (Galagher and Freeman 2011). Our research team responded to a number of such practical matters: we had lots to learn. How do we mute our microphones when we are talking live and sharing PowerPoint slides on GoToMeeting? Should we use N-Vivo or Atlas-Ti – two excellent but somewhat different qualitative data analysis software (QDAS) programs – to organize, collate and code our qualitative data, and how long will our chosen software take to learn to use? Questions such as these might be seen as being straightforwardly anticipated: that is to say, it is easy to imagine questions such as these arising amongst a team of researchers, not all of whom have conducted ethnographic research – or educational research more broadly – before now, but who are experienced researchers in other fields, users of other ICTs and so forth.

But in addition to the questions listed above relating to the technical and practical work of our ethnography, the doing of the research work within and through a technologically mediated environment led to more profound and problematic questions. Some of these related to the ways in which the researchers’ identities were constructed. The mediation of identity through ICTs raises considerable epistemological and ontological concerns. The production of discourse in an online space that is physically apart from the body is one such concern (Markham 2005), necessarily resulting in a diminished space for paralanguage (facial expression, gesture and movement) within communication (Duck and McMahan 2012). The rendering permanent of discourses that would, outside ICTs, be temporary, is another (James and Busher 2013). The knowledge that what one says is also being recorded and can be scrutinized by people who did not take part in the original (online) conversation can lead to changes in how one talks; thus, it can lead to changes in how one presents as a social being – a process that can be more or less deliberate (Angrosino 2007). These are issues that were enfolded in the practice of our ethnography within Medical Education in a Digital Age. And they were problematic because they constituted
a set of questions that were fundamental to the ethnography, but they were latent: they were present within the ethnography but took time to emerge and become foci for reflexive attention and comment.

**Wicked Issues in Research: Unpacking Different Kinds of Ethnographies**

_Wicked issues are ill-understood, there are many causal levels, there is no clear “stopping point” where a solution has been reached and solutions are not clearly right or wrong._

(Trowler 2012, 273)

An ethnography such as this one, which was both characterized by and defined through technology, raises not only problematic issues relating to the method and methodology such as those outlined above but also complex and messy issues relating to whatever it might mean when we – or others – talk and write about “ethnography” in a paradigmatic sense. Such arguments reflect recent and current arguments surrounding ethnography that are informed more specifically by insights offered to us, as researchers, from institutional ethnography (Smith 2005), multi-sited ethnography (Marcus 1995) and online ethnography (Gatson 2011). These arguments, we suggest, can be best understood as being wicked, and by “wicked” we mean to refer to problems that are complex and defined or described differently by different social actors with consequently different – and by no means commensurable – solutions (Bore and Wright 2009; Trowler 2012).

We shall discuss two such issues here. First, we shall consider the field that the research project was seeking to explore; second, we shall consider how the various kinds, or categories, or _types_ of ethnography are positioned.

**Wicked Problems: Field**

How were we to understand the construction or description of the field that, as ethnographers, we will be researching for _Medical Education in a Digital Age_? It was not a field in the sense that “field” is understood by “traditional” anthropological ethnography, not least as significant aspects of this field do not exist in a physical sense: it was not a field that, in its entirety, could be materially connected with the ethnographers. In this context, it was impossible for us as researchers to always perform the expected roles of the ethnographer as having direct, personal experience of the places or spaces being researched (Landri 2013).

When we were defining the field of our research, a number of factors needed to be considered. We needed to think about the organizational context of the ethnography. We needed to consider the consequences of having several research team members who were working in the organization in question. Issues of location and access were made complex in our research: the “insider knowledge” that allowed our research team to quickly negotiate routes to gatekeepers and key informants was tempered by the need – as for any researcher of their own workplace – to prevent damage to their organization or harm to their colleagues or vulnerable others (Gibbs 2007; Neyland 2008). But the field of our research was not straightforwardly aligned...
with this organizational context. By this we mean to stress that our ethnography was not “of” an organization (being mindful at the same time that “institutional” ethnography is not simply ethnography of an institution (Smith 2005)). Our field encompassed not only two campuses that are geographically distant (but which at least are straightforward to identify and put boundaries around) but also a more nebulous online space and place, mediated by ICTs. At the same time, different members of the research team had differential relationships to these spaces, in terms of not only geographic proximity (or lack thereof), but also organizational and hence, arguably, cultural proximity as well: some of the team were insider-researchers; others were very much outsiders.

The relationship between the research team and the field was complex, therefore. In part this was due to the nature of the research team; and in part this was due to the nature of the field. And it seems right – obvious, even – to highlight this. How can researchers, who are living and studying in the UK, be seen to conduct ethnographic research within a medical education curriculum in Nova Scotia in the same way as those researchers who are members of staff, both academic and professional, at the institution in question? And how ought a field that consists of both the virtual and the physical be made sense of within an educational ethnography paradigm?

The problem of the field – how it is defined or constructed, and how ethnographers are related to it and move around within it – is enfolded within and necessarily leads us to a discussion of types of ethnography and of ethnographic method. We described our research as an institutional ethnography (IE). IE – as should be expected, mindful of the nomenclature – rests within a broader tradition or paradigm of ethnographic research. Our research was field-based; it was inductive; it was immersive research; and it rested on methods that are common within ethnographic research: interviews, observations and the analysis of cultural artefacts (which, in the case of our research, predominantly consist of different kinds of multi-modal texts, both paper- and screen-based). These elements are typical of ethnography (Angrosino 2007; Angrosino and de Pérez 2000; Atkinson and Hammersley 1994; Tedlock 2000) and it is within this tradition that the Medical Education in a Digital Age project is situated.

So, what of the field? Knowing what we know about IE’s commitment to an interpretivist, rather than positivist, epistemology, it is perhaps unsurprising that IE, in turn, subscribes to a social ontology (Tummons 2010). Thus, in reflecting the IE’s central focus on texts and textually-mediated knowing and action, fields or sites of interest (to use the language of IE) are distinguished by two characteristics. First, a site of interest is discursively constructed; second, any site of interest has two elements: (I) the local, the everyday/every night world, where life is experienced by people, and (II) the translocal, which is outside the bounds of people’s everyday experience (Campbell and Gregor 2004, 28–29) but which, through texts, influences the everyday lives of people.
Wicked Problems: Framework

Taking a reflexive turn, therefore, we find ourselves considering the extent to which IE’s conceptualization of field (as discursively constructed and as being characterized by both the local and the trans-local) provides a theoretical framework that is sufficient for the Medical Education in a Digital Age project. We should point out that this discussion does not preclude the methodological and empirical validity of the initial project proposal: as researchers, we are satisfied that this project was an institutional ethnography. But might it have been something else, something more, as well?

Consider the example of, and the perspectives afforded to researchers by, multi-sited ethnography (MSE). The methodology of MSE is distinct from that of traditional anthropological ethnography in a number of ways. MSE instead ranges across sites, in a spatial as well as temporal sense, in order to explore the many and various people, cultural meanings, identities and artifacts that are of interest or concern to the researchers. It is through the study of how these things actually move across these sites that the argument of the ethnography emerges (Marcus 1995). Relationships between or across these sites are important as well, and these also need to be identified or established and then accounted for by the ethnographer (Hannerz 2003). In a MSE, therefore, we might follow people, artifacts and stories, tracing the networks and conjunctions that join them (Marcus 1995). Rather than being circumscribed by the geographic or institutional boundaries of the field in a manner akin to traditional ethnography, MSE encompasses borders, making them part of the field of research so that comparisons can be made between what happens on either side of them (Cook, Laidlaw and Mair 2009; Nadai and Maeder 2009), linking the global with the local (Hine 2007). The choice of research methods creates a further distinction between MSE and traditional ethnography. MSE is more dependent on interviews than traditional single-site studies (Hannerz 2003), reflecting the postmodern turn in ethnographic research that foregrounds the co-production of data between the researcher and those whom s/he is researching. Indeed, if multiple sites can be based as much on cultural or spatial differences as on geographical ones, then the people who move and act within these sites can help the researcher to define them (Falzon 2009).

MSE and IE occupy much common ground, sharing a number of distinctive features that distinguish them as being different from traditional anthropological ethnography. MSE’s encompassing of borders within research to link the global to the local sits quite comfortably alongside IE’s concern to link the local and the trans-local, in contrast to the single-site that characterizes traditional anthropological ethnography (Marcus 1995). In addition, MSE’s focus on the material artifacts of a culture is aligned to IE’s interest in the artifacts that mediate peoples’ work, a focus that foregrounds the effects of tools, artifacts and other aspects of material culture in a manner which, it has been argued, can be lost sight of in traditional anthropo-
logical ethnography (Landri 2013). Both rely on interviews to a greater extent than is the case within traditional anthropological ethnography (Hannerz 2003). And both foreground the perspectives of the researched, not only in the construction of knowledge and the making of meaning within the fields of research, but in circumscribing the boundaries of the fields themselves, reflecting the broader critical and postmodernist turns that have informed qualitative research methods more generally in recent times. In fact, it would be perfectly possible to imagine *Medical Education in a Digital Age* as an example of multi-sited ethnography as opposed to institutional ethnography from both pragmatic and theoretical perspectives, as research paradigms, they achieve more-or-less the same things and afford the same empirical and ontological possibilities to the researchers.

Thus, we arrive at our *wicked* problem. It might be argued, based on the above, that distinctions between IE and MSE are based on nothing more than scholarly tradition, the cultures and habits of particular academic tribes (Becher and Trowler 2003). They share a social epistemology and a social ontology; they share a commitment to the knowledge and perspective of the researched and to co-construction of data; they share many of the same methods; and they share a concern for making the local, global. So why choose one over the other? Are two such paradigms actually needed or justified? If two such paradigmatic movements do indeed have more in common than not, what does this say for the study of “ethnography” more generally?

### Defining Ethnographies

Many now think that ethnography needs to work differently if it is to understand a networked or fluid world.

(Law 2004, 3)

The *Handbook of Ethnography*, published by Sage in 2001, includes chapters titled “Phenomenology and Ethnography,” “Grounded Theory in Ethnography,” “Feminist Ethnography” and “Ethnography after Postmodernism,” *inter alia*: serious chapters that provide an insight into how the prevailing intellectual and cultural trends of recent years and decades have changed the ways in which researchers work, think and write. It also includes a chapter called “Computer Applications in Qualitative Research.” The third and fourth editions of the *Sage Handbook of Qualitative Research* both include a chapter titled “The Methods, Politics and Ethics of Representation in Online Ethnography.” But they are written by different people and the content of each is markedly different, the argument of the 2005 edition being already rendered redundant – if not erroneous – by technological change, in a way that the 2001 chapter on feminist ethnography is not and can never be. And at the same time, journal articles proliferate and provide further perspectives on critical ethnography, performance ethnography, post-colonial ethnography and other variants. The feminist critique of masculinist discourses of knowing is matched by the post-colonial deconstruction of the “all-knowing” outsider-ethnographer, which, in turn, echoes the postmodernist rejection of all-encompassing schemata or modes of explanation, turning our attention instead...
to the local, to the partial and to the multiple truths and perspectives.

Whether we talk and write of “moments” in qualitative research or stress themes within the scholarship of methods and methodology such as “the postmodern” turn or the “postcolonial” turn, or note the various ways in which the methods that make up the building blocks of social research, “interviews” or “observations” are increasingly interpreted in diverse ways; it is self-evidently the case that social research is in a state of flux (and perhaps it has always been so?). Some of these flux factors have been at work for relatively long periods of time, the feminist turn being a good example. But other flux factors are within themselves faster moving and more complex. The challenges of and affordances offered by ICTs in themselves move at a bewildering rate, rendering concerns for method, arguments about theory and revisions to methodology obsolete within ever-shorter periods of time.

So how should ethnography be defined? Is a singular definition achievable, much less desirable? If overarching paradigms are indeed increasingly inadequate (Law 2004), should we rely on linguistic tricks, such as the use of plural nouns (for “ethnography,” read “ethnographies”) or capitalization (“ethnography” or “Ethnography”), to stake out methodological terrain? Plural nouns seem to work for postmodernist researchers (“truths,” “realities” (Scott and Usher 1999)); and capitalization is used in fields as diverse as sociolinguistics (viz. “discourse” and “Discourse” (Gee 1996)) and the politics and sociology of specific deaf communities (“deaf” and “Deaf” (Centre for Deaf Studies 2011)). Should ethnographers follow suit?

Conclusions (I): Methodological Tribes and Territories

...many of the purported divisions [between research paradigms] are artificial, involving spurious claims to novelty, and are based on cavalier use of philosophical and methodological arguments.

(Hammersley 2005, 142)

Words have different meanings according to the context in which they are used. A word or a text does not possess an intrinsic meaning but is instead subject to multiple reinterpretations as readers make sense of the words that they encounter, bringing their own prior understanding and experiences to the act of reading (Barton 1994; Barton and Hamilton 1998). In this context, it is unsurprising that “ethnography” is similarly capable of being read, understood, conceptualized in different ways. These meanings will shift – within boundaries that are socially established by speech or discourse communities (Gee 1996; Swale 1990) – over time, in response to changing societal attitudes, wider cultural and intellectual changes and technological shifts. In this context, Shumar and Madison’s (2013, 263) suggestion that any ethnography is a virtual ethnography can be understood as being a simple reflection of the fact that to make sense of the practice of ethnography in a networked, globalized world (Angrosino 2007), the ways in which the virtual – mediated through ICTs – permeates the social cannot be compartmentalized or othered. We cannot any longer comfortably distinguish between the “virtual” and the “real.” The emergence of “multi-sited ethnography,” “institutional ethnography,” “virtual ethnography” or any other kind of
ethnography thus becomes a reflection of an always-shifting discussion about method and methodology that is compelled to change by and in response to the social worlds that such research methods seek to explicate.

This is not to say that such conversations are unimportant – far from it. Emerging within and alongside discourses and cultural turns of postmodernism and globalization, we find arguments relating to the position of the researcher and the researched as co-participants in the research process (Marcus 1995). The broader global and postcolonial turns in qualitative research, in turn, allow us to reposition the ethnographer, dismantling the anthropologist/other and center/periphery binaries that placed the researcher as an outsider, travelling to marginal or liminal spaces in order to take stories about these spaces “back home,” better able to understand the social and/or cultural practices of the field than the actors who populate it (Pierides 2010). In contrast to these traditional constructions of the ethnographer as the all-seeing and all-knowing authority, postmodernist and postcolonial discourses construct the ethnographer as diffident, as collaborating with the researched as partners to produce meanings that are contingent and fluid, rejecting overarching sociological or anthropological structures (Cook, Laidlaw and Mair 2009; Holmes and Marcus 2005; Lingard 2006).

The problem – and it is a wicked problem – is the balkanization of the ethnographic landscape. Different academic tribes mark out their territory through their conceptualization and promotion of different research methods or paradigms. And whilst our work as ethnographers is, arguably, enriched through such a critical and reflexive turn, we also risk being placed within categories – perhaps silos is a more apt term – that hinder our talk. One the one hand, we find those ethnographers who insist that their work needs to be hands-on and first-hand; on the other, those ethnographers who are distributed or mobile (Gibbs 2007; Landri 2013). In fact, “ethnography” might well be a term that is sufficiently generous to allow for both.

Conclusions (II):
“Use What Seems Best”

We should be less self-conscious about our methods and use what seems best for answering our research questions. There are no right or wrong methods.

(Thomas 2007, 95)

An alternative approach might simply be to relax and take a breath, to stop spending so much time reading and thinking about different research paradigms and instead get on with the actual work of doing some ethnographic research. Citing Stanley Fish, Gary Thomas has argued that there is, put simply, too much talk about “theory,” to the extent that the word has become an “empty signifier” (2007, 53). There is theory and then there is theory-talk, which is defined by Fish as “any form of talk that has acquired cachet and prestige” (ibid.). The focus of Thomas’ critique is theory use in education rather than research methodology per se, although the argument is straightforwardly transferable as ethnographers are engaged in theoretical work throughout the research process. Theory talk, Thomas argues, must not be seen as
being more important than the practice that
the theory purports to talk about. So how
do we explain the presence of so much
theory talk in our work? Is it a necessary
element of our research practice in order to
make robust our claims, conclusions and
findings? Or is it that to do without it “ex-
poses the lack of special knowledge need-
ed to do [ethnography]. It is intense, but
its mechanics are fairly simple, and they
are things that we and our students are en-
gaged in every day” (Gatson 2011, 520)?

Conclusions (III):
ICTs and the Internet as Field
and Framework

The prominent position of ICTs within the
Medical Education in a Digital Age insti-
tutional ethnography required us, as re-
searchers, to find ways by which the posi-
tion of the ICTs and the activities that they
encouraged and that enfolded them could
be made sense of. The fact that ICTs were
similarly prominent in mediating the work
of the research team only adds to the im-
portance of this particular reflexive task. It
seems right to say that talking with people
online is different to talking with them in
real life, and it also seems right to say that
doing research that involves looking at
how students and staff work across a cur-
rriculum that is delivered through the ex-
tensive use of ICTs is different to explor-
ing the exchanges, cultures and practices
of a purely physical, as opposed to online,
setting. But we needed to go further than
this. And so, we argued that we needed
to have conversations about method that
are, at times, abstruse. We acknowledged
that these conversations did not provide
straightforward answers: indeed, they
raised more questions in turn. Instead, we
positioned our conversations as part of a
turn in qualitative research more generally,
which seeks to promote greater reflexivity
amongst educational ethnographers whilst
at the same time avoiding overshadowing
the empirical work that our ethnography
rests on. And we needed to be sensitive
to the fact that ethnography moves on and
will continue to do so. It may well be the
case that all ethnography is virtual ethnog-
raphy (Shumar and Madison 2013), in that
it needs to take account of the internet in
the social world. Perhaps, reflecting the
world that we all live in, all ethnography
is institutional and multi-sited ethnogra-
phy as well? Or should we have spent less
time unpacking our methodologies, focus-
ing instead on the empirical findings of our
three years of research work?

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**IKT IR INTERNETAS KAIP ETNOGRAFINIO TYRIMO „RĖMAI“ IR LAUKAS**

**Jonathan Tummons**

**Santrauka**

Šiame straipsnyje siekiu aptarti savo, kaip trejų metų etnografinio tyrimo grupės nario, požiūrį.

Projekte „Medicininis švietimas skaitmeniniame amžiauje“ (angl. Medical Education in a Digital Age) naudoti skirtingi duomenų kūrimo metodai: dokumentų analizė (išanalizuota 60 skirtingų institucinių tekstų) ir pusiau struktūruotų interviu analizė (kartu su administracijos personalu, akademiniu personalu bei techninės pagalbos personalu buvo atlikta 16 interviu). Be abejo, dokumentų analizė ir interviu yra metodai, turintys labiau institucinės etnografinios nei „tradinės“ antropologinės etnografinios (Smith, 2015) charakteristiką. Dviejose žemynuose tyrėjų grupės atliktais tyrimais iškeltas kompleksinių klausimų, susijusių ne tik su tyrimo lauku, bet ir su tyrėjų bendradarbiavimo pobūdiu. Šie klausimai leido giliau apmąstyti etnografinio tyrimo sampratą, kai tyrėjai ir tyrimo laukas yra iš dalies virtualūs. Mano atsakymai į šiuos klausimus remiasi metodologinio pluralizmo idėja ir pragmatiniu požiūriu į tyrimo procesą.

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