

# ***Encounters with the mobilage (virtual or actual<sup>1</sup>)?***

Mike Johnson

Department of Educational Research, Lancaster University, [m.johnson6@lancaster.ac.uk](mailto:m.johnson6@lancaster.ac.uk)

School of Healthcare Sciences, Cardiff University, [johnsonmr@cardiff.ac.uk](mailto:johnsonmr@cardiff.ac.uk)

## **Abstract**

This paper explains and reflects on two methods used as part of a doctoral research project to investigate mobile phone use by healthcare students for academic work.

Theoretical moves were made to retain some of the complexities of researching technology use, drawing upon ideas from ethnography, phenomenology, actor network theory (ANT) and the networked learning literature. Informants and their devices were conceived of as a 'mobilage'; a blend word that incorporates 'mobile assemblage' from ANT with theories of informal learning, ie. bricolage. A focus on the mobile phone helped to circumscribe mobilage but it was important to avoid excluding other information technologies in use.

The two methods featured in this paper are 'encounters', a particular framing of one-to-one interviews, and an online focus group (OFG) which drew upon the 'Day Experience' cultural probe method, seeking to prompt informants to giving 'in the moment' detail of their mobilage.

Encounters were primed with a learn-place list/map drawing activity which, in some cases, dominated the early time spent with informants. In spite of this threat to gaining useful data about mobilage, it became apparent that the list/map drawing itself made the encounter a site of epistemic performance closely related to the practice of academic work. This realisation occurred whilst listening to the audio recording rather than attending to verbatim transcription.

The online focus group ran for three months. Seven informants were invited to react to triggers sent by the researcher but they were also free to post their own messages, including hyperlinks, and other media. Response traffic varied over time but at its nadir was sustained by a couple of informants. Informants who contributed to both the encounters and the online focus group helped provide a more rounded picture of mobilage as manifest for them. Although the OFG was never intended as an 'online ethnography', scholars from that field confirm the usefulness of meeting informants in person. OFG data was carefully transferred from the Yammer platform to the ATLAS.ti analysis tool so as to anonymise contributions but retain the 'look and feel' of Yammer.

It is hoped to take the corpus forward into representation through a series of vignettes which, as part of analysis, are being developed as phenomenological texts.

## **Keywords**

Methods, interviews, online focus group, mobile phone, cultural probe, phenomenology, ANT

## **Introduction - the what and why of 'mobilage'?**

The context of this paper is a research project that was part of a doctoral thesis in the field of Technology-Enhanced Learning (TEL). The research context and questions related to healthcare students' experiences of and use mobile phones for academic work, and how they learn this. Data collection took place between December 2016 and April 2017. This paper aims to provide the reader with an account of how research methods were chosen and a reflective discussion of their merits.

A preliminary review of the literature in 2016 had identified a preponderance of quantitative surveys to investigate student mobile phone use. Surveys can distance and constrict the data from the phenomena of interest: a quantitative survey typically gathers self-reported data in response to questions presented. Other

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<sup>1</sup> I am grateful to my reviewers. In deference to one them, I have amended the title to reference Deleuzian coinage: originally 'virtual or *real*', now 'virtual or *actual*'. My own use of ANT is epistemological rather than ontological, for which, with Chris Jones I remain 'solidly realist' (2015, p. 232).

methodologies and methods can combine to provide a more authentic, detailed and informative account of student learning. For Jones, 'learning is too slippery and complex a term to have a single theoretical solution and the addition of networked and digital technologies only adds to that complexity.' (Jones, 2015, p. 62). For some time, mobile phones, especially Internet enabled ones, have featured an array of communication and information technologies and thus offer wide potential for applications in learning, apart from those envisaged and reported within the m-learning literature (see, for example, Sharples, Taylor, & Vavoula, 2005). The recent large-scale United Kingdom (UK) Joint Information Systems Committee (JISC) sponsored Student Tracker project does not achieve the kind of sensitive illumination of what students actually do compared with some of the technology enhanced learning (TEL) literature (Crook, 2003; Gourlay & Oliver, 2013; Jones & Healing, 2010). The view was taken that since learning is human phenomena, the concepts implicated required a human approach.

However, from an actor-network theory perspective, even to coin the word 'phenomena', hints at an unhelpful assumption of objectivity in the perspective of the one studying vis-à-vis the phenomena being studied, a privileging of the human perspective. With technology central to the research foci, Actor Network Theory was indicated where concepts such as 'assemblage' are used to flatten out hegemonies between various human and non-human actors. Although Dant coined the term 'mobile assemblage' (Dant, 2014, p. 369) just before Crow and Sawchuk, their understanding of the concept is closer to classic ANT - i.e. 'actions': 'practices, sets of relations and fluid associations between both human and nonhuman actors.' (2014, p. 188)

ANT has been prominent in recent educational research, nevertheless, learning itself is less well represented in the theory and I did not want to let go of that (ANT is more interested in the 'relations that produce things, not the things themselves' (Fenwick, Edwards, & Sawchuk, 2011, p. 8). Selwyn et al. (2006) linked learning information technology (IT) skills with the concept of bricolage, considering the haphazard ways in which these skills are enacted over time, the facility to do so using whatever is near at hand at the time. When joined with 'mobile assemblage' to form the blend word 'mobilage', this was thought to offer a useful theoretical referent in the conduct of the research.

Ethnographic values were preferred, requiring researchers to directly experience the phenomena in question while acknowledging that we can have no unmediated access to other people's internal lives and experiences (Atkinson, 2015a, p. 108). Nevertheless, methods reliant upon informant observation appeared out of reach for various reasons. The mobilage is literally a moving target that frequents highly intimate places seeming to require an extreme form of 'sociological stalking' (Büscher & Urry, 2009). However, the enquiry aimed to apprehend mobilage, rather than see where it went, thus the type of 'walking ethnography' used by geography and mobilities scholars (Adey, Bissell, Hannam, Merriman, & Sheller, 2014) seemed unnecessary, if only because concentrating on academic work requires 'moored' attention, even when one's body is moving.

The aim was to apprehend the mobilage in context, not merely instrumentalise subjects by obtaining words for thematic analysis. Atkinson is scathing towards work that claims to be ethnographic yet relies entirely on interviews (Atkinson, 2015a; Hammersley & Atkinson, 2007). The 'interview' itself is a particular socio-culturally formed and framed type of interaction, constitutive of behavioural expectations and unequal power relationships. Through thinking of our meetings as 'encounters with a mobilage' the unit of analysis was more diffuse and relational than if I merely set out to talk with students about what they did with their phones.

I hoped that spending 'some' time in the presence of mobilage would yield useful data, but the ethnography literature can be disheartening: it is not unusual to read that ethnography demands a minimum six months of field-work and 'several continuous hours inworld' at a time (Boellstorff, Nardi, Pearce, & Taylor, 2012, p. 90). Taken together, these values and aims all-but rule-out the use of ethnography in doctoral research projects, especially part-time, which must be manageable yet of sufficient magnitude to afford the potential for significant outcomes, original insights and new knowledge.

With these doubts about the viability of ethnography as a methodology, I attended a lecture by Paul Atkinson in which he argued that the amount of exposure and data required was an aliquot, an adequate amount (Atkinson, 2015b). The analytical payload of a field encounter was more important than the sheer amount of time spent or data gathered, depending on the researcher's perspicacity (see, for example, Atkinson, 2013). Somewhat comforted, I judged that the research still lacked an ethical and viable way to accompany the mobilage into various important avenues of life where predictably much phone use could occur, this in sharp contrast to what could realistically be observed in a brief encounter.

Inspired by Jones and Healing's use of the 'day experience method' in their study (Jones & Healing, 2010; Riddle & Arnold, 2007), another arm of the methods was developed whereby informants could be enlisted in reporting from their mobilage 'in the moment', lessening the impact of delayed recall on self-reported data.

Ethical approval was obtained from Lancaster University and permission from the host university was granted to access students. The approach would be made to all students in a faculty of nursing, midwifery and Professions Allied to Medicine (PAMs). A single announcement on the institutional Virtual Learning Environment (VLE) and single follow-up email had a potential reach of around 3300 undergraduate and postgraduate healthcare students. There were just over 370 responses to the online survey. The invitations to participate and the online survey contained links to information about the interviews and online focus group. Ten students were interviewed and seven students volunteered to join the online focus group. These will be discussed in turn.

## Encounters with the mobilage?

Ten students volunteered for informal interviews, although they were conceived of as 'encounters' and the distinction was explained at the start of each meeting as part of obtaining informed, written consent. Encounters were audio recorded using two digital devices (Zoom H2N for quality and a Sandisk Sansa Clip as backup). Handwritten field-notes and digital images were taken to provide context for the encounter, including some phone screenshots. At the earliest opportunity, these files were removed from the audio recorders and stored using Lancaster University's approved secure Box.com cloud solution. ATLAS.ti project files were also password protected, as was the computer used to work with them.

Encounter locations were negotiated with ethical and safety concerns in mind, with a preference for informal settings representative of locations where informants would normally use their phones for academic work.

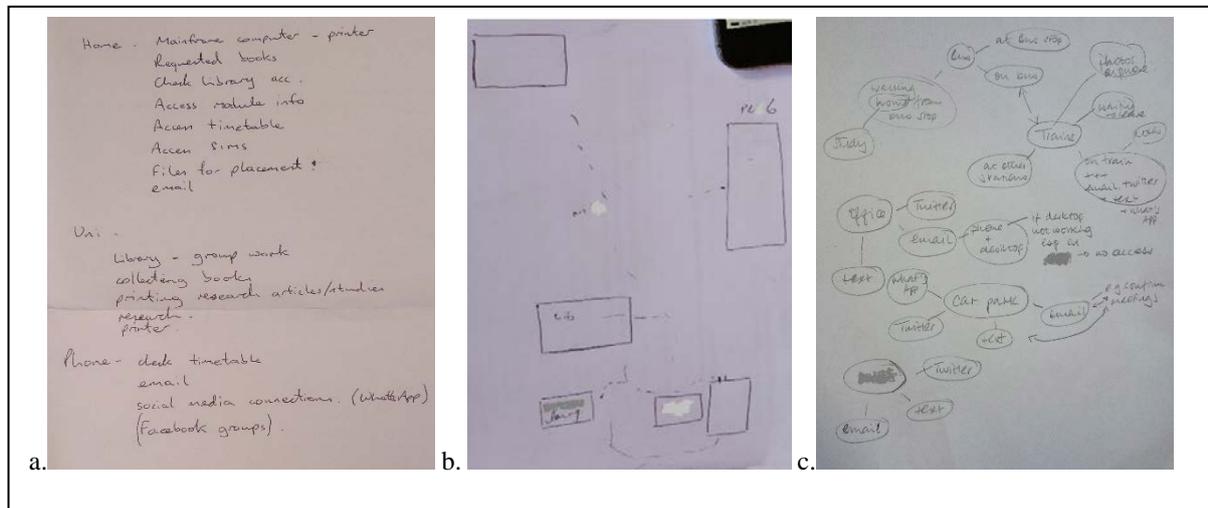
The informal use of phones in lectures, whether illicit or otherwise, is an interesting topic in its own right (Sebri, Bartier, & Pelaccia, 2016), and this was mentioned by informants, but it was felt that to try to observe this would be unethical without the full approval of everyone sharing the space. Furthermore, my presence, especially in short bursts, would impact on the experience of the lecture and encourage artificial behaviour from the participants and those around them.

A rough indexical transcript of the audio recordings was made, noting what was going on at 30 second intervals. This aversion to verbatim transcription was intended to anchor analysis in the sound of the encounters rather than inviting an obsession with text that was remote from the encounter (Mann, 2016). Where further detail was required, a patch of the conversation was transcribed verbatim 'on demand' but this was only needed on three occasions to clarify meanings or capture something which was 'of the essence'.

In another move to honour ethnography's values, one approach to coding the encounter data involved distinguishing between recalled anecdotes and observed data. Although just 15 data fragments have been coded as 'obs', signifying observational data, this small number was not unexpected. Informants varied widely in the extent to which they conceived of, attempted or undertook academic work using their phones and opportunities to observe them doing this were quite limited. During the encounters I was aware to varying degrees of my own particular impact on the informant's 'normal' mobilage. There was a fine line between probing and coercion in finding out the extent of informants' experiences of mobile phone use. I did find myself asking questions that varied between asking for clarification, learning about their own knowledge-working methods as well as sharing my own skills and experience of IT. Atkinson insists that meeting informants should be done with the intention to learn from rather than interrogate them or objectify their accounts and instrumentalise them as mere objects of research (Atkinson, 2015a). Both the encounters and OFG featured moments of bricolage learning. Space defies any attempt to enlarge on this but I feel the usual definition of networked learning implicitly excludes learning which occurs while people are co-present with technology (Goodyear & Networked Learning in HE Team, 2001).

To maximise the time we had, and encourage informants to attempt a broader range of the things they do when they undertake academic work on a phone, informants were asked to list and map their learn-places and any transits between them. This idea was borrowed from Gourley and Oliver's work (2013).

The maps/lists varied considerably, depending partly on my own attentiveness to the method as well as the variety of places students went. Some of those in full-time employment had access to superior equipment and/or dedicated 'study nests' (Crook, 2002) in their own homes which lent themselves to being less reliant on harvesting time spent in transit or between lectures. Some informants simply had more to write about in terms of where they went and what they attempted than others. For example, two informants worked at home or in the library and drove to the campus, often in company with other students and this curtailed their attempting academic work while in transit. Mo's list of learn-places and activities is Figure 1a, Arlo's map is Figure 1b.



**Figure 1a-c: Learn-places - Mo's list, Arlo and Ian's maps**

Ian, a part-time PhD student, used 12 minutes of our time to list activities and learn-places and then map them in detail (Figure 1c), flipping the A4 page over and back. This compounded a creeping sense of hopelessness since Ian had already asked to limit our time to 35 minutes. It was not until listening, months later, to extended scribbling sounds that I connected Ian's mapping with the approach to knowledge work he explained later in the encounter. Having tried many ways of managing his qualitative research project, Ian had fallen back on paper in a big way. Ian lives alone and works on the doctorate as 'play time' exclusively at home. Paperwork is spread out into large proportions of the available space. He had found that working with paper and pencil was more conducive to thinking. On a practical level, it also meant scribbling in bed without worrying about 'ink everywhere' the next day. Although a capable touch-typist and keen phone user (Twitter, WhatsApp, photos, etc.), to Ian, paper was the best canvas to fluidly record and code immediate thoughts which were 'made sense of' more fully later through transcription. But the initial thought burst was done on paper and that is what the encounter learn-place list/map activity invoked. Although the list/map was intended to stimulate recall for talking about and demonstrating use of the phone, the activity itself was a kind of epistemic game (Morrison & Collins, 1996): Ian's fluency with that game was extreme. Until this realisation, I had dismissed my time with Ian as constituting, in any sense, a direct encounter with mobilage. In retrospect, even this brief encounter had, instead, provided an ideal opportunity to observe authentic knowledge work. Students make their own path to effective epistemic practices, mobile-enabled or otherwise. Aided and abetted by the best intentions of those who would foster digital literacy, competency, or capability, a more generative and directly relevant aim in the context of higher education would be to focus on students developing epistemic fluency (Goodyear, 1999; Markauskaite & Goodyear, 2016).

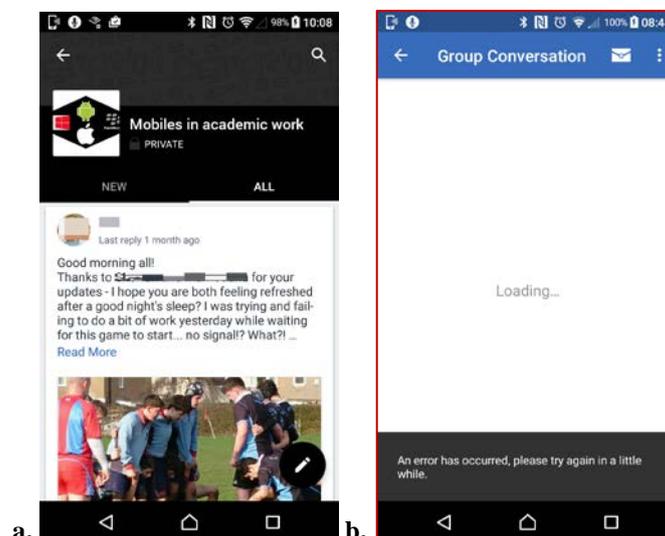
## An online focus-group

I wanted a fuller picture of students' academic mobilage across the lifeworld without intruding into their personal lives. Although a departure from ethnographic principles, one method for doing this was through recruiting informants as co-researchers to report back on their activities. Jones and Healing's (2010) research funding enabled them to provide the means, such as voice recorders and cameras, for students to record their learning activities. SMS text messages prompted students at intervals over a 24-hour period with simple questions such as, 'Where are you?', 'What are you doing?', 'Who are you with?', etc. Jones and Healing drew upon Riddle and Arnold's (2007) appropriation of 'Cultural Probes' (Gaver, Dunne, & Pacenti, 1999), which

uses packages of physical artefacts as triggers and post-cards for returning responses. This realisation opened the way for a creative re-interpretation of the method from that initially envisaged:

- Informants would be invited to join a private online group. Unlike Jones and Healing, responses would be shared with other group members and we could respond to and learn from each other: a collaborative experience.
- Trigger messages were developed and sent by myself at varying times once per week. These were informed by Riddle and Arnold's questions but adapted according to the group's responses and my own learning.
- An extended period of three months was chosen to allow for variations over time, more in keeping with extended periods required in the ethnography literature. This also allowed for flexibility in the timing of communications to account for the asynchronous nature of the medium. Members regularly apologised for late responses but I was careful to reassure them that 'time works differently online' and not to worry.
- It was important to make participation expectations clear from the outset and members were asked to commit to one reply to the weekly trigger message. However, an online forum allowed members to initiate their own messages to the group. This only happened twice but each was significant.
- Trigger messages usually included a picture. Members were encouraged to reply using multimedia and hyperlinking in messages. They were also asked to take care to avoid posting sensitive information and this problem did not arise.
- The platform of choice was linked to university networked infrastructure. This made it possible to reference the institutional acceptable use policy which contains clear remedies for various levels of breach, thus assuring a safe online environment. Members could leave voluntarily at any time without giving a reason although none did. Indeed, the more active members expressed surprise at the speedy passage of time and mild dismay that the group was ending. These were offered membership of a related but open group.
- Since the invitation and survey information had an international reach, an online group facilitated participation by anyone, full or part-time, regardless of their location. Just one of the seven members was based overseas.

Predictably enough, Facebook and WhatsApp ranked highly in the survey results for students' favourite mobile apps for academic work, but I felt uneasy about using these media for data collection. With the research foci in mind, I did not need nor want to 'go native', i.e., get drawn into informants' personal lives more than they might wish. This can happen with Facebook which, for example, encourages users to grow their friend network of interpersonal connections (Stirling, 2016). Also, the research questions were not related to a particular app or online space, as seen in some virtual ethnographies (Hine, 2005; Snee, Hine, Morey, Roberts, & Watson, 2016).



**Figure 3: a. Yammer mobile app, b. 'An error has occurred...'**

The host university had recently launched Yammer, a social network platform for organisations, and included all staff and students. Yammer interactions can be conducted through a mobile app (Figure 3a), email to a dedicated Yammer Group address, or the Web interface (see Figure 4). Membership of Yammer was granted through a university login which made members identifiable to each other, as in a co-located focus group. Yammer also helpfully limited the amount of personal information that was shared by default, i.e., name, profile picture,

organisational role, and group memberships. Useful features of Yammer would be negated if students struggled to access and use the proposed group, so a small number of personal contacts helped test Yammer with three main smartphone operating systems. This could not wholly account for problems with authentication as well as other connectivity issues (see Figure 3b) which continued to assert themselves. These 'mobile entanglements', or 'mobents' to coin another ANT-related phrase, cropped up in various forms, prompting the humans involved to engage in piqued reflection and/or strategic problem-solving, and learning.

Informants were warmly encouraged to use the mobile app because this would alert them of activity requiring a response and site the trigger and the act of responding within the students' own device, within the mobilage. This proved problematic to achieve, which itself speaks of the unpredictable nature of activity within the mobilage and 'managing' informants at a distance. In retrospect, more could have been done to ensure that members used the mobile app, rather than relying on email as a back-up notification system. In a post-data collection follow-up email, one informant agreed that SMS text messages may have provoked a more spontaneous reaction using their phone. These could have been sent from a dedicated mobile number to overcome the privacy issues of swapping personal mobile numbers. None of the online focus-group (OFG) data was 'observational'. However, a distinction was made in coding where informants were apparently recording what was happening at the time of writing or if they were reporting past events. Trigger timing was varied to prompt a 'simultaneous self-report' type of message at different times of the day. This kind of simultaneously-voiced reply appeared frequently, but they were never returned immediately after the trigger was sent.

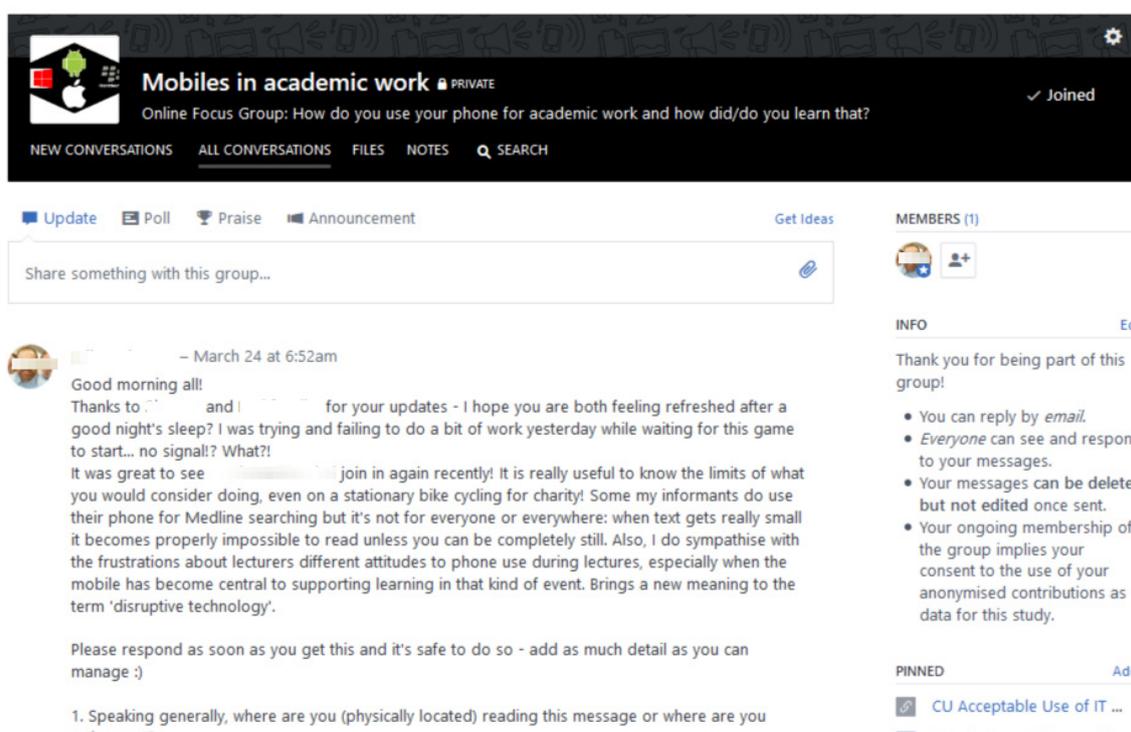


Figure 3. The Online Focus Group Yammer interface plus sample trigger

OFG messages could not be analysed in nor easily exported from Yammer and yet I wanted to analyse the OFG data as it appeared to me originally in Yammer. I had selected ATLAS.ti for qualitative data management, but it does not have its own data container to simply copy/paste data into, relying instead on importing documents and other digital artefacts. Thus, each of the nineteen message threads was copied into individual Microsoft Word documents. This allowed 'Find and Replace' operations to thoroughly anonymise text. It was expeditious that 'Find and Replace' also works for images. Three informants had chosen an avatar, two including their own face. If users do not change their avatar, Yammer defaults to showing a small coloured circle overlaid with the user's initials. Thus, each informant's profile image had to be anonymised and I replaced them with photographs I had taken, mainly of inanimate objects. This helped to preserve some of the 'look and feel' of the Yammer platform during analysis of the messages using ATLAS.ti.

Responses were somewhat skewed in terms of quantity by just a couple of participants although all seven posted something helpful. Three OFG informants also agreed to interviews and their pseudonyms were preserved

across the data. As suggested by Orgad (2005), participation in both methods helped me form a clearer apprehension of informants and understand their contribution. Wes, another part-time PhD student, only posted two OFG messages but this was consistent with what he had already told me about his preferences for working with a laptop, relying on his phone's signal for connectivity. 'Between times' he spent thinking, phone stowed.

## Synthesis

The research attempted to gain insight into students' use of mobile phones by enlisting ethnographic sensibilities and yet its divergence from classic ethnography is acknowledged. It seemed that an aliquot of data was achieved and thus should be sufficient to percolate a number of vignettes, again drawing upon a central plank of ethnographic practice - narrative correspondence to my informants, to what happened, and, in this case, mobilage. I believe that the concept of mobilage was a useful lens to guide the unfolding project. As the project matured, its orientation has shifted towards phenomenology. The initial research question asked, 'what is learning at university *like* for healthcare students in a mobilage?'; this focus is experiential rather than ethnographic, e.g. I have not been seeking to unveil cultural patterns.

As a phenomenon, mobilage persists in the ordinary everyday consciousness of phone owners to varying degrees. The challenge will be to represent such aspects of the phenomena without loss of fidelity for the reader. Writing of vignettes has become integral to analysis, with the aim of producing fully phenomenological texts (van Manen, 2014) that 'return-to-presence' (van Loon, 2007). One vignette will entirely exclude the phone, not because banned from the clinical setting, but to depict something of the eclipsing emotive intensity of healthcare work. At the other extreme, an OFG-supplied image of the informant's phone cover declares, 'I will never leave you'.

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