Supporting Fieldwork Learning by Visual Documentation and Reflection

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Abstract. Photos can be used as supplements to written fieldnotes and as sources for mediating reflection during fieldwork and analysis. As part of a field diary, photos can support the recall of experiences and a reflective distance to the events. Photography, as visual representation, can also lead to reflection on learning and knowledge production in the process of learning how to conduct fieldwork. Pictures can open the way for abstractions and hidden knowledge, which might otherwise be difficult to formulate in words. However, writing and written field notes cannot be fully replaced by photos and visual images. Techno-anthropology students at Aalborg University, in their course titled “Portfolio in Anthropological Work,” use photography and visual abstractions for different purposes during fieldwork. This article analyzes certain excerpts from students’ portfolio works in order to show the role played by photos in their learning process. For students, photography is an everyday documentation form that can support their memory of field experience and serve as a vehicle for the analysis of data. The article discusses how photos and visual representations support fieldwork learning and analysis based on students’ initiatives and experience in using photos and photographing for a wide aspect of purposes during participant-observation.

Keywords: fieldwork learning, photos, visual reflection, learning portfolio.

Introduction

Techno-anthropology is a bachelor’s and master’s study program at Aalborg University, Denmark. With a focus on human-technology interactions, the program combines anthropology with technological insight and ethics, connecting technological knowledge with anthropological understanding. Aalborg University is based upon a pedagogy of problem-based learning (PBL). Techno-Anthropology students investigate the social and cultural environments in which such technologies are embedded by carrying out project work in groups. They study expert cultures in which technologies are developed and the contexts within which these technologies are applied.

Methods

This article describes learning in students’ fieldwork processes by analyzing the students’ field notes and photos from their conducted participant observations (Spradley 1980) and analysis. The data is selected from students’ visually mediated documentations and reflections upon their fieldwork, found in their individual learning portfolios. My research interest here is in how students improvise with their visu-
alization during fieldwork and how their fieldwork reflections create new kinds of knowledge.

Fieldwork-based teaching usually involves the student making some kind of fieldwork diary, normally a written text of observations and reflections. At Aalborg, we added the option of photography to the field diary assignment. I instructed and supervised students in using photographing and photos as means of visually-mediated reflection. Photos were not only “allowed” as part of fieldnotes and portfolio reflections. They became part of the teaching exercises in evaluating the students’ learning and knowledge development. Thus, the data presented consist of extracts from documentation and reflections found in the portfolios of techno-anthropology students during fieldwork and a teaching exercise in visual reflections, conducted as part of the course “Portfolio in Anthropological Work.”

During their fifth semester of study, techno-anthropological students carry out project group fieldwork in a “technology culture” and, at the same time, participate in the “Portfolio” course. The course consists of formal teaching that is conducted at the beginning and the end of the semester. For instance, during the course in 2014 and 2015 (from which the data for this paper are derived), I taught written field note techniques and practice in the first weeks of the semester and in ethics in representations and learning reflections at the end. In between, during their fieldwork, the students had two feedback sessions based on excerpts from their fieldnotes and individual learning portfolios and received feedback from two students and the teacher. For the first feedback session, students were suggested to present fieldnotes and portfolio reflections on topics such as “encountering the field” and “roles in the field.” In the second feedback session, students presented their reflections on experiences and presented analytical choices.

For this course, the students have to produce a portfolio consisting of selected fieldnotes and excerpts from their learning. The content of their portfolio should show the process of their work, documented by fieldnote description and containing reflections on how and what has being learned and how the analysis was being formed.

Their fieldwork portfolio writing is individually formed during their fieldwork. The two feedback sessions support their communication and reflections and learning during fieldwork. The students were being supervised during fieldwork by their project supervisor as well.

Visual Representations and Learning Processes in Fieldwork

In the portfolio-creation process, the techno-anthropology students presented raw field data and reflections on what they had learned. In the following, their individual experiences and expressions of style in documentations and reflections are shown in excerpts presented to fellow students and to the teacher in two feedback sessions and in the final paper. Their individual learning processes are framed in the portfolio.

Most of us who have done fieldwork realize that each field situation is quite different for each person. Each project has its own requirements, and the ethnographer has to draw from his or her knowledge and
experience base. Much like learning a second language, students learn ethnographic methods more effectively by immediately putting into practice the things that they are learning (Wallace 2004, 46).

In learning fieldwork, students’ experiences are very diverse; therefore, they have an urge to find suitable and meaningful ways to reflect. Wolcott describes fieldwork as a “mode of inquiry in its own right, unique unto itself” (1995, 16).

During their fieldwork and in the analysis, the techno-anthropology students produced written field notes, but some of them also used different ways of photographing and visualization. The visual impressions coming from fieldwork can be represented in visual forms, but photos can also be a way of creating non-written “jottings” (Bernard 1994) to remember particular situations or to embody the kind of knowledge that can be formulated into words later on. Furthermore, visual methods and mediation of field experiences can strengthen student awareness of how the analytical points of their project have taken shape. By taking photos as part of the field notes, specific aspects of the field situation can be described. However, the pictures can never speak for themselves. The photos must be explained and supported by spoken or written words.

The examples in this paper comprise students’ visual methods to create, code and reflect on fieldwork data and learning experiences. Furthermore, the specific visual approaches are photos taken during the process of creating fieldnotes and reflecting on the analytical perspective and learning processes during fieldwork.

The understanding of scientific methodology, especially in the social sciences, involves comprehending how we know as well as the environments in which the knowing is produced. Research methods and the practical engagement they entail are interconnected.

How Students Visualize Knowledge Creation

The fieldworker’s own experiences may be translated into written notes and texts, but also visual images, that “capture” the immaterial and sensory nature of human experience and knowledge (Pink 2007). Visual ethnography has inspired innovative and important studies across disciplines, for instance, with a theoretical turn to the senses (Pink 2012). This has brought about a rethinking of visual culture studies in terms of an acknowledgment of the relationship between the visual and the other senses. Pink (2009; 2012) points out that this focus on how the visual relates to other sensory categories comes into play in the ways we create routes to knowledge in research processes. This interrelation will be exemplified below by the students’ descriptions of their knowledge creation and learning processes.

A learning portfolio is a form that legitimates or represents work in progress. It can thus include snapshots of learning situations that have not been formed into full-fledged analytical insights. Including and discussing visual material was an optional part of the course “Portfolio in Anthropological Work.”

Students with no or little fieldwork experience must develop ways of recording their observations that do not disturb their immersion in the field. Visual jottings
led to the recall of significant details and sometimes created reflections and awareness in the process of doing so. The student fieldworker, when using the camera, sometimes contributed a meaningful and transferable representation in a way that note-taking could not. On the other hand, the photographing fieldworker can disturb and interfere the social setting in more drastic ways than quietly retreating to jot down fieldnotes.

We present four kinds of visual documentation and reflections created by students for their portfolio during fieldwork or initiated by me as a teacher. My role with the students lay in acknowledging some students’ interest in doing visualization as part of their fieldnotes and portfolio documentation. Due to my experiences with techno-anthropology students’ engagement in using visual representations (in 2014), in the following year, I had added a workshop to the post-fieldwork teaching, where students had the opportunity to present photographs, drawings and other visual materials that could show their learning process from fieldwork. The use of photos differs depending on which stage of the fieldwork they is used and whether the photos were taken in the process of participant-observation or as part of the data analysis.

1. *Photos as jottings due to the physical and social context where writing was inappropriate or impossible.* One of the three students in the group, doing fieldwork in South Africa, wrote in her portfolio: “When you are not used to writing field notes, it is somewhat of a challenge to find the best way of making notes. Furthermore, it was very difficult to take notes when you were working with your hands buried in mud in the fields. In contrast to pencil and paper, I could have the camera in my pocket and I could simply clean it if it got dirty.”

Photographs are used as a way of “jottings” (Bernard 1994), as the students seek to capture an actual situation or thought which they remember and recall by means of the photo. Jottings or “scratch notes” are what you get through a day of participant observations. This was a methodological improvisation to which students became accustomed and found meaningful. This visual as well as written jotting is based on observations, informal talks and any details that strike the fieldworker as significant to be recorded for later use or as analytical and methodological questions and points.

In looking at the “jotting” pictures, images of what to remember can be created. The photos or drawings are a means of both documenting and remembering actual situations. Nevertheless, there are also situations and places where photographing is inappropriate or very disturbing, which some students have experienced for themselves.

2. *Photographic details and representations of the unspoken or what was difficult to describe by written words.* These could be pictures portraying the nature of the field site, complicated elements of a specific technology or the “tacit knowledge” of informants during the field work. However, photos and photographing can potentially also lead to distancing from the informants and participation in the field. This paradox is exemplified in the following example:
A techno anthropology student doing fieldwork among Danish fishermen described and analyzed the fishermen by using photography, subsequently reflecting in his portfolio about being almost paralyzed by the beauty of the fishing site. This paralysis at the beginning of the fieldwork, however, meant that he became more physically distant from the social situation and used the camera to take landscape photos. The student became very aware of his distancing when he examined his pictures more closely while preparing to present them at the second feedback session and while comparing his own materials with the fieldnotes of fellow project group members. Due to the reflection from preparing his submission for the first feedback session, he started to do more participant-observations and literally moved closer to the actual fishing in finding ways of participating with the informants.

“This picture shows how the bulldozer has to pull one of the boats up to shore. This particular situation was taking place during a storm, which can be seen in the way the boat is leaning much to the side” (Portfolio reflections selected for feedback, Session Two).

In his portfolio, the student reflected on his attention to photographing and describing dramatic situations more often than the everyday life of fishing – a boat struggling in hard weather, for instance. The learning process that took place as he perused his pictures (as well as notes) reflects an awareness of how the perspective and “note” can represent implicit assumptions of the observer. Using photos can lead to creating an analytical distance, as the field-
worker, by looking at the picture and reflect upon its meaning in the work process, can analyze the potential analytical conclusions and tacit knowledge generated.

3. **Photos as triangulation: using photos as part of a validation by reflecting on the methodological approach and the knowledge-creation process.**

A group of techno-anthropological students did fieldwork among peasants in South Africa, studying their field watering technology.

“My method was to take pictures – and a lot of them – to ensure that later on I could recall important aspects. Maybe I could not see the meaning of these aspects in the actual situation.”

One of the students reflected on the process of taking the picture as well as what meaning it held methodologically as well as for the creation of knowledge.

A *drip irrigation* with a leak. “It became essential that I take the picture instead of notes, as only later on did it become important to me to document in order to further analyze at what speed the water was leaking. In this way, it also taught me that you should also make notes of what may not seem important in the first place. It is an element of major importance when you are trying to map the empirical reality you have been occupied in and create validity. […] In this way, I learned about writing field notes, not by writing field notes but by taking pictures” (a student’s portfolio reflection selected for Feedback Session Two).

It could be added that this student also learned about which analytical elements could be included in an analysis. The actual picturing above led to a reflection about the importance of remembering and noting elements that did not seem important at the time. Viewing her photo of a drip irrigation with a leak from the beginning of the fieldwork made the importance of details clear to her.

The photographic field note, like written fieldnotes, has the flexibility of improvisation. The researcher does not necessarily need to plan in advance what to note or what to photograph.

4. **Pictures of the practice of fieldwork and of analysis.** The documentation of the students’ work processes is being required in the course “Portfolio in Anthropological Work” in supporting their project group fieldwork. For this purpose, photos and other visual products are created in and as a systematization of empirical materials.
Pictures or images could also be a way of sharing in a joint fieldwork and of mediating the creation of shared meaning during fieldwork and analysis. A group of students’ doing fieldwork among farmers in Tanzania worked on making an overview of their data by localizing “key moments,” which could be called the process of condensing data or grounded theory work. This group made visual representations during fieldwork in order to become aware of their analytical and methodical focus,photographing the process for portfolio documentation. Their visual representation is what is being produced in the picture below.

“We wrote our ‘key-moments’ on post-it notes in order to read them aloud one after the other (see the picture) and to sort them due to the kind of coherence we experienced. We did that three times, each time writing the topic which we found was connecting the actual bunch of post-it notes. Due to the topics we created as part of our analysis, we discussed and reformulated our research question. This process has been very structured based on notes from a meeting with the first 12 farmers. Therefore, our focus has deliberately and, to some extent, unintentionally centered on these farmers. Another way that I experienced this process took place in the field in the following days, when I experienced a new way of meeting the farmers. I had both a renewed curiosity and a more focused approach.”
The student ends his portfolio excerpt by commenting on the exercise of immersion into fieldnotes and the creation of a visual and physical mapping of the main points from the empirical work. He writes: “I now realize that it is of great importance to step back or away from the field.”

The fostering of this reflective awareness during fieldwork requires establishing a reflective distance or a “process of abstraction.” The process resembles the awareness attained by the previous student fieldworker who worked among Danish fishermen. This student had reviewed his pictures taken during fieldwork and critically reflected on the perspective they showed, leading him to adjust his fieldwork practice.

Supporting a Reflective Distance

Many of the techno-anthropology students had difficulties pointing out examples of their actual learning and figuring out what to write in their learning portfolio during the fieldwork. Therefore, visual representations were employed as a teaching exercise. During the last part of the Portfolio course, after finishing their fieldwork and having submitted their project reports, the students in the 2015 course were asked to prepare a visual presentation or product of a learning or “Aha!” moment from their fieldwork (Saltofte & Krill 2017). One student, who had been part of a group conducting fieldwork in the Danish military, was not able to describe his learning process during the writing of fieldnotes and documentation in his portfolio. He simply did not understand or could not imagine what it could be. However, while showing a photo or drawing during a workshop, it finally made sense to him. In preparation for the workshop, he had drawn a map of where the informal conversations with their main informant typically took place. By making this visualization, it occurred to him that these conversations always occurred when they walked between buildings at the field site. In his final paper, he wrote the following reflection on learning and knowledge creation:

“During the fieldwork, I didn’t give it much thought about what actually happened when we walked from his office to the garages containing the technologies. But after the fieldwork, during the course, when I was given the task of finding or drawing an image of an ‘Aha!’ experience, I became aware of it. The informal conversations were a major source for our empirical work and for the analytical change in our study.”

The student became aware of the specific meaning of informal talks with informants in his fieldwork and could relate it to a well-described topic from the field method literature: informal conversations and the status of the knowledge created by these. Drawings and other visual representations can lead to an aesthetically mediated reflection describing a more diffuse phenomenon, such as “your own learning” or “the route to knowledge.”

Visually Mediated Reflections

Doing fieldwork and writing ethnography are ongoing and reflexive processes, exemplified by the students’ reflections above. Halstead refers to “the transformative spaces of anthropological knowledge
construction” (2008, 3). In these spaces, learning and knowledge creation take place through the anthropologist’s engagement in participant-observation. As shown above, fieldnotes could be something other and more than written texts. However, it is not solely the pictures in themselves that are of interest in understanding these visually mediated fieldwork processes. Students’ representation of sensory impressions in the fieldwork experience can be analyzed as different types of visual documentations and can create an awareness of and enhance the learning process.

On the other hand, photography during fieldwork can be considered to mark the distant position of the observant. Informants tend to act more formally when they are being photographed, especially in the initial encounters.

The fieldworker typically has to handle and share the surprising situations and unexpected learning and knowledge creation and learning processes.

“The skill of the ethnographer, therefore, is different from the simple application of analytical grids to settings of activity, but rather is itself similar to the ability of learning, resulting in the capacity to recreate particular conditions which allow her to engage in a ‘community of practice.’” (Grasseni 2008, 155).

The students’ learning processes also give “a language” to experiences of the unspeakable (Malkki 2007; Ingold 2013). This approach is also represented by Malkki (2007). Anthropology is defined less by a strict set of topics, theories or methodological steps and more with a “specific anthropological sensibility” (Malkii 2007). Learning to improvise is a metaphor Malkki uses about the acquisition of this specific anthropological sensibility. For the techno-anthropology students, developing skills and becoming trained had involved both learning by practicing and learning by doing fieldwork in groups. They gain experience in building up a repertoire (Bruun et al. 2015). Nevertheless, improvisation relies not only on a methodological repertoire but also on what is being experienced as situationally meaningful in the actual fieldwork. Since visual anthropology can never replace ethnographic field notes as a record of research, it must develop alternative objectives and methodologies that will benefit anthropology as a whole (MacDougall 1997, 202–203). A fieldworker has to consider issues of interactions between the visual, textual and performative and the producers of images and words (Pink 2007).

Visual approaches and representations could lead to a rethinking of certain categories of anthropological knowledge in light of the understandings that may be accessible only by non-verbal means (MacDougall 1997, 292). The liminal quality of field notes is of three different kinds (Jackson 1990): (1) betwixt and between worlds; (2) betwixt and between selves; (3) betwixt and between words. Since we are arguing here that fieldnotes can take forms of documentation and expression that are not textually based, it is the last of Jackson’s types that has interest here. It refers to the liminalities found in the relationship between fieldnotes and other genres of writing. The liminality could then be viewed as a way of linking to the participant observer’s everyday life and thereby making the strange aspects of writing.
fieldnotes more familiar. This is also the case with students’ use of photographing as part of their fieldwork routine.

The visual documentations and abstractions during the techno-anthropology students’ fieldwork has not been a focus of the methodological literature. Yet our studies show that it was significant as an everyday way of meaning-making for the students. The students’ written and visual reflections on their field notes and field experiences became a valuable learning process.

Analytical distance can be created in the process of selecting and reflecting on non-verbal documentations. Some learning processes and knowledge creation in fieldwork practice are supported by using and reflecting on photography and on other visual representations in the students’ field diaries and learning portfolios.

Conclusions

The techno-anthropology students’ portfolio can be characterized as a repository or reflective ground where the student documents their learning and understanding processes. The processes of meaning-making for oneself (or in a group) and for the purpose of presenting analytical points – can take place with or without the actual portfolio. The individual learning portfolio, however, supports and comprises a presentational source for the unfinished thoughts and descriptive bits that are selected for feedback. The portfolio feedback form supports the combination of immersion and reflective distance that is so essential to successful participant-observation.

This article has presented four types of visual documentation and representation used by techno-anthropology students at Aalborg University (2014, 2015) during a fieldwork supporting course in which students used photos and other visual elements in their fieldwork portfolios. The four types of documentation were the following:

1. Photos as jottings due to physical and social context inappropriateness of writing. Through photography “jottings” (Bernard 1994), students could capture an actual situation or idea using the photograph as a mnemonic device;

2. Photographic details and representations of the unspoken or of situations that were otherwise difficult to describe in words. These could be pictures portraying the nature of the field site or documenting specific technologies or practices;

3. Photos as triangulation. Using photos as part of empirical validation by reflecting on methodological approach and the knowledge creation;

4. Pictures of the practice of fieldwork processes and of analysis. Visual representation as a means of ordering of data. Creating images as a way of mediating the creation of shared meaning during group fieldwork and analysis.

Although visual/photographic description and documentation is considered easily accessible for the techno-anthropological students, it has problematic aspects as well. Photos and the act of photographing, especially in sensitive or awkward situations, can alter the social situation and restrict access to specific social settings while in the field. The act of photographing creates different kinds of expectations from informants and thus potentially changes relations and roles between the fieldworker and the group they are studying.
Visual images of learning processes can support and document important meanings created from and about fieldwork. Of course, pictures cannot replace written descriptions. They must be supported by text that can contextualize and explain what the picture is meant to represent. A photo or other visualization has the advantage that it can help researchers recall details of places and situations better than written notes. Used as a mnemonic device, photography can be invaluable in field research situations where it is not possible to write notes or when words may be inadequate.

Acknowledgements

I wish to thank the techno-anthropology students who have most kindly contributed their visual, analytical and methodological reflections from their portfolios during the Portfolio in Anthropological Work courses from 2014 and 2015.

REFERENCES


VIZUALINĖS DOKUMENTACIJOS IR REFLEKSIJOS PAGALBA MOKANTIS LAUKO TYRIMŲ

Margit Saltofte
S a n t r a u k a

Nuotraukos gali būti naudojamos kaip lauko tyrimo užrašų priedas ir refleksiją skatinantį priemonė lauko tyrimų ir jų analizės metu. Būdamos tyrimo dienoraščio dalis, nuotraukos gali padėti atgaminti patirtį ir palaikyti reflektyvių atstumą nuo įvykių. Nuotrauka, kaip vaizdinė reprezentacija, taip pat gali skatinti mokymo(si) ir žinių "gavimo" (angl. production) refleksiją bei atskleisti paslėptas žinias. Remiantis studentų patirtimi vykdant dalyvaujantį stebėjimą, straipsnyje diskutuojama, kaip nuotraukos ir vizualinės reprezentacijos padeda mokytis lauko tyrimų ir jų analizės. Mokymosi proceso vaizdai gali padėti suvokti ir užfiksuoti svarbias reikšmes, įgytas lauko tyrimo metu ir apie patį lauko tyrimą. Žinoma, nuotraukos negali pakeisti rašytinių dokumentų. Jos turi eiti išvien su tekstu, kuris gali paaiškinti, kas nuotraukoje reprezentuojama. Analizė rodo, kad studentų portfolio gali būti saugykla, kurią įdiegiant, studentai veiksmaizkūrės kūrė patirtį, kas yra naudojamas kaip pagrindinės refleksijos priemonė. Šis poveikis yra labai svarbus, nes jis padeda studentams suprasti, ką dėlės ir ką leis, o taip pat padeda jie atsiimti savo atsakomybės. Ši straipsnio tikslas yra diskutuoti apie tokią refleksiją, ir nustatyti, kaip ji padeda studentams suprasti ir įgytus mokymosi patirtis.