Tracing Sequential Video Production

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**Abstract:** With an interest in learning that is set in collaborative situations, the data session presents excerpts from video data produced by two of fifteen students from a class of 5th semester techno-anthropology course. Students used video cameras to capture the time they spent working with a scientist, for one week in 2014, and collected and analyzed visual data to learn about scientists’ practices. The visual material that was collected represented the agreed on material artifacts that should aid the students' reflective process to make sense of science technology practices. It was up to the student and the science expert to negotiate the nature of this collaboration. Following the inspirations by Charles Goodwin on action and embodiment and Lorenza Mondada’s work on multimodality in interactional spaces, this analysis explores: the nature of the interactional partnership and their transformations through video, nature of the interactional space, and material and spatial semiotics.

**Keywords**: sequential and multimodal video analysis, embodiment, discourse analysis

# Introduction

Examinations of video material provide powerful insights into understanding people’s practices (Schwartz & Hartman, 2007). Video can support learning by “mapping uses of video into desirable and observable learning outcomes” (Schwartz & Hartman, 2007, p. 335). While video is used as a pedagogical tool in education including techno-science programmes, focusing on its analytical potential is still very rare (Broth, Laurier, & Mondada, 2014a). We consider video as a form of dialogue that also requires understanding the circumstances of production. The history, of studying the interactional patterns within and across cultures, date back to the late nineteenth century for those interested in anthropological investigations (Barron, 2007). The context of the study is a techno-anthropology bachelor programme where students explored technoscience practices. Students occupied multiple roles during this process, including being behind and in front of the camera. Our research question was: How can we examine the circumstances under which practices captured on video are experienced and articulated verbally and non-verbally and use for teaching purposes?

# Theoretical background and relevance to field and conference

Interested in collaborative learning settings, we premise that collaboration involves individual learning but that it cannot be reduced to the individual (Stahl, Koschmann, & Suthers, 2006). We view that collaboration and learning are series of social activities situated in material ecologies (Jordan & Henderson, 1995). This position prompts us to explore sequential and multimodal analysis (Mondada, 2008) to trace how ideas and relationships are captured on video, taking note of who recorded and what aspects were captured. Video has been used to support anthropological and ethnographic investigations, exploring ethnographic videoing for teaching purposes by examining bodily stance (M. Goodwin, Cekaite, & Goodwin, 2012) and contextual configurations of the cameraman with his environment provide new pedagogical possibilities.

# Methodology

# Ethnomethodology and conversation analysis

EMCA has three characteristics: recording, transcription, and analysis to “reflect the importance of locally situated, and endogenous orders of action” (Broth et al., 2014b, p. 5). Video-based EMCA approaches have investigated how different forms of embodied conduct, including body posture, gaze, language, gesture, constitute a holistic meaning-making through coordinated and synchronized ways (see for example, (Broth et al., 2014b, Chapter 1). Only a few studies have investigated beyond the embodied conduct to include configurations of video recording including environments, objects and/or technologies. For our analysis, we employed Gail Jefferson’s conversation analysis convention (Jefferson, 2004), including translations in italics (Broth et al., 2014b). We included non-verbal aspects (Jordan & Henderson, 1995) and took note of bodily stance and embodied configurations (M. Goodwin et al., 2012).

# Context and participants

We examined videos produced by two students from a class of 15 who worked with scientists for one week to learn about their practices and produce video diaries and reflections. Students were introduced to Ylirisku & Buur’s (2007, Chapters 2–3) ethnographic camera methods (namely, situated interview, shadowing, in-situ acting, and self-recording) and methods of interpretation (namely, interaction analysis lab, video card game, video stories, video portraits, and video collages). Scientists and students collaborated on the task to collect visual data, but achieved this in different ways.

# Expected outcomes and contributions

We take an interest in temporal, material and spatial aspects and how they can be represented together with discourse analysis and the analysis of embodiment, to identify a number of outcomes:

* Nature of the interactional partnership and their transformations through video: understanding the needs of the other (i.e. who is the knowledge holder, who takes the initiative in the video recording)
* Nature of the interactional space: taking note of configurations between cameraman and the recorded and the artifacts they identify.
* Material and the spatial semiotics: taking note how solid, enduring material objects in space, but also the video itself provides structures for collaborations and interaction.

We see video used in this example as a result of negotiations between cameraman and the environment, as a form of dialogue and video observation and interaction analysis as a means to develop a pedagogical method.

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# Acknowledgments

We thank Jacob Jensen and Janus Avbæk Larsen for their permission for using their video material for this presentation. The video analysis was supported through VILA – the Video Research Lab at Aalborg University - a DIGHUMLAB initiative.