# Talk, Silence and the Study of Situated Action

## Ivar Solheim

Department of Educational Research, University of Oslo and Norwegian Computing Center<sup>1</sup> solheim@nr.no

# **ABSTRACT**

This theoretical paper discusses some conceptual and epistemological issues in the study of situated action in CSCL environments, especially focusing on ethnomethodology (EM) and conversation analysis (CA). It is argued that EM and CA approaches provide relevant and fruitful research strategies and methodologies. Some theoretical and epistemological peculiarities, weaknesses and biases of the approaches are identified and discussed. Finally, activity theory is briefly discussed as a potential alternative methodological and theoretical approach.

## **Keywords**

Situated action, discourse analysis, ethnomethodology, conversation analysis, computer supported group work.

#### INTRODUCTION AND MOTIVATION

The ideas discussed in this paper have partly been inspired by some concrete methodological challenges that I have met in my study of the interaction between computers and students in classrooms. A basic challenge for my methodological framework rooted in analysis of talk-in-interaction, was the fact that the students I observed only talked occasionally to each other during their work. This raises of course some specific methodical issues concerning application of the appropriate devices for mapping the interaction. Obviously, a mere recording of the talk is in this case not sufficient as a tool to map the actual interaction going on in this group. I chose, probably appropriate, to use video camera to tape the interaction between the students and the computers in order to map not only the interaction with the computers, but also non-vocal communication, gestures, gaze, the character and function of hesitations and absences etc.

However, these more methodically and technically oriented issues are not my main concern in this paper. It seems to me obvious that it would be wrong to reduce my problem to merely a question of finding the appropriate methods and techniques for mapping the interaction. Several broader methodological, epistemological and philosophical issues must be addressed. For example: Are the conceptual tools of CA appropriate for analysing silence and unspoken utterances? To what extent can pupil's learning processes be accounted for within this framework? What is the epistemological status of spoken utterances compared to the unspoken within the framework of CA? Is the methodical strategy of CA focusing on moment-to-moment turn-taking in talk neglecting the importance of other significant, but less observable structures? Most fundamentally, to what extent can the possible constraints of CA as an empirical strategy reflect more fundamental challenges or problems in the philosophical and epistemological foundations of EM/CA?

## A DISCURSIVE ANALYTIC PERSPECTIVE ON SOCIAL ACTION AND LEARNING

Inspired by Wittgenstein's later writings, Harold Garfinkel's ideas of ethnomethodology, and especially the ideas for discursive psychology (Edwards, 1996, Potter and Edwards, 1992), my work has been based on an understanding of language as action and talk as accountable action reflecting the participants' own concerns, orientations and intentions. According to this view, the researcher should not look for "hidden" representations and motivations or unobservable social structures, but concentrate on the accountable, observable, and detailed talk-in-interaction of people, in my case interaction between students doing computer assisted project work. I have been particularly attracted to CA, which has been presented "as a solution to EM's problem of the 'invisibility' of common sense" (ten Have, 1990). This approach directs the focus on the detailed interaction and construction of meaning through talk. For example, if one wishes to study how or to what extent students "learn" in the interaction with computers, the researcher should be paying attention to what students are actually doing and saying when they use computers in their daily work.

## **DISCUSSION**

In a critical discussion of EM and CA, I relate my arguments loosely to my initial methodological problem of applying EM/CA in a context where the participants evidently do communicate in their cooperative work, but where this only to a very limited extent is reflected in "ordinary" conversation between the members of the group.

I appreciate CA as a part of the methodical fundament of discourse analysis. But as I read the works of many conversation analysts and ponder the character of the research program, I am increasingly struck by a peculiar narrowness and disembodied, and to some extent empiricist, character of many CA studies. In my view this is due to certain theoretical

<sup>&</sup>lt;sup>1</sup> In the academic year 2001 and 2002 I am a visiting researcher at the Center for Lifelong Learning and Design, Department of Computer Science, University of Colorado et Boulder. Email: ivar@cs.colorado.edu

peculiarities and biases, more specifically the idea of rationality as accountability, the premise of the knowledgeable actor and the exaggerated epistemological and methodological status of speaking turns and sequential organisation of utterances. In particular, and here I follow Michael Billig's (1997) critique, the study of central issues as repression of knowledgeability and absences and silence in dialogues, seem to require additional or alternative theoretical and methodological frameworks.

Activity theory has been presented as an alternative to CA and discourse analysis (Engeström, 1999), but in my view activity theory does not offer significant insights in the study of the finegrained aspects of sociality and human interaction, especially human-computer interaction, which is the focus of the present paper.

By way of conclusion, I consider EM and CA to be highly relevant and valuable research strategies and methodologies in the study of situated interaction, and especially in CSCL environments. The major strength of CA lies in the idea that conversational meaning is to be situated in the sequence. Its most powerful idea is undoubtedly that human interactants continually display to each other, in the course of interaction, their own understanding of what they are doing. This, among other things, creates room for a dynamic, interactional view on human-computer interaction. EM and CA seem particularly relevant to the study of human-computer interaction since these processes are often complex to analyse because also the computer is involved as an interactant in its own right, albeit not human.

For the further development of CA within a discursive analytic framework it seems important to also include analysis and interpretation of "unspoken utterances" which are not directly observable, but which leaves traces. Theoretical concepts from e.g psychoanalysis and rhetorics, may seem relevant in addressing the challenges presented in the beginning of this paper (for other phenomena, other theories may seem interesting). But a prerequisite for such application of theory should be that the inferences and theorizing are derived and traced from actual interaction in its situated context, non-vocal or vocal.

## **ACKNOWLEDGMENTS**

I thank Hans Christian Arnseth, Vibeke Grøver Aukrust, Sten Ludvigsen, Roger Säljö and Svein Østerud, for helpful suggestions and comments on a previous version of the paper.

#### REFERENCES

Billig, M. (1997) The dialogic unconscious: psychoanalysis, discursive psychology and the nature of repression, *British Journal of Social Psychology*, **36**, 139-159.

Billig, M. (1996) Arguing and Thinking, 2<sup>nd</sup> Edition. Cambridge: Cambridge University Press.

Edwards, D. and Potter, J. (1992) Discursive Psychology. London: Sage.

Edwards, D. (1996) Discourse and Cognition. London. Sage

Engeström, Y. (1999) "Communication, Discourse and Activity" (manuscript)

Have, P. ten (1990) 'Methodological issues in conversation analysis', Bulletin de Méthod. Socio., Nr. 27 (June): 23-51

Garfinkel, H. (1967) Studies in Ethnomethodology. Englewood Cliffs: Prentice Hall.

Schegloff, E. 'Whose text? Whose context?', Discourse & Society (1997) 8: 165-87,

Suchman, L. (2000) Embodied Parctices of Engineering Work. In Mind, Culture and Activity, 7(1&2)

Wittgenstein, L. (1953) Philosophical Investigations. Oxford: Blackwell.