# **Ethnography for Design?**

**Terry Hemmings and Andy Crabtree** 

The School of Computer Science and Information Technology The University of Nottingham Jubilee Campus, Wollaton Road Nottingham NG1 8BB United Kingdom 0115 84 66512 {tah; axc}@cs.nott.ac.uk

### ABSTRACT

Ethnography is a widely used term in contemporary design circles though is not often recognized that this term glosses a host of different analytic perspectives on social interaction. A broad distinction may be drawn between interpretive and non-interpretive approaches to ethnographic inquiry. This paper articulates the distinction with particular reference to ethnomethodology, which has dominated ethnographic inquiry in a design context following Lucy Suchman's pioneering work in the field.

## Keywords

Ethnography, ethnomethodology, workplace studies.

# ETHNOGRAPHY FOR DESIGN

The term 'ethnography' marks a distinction between quantitative and qualitative approaches to social science research and carries with it a commitment to a period and degree of immersion in the social setting being studied sufficient to reach a coherent understanding of what happens there and how. The approach is one of the oldest in the social research armoury and although falling from favour in the social sciences following the urge to professionalism and commensurate rise of logical positivism, it has been found to be of considerable utility to the designers of interactive systems [4].

Ethnography has been of utility to design since the 'turn to the social' [14] and the 'interpretive' approaches of the social sciences [15] occurred in the early 90s. The appeal of ethnography to design follows from the recognition by designers that the development of interactive technologies increasingly relies upon an appreciation of the social circumstances in which systems are deployed and used [10]. The approach is particularly concerned to identify and convey to designers the local working practices through the accomplishment of which everyday activities are ordered or

#### COPYRIGHT NOTICE

coordinated by people in their interactions together, thereby elaborating the social demands that may be placed on new computing systems in their collaborative use [1].

Emphasis on the coordination of activities in interaction leads ethnographers to speak of the 'social organization' of activities or, more simply, of 'cooperative work' [20]. This distinct focus underpins ethnography's appeal to and purchase in systems design and betrays a certain *analytic* take on ethnographic inquiry. Simply put, when invoking the notion of ethnography in a design context, ethnomethodologically-informed ethnography is often being referred to. When speaking of ethnography in this paper, the word might be and indeed should be heard as it often heard, namely as a gloss on is the ethnomethodological approach that has 'dominated' [18] ethnographic inquiry in design following Suchman's pioneering work in the field [19].

# THE ETHNOMETHODOLOGICAL ANALYTIC

Ethnomethodology is a unique analytic approach to the study of social interaction insofar as it eschews any form of 'interpretation' as that notion is understood in the social sciences. To draw out the distinction, conventional social science approaches to ethnographic inquiry employ the analytic categories that make up particular generic representational formats (theories and models) to codify ethnographic findings [16]. The act of codification requires the analyst to treat observed events as symbolic forms or 'types' of action that have an indexical relationship to an underlying organization of social activity described by some theory or model.

Once treated as symbols or signs, it becomes possible to attach the analytic categories making up the model employed to the events observed. The practical problem the analyst must contend with in undertaking this work is one of deciding just which analytic category applies to which event? He or she cannot appeal to the analytic categories to resolve the problem however, as they do not provide sufficient instruction for their application to the contingent events to which they are being applied. Consequently, the analyst finds him or herself in a situation where he or she must engage in an ad hoc act of interpretation in order to work out what the instructions 'are definitely talking about' with reference to the contingent case to hand [8].

Interpretation is inevitable in conventional social science approaches to ethnographic inquiry, where the notion of 'conventional' refers to approaches that employ generic representational formats (theories or models) to make sense account for the interaction of and observed. Ethnomethodology eschews the use of generic representational formats. As Garfinkel [9] puts it,

[Ethnomethodology] is not an interpretative enterprise. Enacted local practices are not texts which symbolise 'meanings' or events. They are in detail identical with themselves, and not representative of something else. The witnessably recurrent details of ordinary everyday practices constitute their own reality. They are studied in their unmediated details and not as signed enterprises.

Ethnomethodology eschews interpretation as the use of generic representational formats glosses, obscures, ignores and in other ways passes working practice by. Thus, whatever we may learn from interpretive accounts it is not something of the organization of interaction as made visible and available to analysis by the parties to interaction.

It might otherwise be said that in substituting a members' perspective for an analysts' perspective [22], the real world, real time, naturally organized character of work-in-context is ignored and replaced by an abstract analytic account [17]. Ethnomethodology is therefore concerned to describe work in its own terms – in *recognizable* details of its practical interactional accomplishment. Ethnomethodology furnishes 'praxio-logical accounts' then [6] that describe the 'phenomenal fields of ordinary human jobs' [9]. In a design context, these accounts have become known as 'studies of work' or 'workplace studies'. It is important to stress that the notion of 'work' does not imply paid labour but draws attention to the interactional ordering (or coordination) of ordinary activities that take place in and 'reflexively constitute' [7] some discrete setting.

Over the last decade a corpus of workplace studies has accrued that describes the interactional ordering of ordinary human jobs in a wide variety of settings including: air traffic control [13], the print industry [2], museums [12], libraries [5], banking [11], hospitals [3], domestic environments [21], and many, many more. Many of these studies were explicitly commissioned to inform the design of new technologies. Their purchase in design relies on the fact that they make real world working practice available to consideration in a technical context, a factor which represents a serious challenge to interpretive approaches wishing to engage in the design exercise. It might otherwise be said that is necessary for the interpretive to move beyond the gloss.

# ACKNOWLEDGMENTS

This research was funded by the Equator IRC (EPSRC GR/N15986/01). <u>www.equator.ac.uk</u>

## REFERENCES

- 1. Button, G. and Harper, R. (1996) "The relevance of 'work-practice' for design", *Journal of CSCW*, vol. 4 (4), pp. 263-280.
- Button, G. and Sharrock, W.W. (1997) "The production of order and the order of production", *Proc. of ECSCW* '97, pp. 1-16, Lancaster, United Kingdom: Kluwer.
- Clarke, K, Hartswood, M., Procter, R. and Rouncefield, M. (2001) "Information technology and managerial work in a hospital trust", paper presented at *The 2001 Nurses & Therapists Informatics Conference*, London: British Computer Society Nursing Specialist Group.
- 4. COMIC Deliverable 2.4 (1994) *CSCW Requirements Development*, Esprit Basic Research Project 6225, Lancaster University: Sociology & Computing Departments. <u>ftp://ftp.comp.lancs.ac.uk/pub/comic/</u>
- Crabtree, A., Twidale, M.B., O'Brien, J. and Nichols, D.M. (1997) "Talking in the library", *Proc. of DL* '97, pp. 221-228, Philadelphia, Pennsylvania: ACM Press. www.mrl.nott.ac.uk/~axc/documents/DL\_97.pdf
- 6. Crabtree, A. (2001) "Doing workplace studies: praxiological accounts – lebenswelt pairs", *TeamEthno Online*, Issue 1 (1). <u>www.teamethno-online.org/</u>
- 7. Czyzewski, M. (1994) "Reflexivity of actors versus the reflexivity of accounts", *Theory, Culture and Society*, vol. 11, pp. 161-168.
- 8. Garfinkel, H. (1967) "Practical sociological reasoning: following coding instructions", *Studies in Ethnomethodology*, pp. 18-24, Englewood Cliffs, New Jersey: Prentice-Hall.
- 9. Garfinkel, H. (1996) "Ethnomethodology's programme", *Social Psychology Quarterly*, 59 (1), pp. 5-21.
- 10. Goguen, J. (1993) "Social issues in requirements engineering", *Proc. of RE '93*, pp. 194-195, San Diego: IEEE Press.
- 11. Harper, R., Randall, D., and Rouncefield, M. (1999) Organizational Ethnography: A Post-Disciplinary Approach to Retail Finance, London: Routledge.
- 12. Hemmings, T., Randall, D., Francis, D. and Marr, L. (1997) "Situated knowledge and the virtual science and industry museum", paper presented at the *Proc. of Museums and the Web* '97, Los Angeles: Archive and Museum Informatics.
- 13. Hughes, J.A., Randall, D., and Shapiro, D. (1992) "Faltering from ethnography to design", *Proc. of CSCW* '92, pp. 115-122, Toronto: ACM Press.
- Hughes, J.A., King, V., Rodden, T., and Andersen, H. (1994) "Moving out of the control room: ethnography in systems design", *Proc. Of CSCW* '94, pp. 429-438, Chapel Hill, North Carolina: ACM Press.
- 15. Knudsen, T. *et al.* (1993) "The Scandinavian approaches: theories in use, of use and organization of interdisciplinarity", *Proc. of IRIS 16*, pp. 29-38, University of Copenhagen: Department of Computer Science.

- 16. Lynch, M. (1993) "Instructed actions and lebenswelt pairs", *Scientific Practice and Ordinary Action*, pp. 287-299, Cambridge: Cambridge University Press.
- 17. Sacks, H. (1963) "Sociological description", *Berkeley Journal of Sociology*, vol. 8, pp. 1-16.
- Shapiro, D. (1994) "The limits of ethnography: combining social sciences for CSCW", *Proc. of CSCW* '94, pp. 417- 428, Chapel Hill, North Carolina: ACM Press.
- 19. Suchman, L. (1987) *Plans and Situated Actions: The Problem of Human-Machine Communication*, Cambridge: Cambridge University Press.
- 20. Suchman, L. (1989) Notes on Computer Support for Cooperative Work, WP-12, University of Jyväskylä, Finland: Department of Computer Science.
- Tolmie, P., Pycock, J., Diggins, T., Maclean, A. and Karsenty, A. (2002) "Unremarkable computing", *Proc.* of *CHI 2002*, pp. 399-406, Minneapolis: ACM Press.
- 22. Zimmerman, D. and Wieder, D.L. (1973) "Ethnomethodology and the problem of order", Understanding Everyday Life (ed. Douglas, J.D.), pp. 285-298, London: Routledge and Kegan Paul.