

# Fieldwork for Systems Design

*Instructors:* Dave Randall (Manchester Metropolitan University) & Mark Rouncefield (Lancaster University)

*Origin:* An update of a highly rated CSCW and ECSCW tutorial to reflect recent developments in the field.

*Goals and Content:* The tutorial has the objective of developing an appreciation of the various and practical issues that arise during the conduct of ‘naturalistic’ enquiry. Competing perspectives will be examined, compared and contrasted. The tutorial will assess competing claims concerning the relevance of the ‘social setting’ in which work takes place and the consequences for system development. We argue that the study of *socially organised cooperation* is central to new generations of systems in organisational contexts.

- Participants will learn the relevance of theoretical perspectives to the practice of fieldwork, and to the problem of capturing social complexity.
- The practical problems, strategies and choices of the fieldworker in performing observational studies will be discussed.
- Experiences gleaned from a range of studies in commercial and industrial settings, domestic environments and public spaces - will be examined.
- Technologies for supporting analysis, especially the use of video, will be examined.
- Problems of method, communication and comprehension in collaborations between ethnographer and system developer will be presented.

*Intended audience:* The tutorial will be of use to those who are intending to embark on observational studies themselves, and to system developers who wish to become familiar with issues arising from the adoption of observational methods.

*About the instructors:* Dave Randall, a Senior Lecturer at Manchester Metropolitan University, has been involved in a range of projects including; Air Traffic Control (ATC); retail finance; museums and domestic environments.

Mark Rouncefield, a Senior Research Fellow at Lancaster University has conducted fieldwork investigations of financial services; managerial work; healthcare and domestic environments.

---

## TUTORIAL SPECIFICATION

# CSCW 2004

## Fieldwork for Systems Design

Dave Randall and Mark Rouncefield

### **Tutorial Objective.**

The tutorial develops and expands themes concerning the use of fieldwork methods in CSCW covered in tutorials previously given by the instructors. In particular, it has the objective of developing an appreciation of the various theoretical perspectives utilised by CSCW practitioners and the practical issues that arise during the conduct of 'naturalistic' enquiry.

A number of competing theoretical perspectives will be examined, compared and contrasted. A range of perspectives including Glaser and Strauss's 'Grounded Theory'; 'Soft Systems'; Distributed Cognition; Ethnomethodology; Participative Design; 'business-led' perspectives such as Business Process Re-engineering; and Activity Theory will be discussed. Examples of contexts in which each have been used will be provided.

The tutorial will assess competing claims concerning the relevance of the 'social setting' in which work takes place and the consequences for system development at different stages of the system life-cycle, with special reference to problems of informing requirements and producing evaluations of, co-operative systems. We examine the practice of fieldwork at a number of levels including the theoretical, conceptual and practical, and use our experience of working with design and management teams to illustrate many of the practical problems associated with doing fieldwork.

Particular emphasis will be placed on complementarity of approach as manifested in contrasts between formal conceptions of process and notions of the 'accomplishment' of work; solution-driven and problem-driven conceptions of analysis; and on professional versus participative privileges in design. Throughout, we will stress the development of a paradigm in the design of cooperative systems that relates the design

---

of systems to the design of organizations. In particular, we will attempt to specify the range of organizational knowledge that might be typically obtained from ethnographic study and in return relate our knowledge of work practices to the demand for new systems.

We argue that the complexity of the organization demands an eclectic and evolving view of data and concept. Further, we argue that the study of *socially organised cooperation* is central to new generations of systems in organizational contexts, and that sociological analysis can be used as an adjunct to modern business/I.T. strategies. That is, systems to support co-operative organizational activities often have a plethora of conflicting requirements, influenced, at least in part, by the social character of work in the domain. Our arguments will be illustrated by examples drawn from empirical studies in a range of domains including commercial and industrial settings, domestic environments and public spaces.

### **Tutorial aims and contents.**

The tutorial aims therefore to meet a number of aims associated with the above objective.

1. Participants will learn the relevance of theoretical perspectives to the practice of fieldwork, and to the problem of capturing social complexity.
  2. We will emphasise the issue of analysis both as it relates to theoretical positions and in examining data /developing appropriate concepts
  3. The practical problems, strategies and choices of the fieldworker in performing observational studies will be discussed in detail. Experiences gleaned from a range of studies will be offered for examination.
  4. The technologies available for supporting analysis, with particular reference to the use of video, will be dealt with in detail. In each instance, the possibility that the analytic stance adopted may have specific 'payoffs' for specific purposes will be examined.
  5. Problems of method, communication and comprehension in interdisciplinary collaborations such as that between ethnographer and system developer will be presented. It will be emphasised that many of these problems are matters of practical communication procedures.
  6. The tutorial will include comprehensive notes and an updated annotated bibliography. It will review and build on existing literature on ethnography, systems design, and change management but will endeavour to maintain a practical focus.
-

## **Tutorial Style and Duration.**

The tutorial will be modelled on other successful tutorials presented by the authors at previous CSCW, ECSCW and HCI conferences. It is intended that the tutorial will be of use both for those who are intending to embark on observational studies themselves, and for system developers who wish to become familiar with issues arising from the adoption of observational methods. This is both as an adjunct to process modelling activities and to gain some understanding of the potential fruitfulness and pitfalls of interdisciplinary collaboration involving social science.

The tutorial will last one half day and may include a variety of presentational techniques, including presentation of video material, ethnographic text, and computer support for ethnographic analysis.

Our style is informal and we welcome the opportunity to deal with issues raised by others in the course of the day.

## **Provisional agenda.**

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
10 min	Introduction	Randall
30 mins	Theoretical perspectives and analytic procedures I	Randall and Rouncefield
30 mins	Theoretical perspectives and analytic procedures II	Randall and Rouncefield
20 min	Problems of post-disciplinary enquiry: 'scoping', 'capturing', 'evaluating'	Randall and Rouncefield
	COFFEE BREAK	
30 min	Video, Audio, Fieldnotes, and Computer Support. Methodologies for domestic environments and	Randall and Rouncefield

---

	public spaces	
20 min	Outputs- 'Writing up' and presentation of results.	Randall and Rouncefield
40 min	Closing discussion	Randall and Rouncefield

The tutorial will draw heavily on the practical experiences of the authors in ethnographic work undertaken in commercial and research contexts, outlining lessons learned from that experience and conclusions to be drawn in relation to approaches to change management. In particular, several examples are given from data that has been collected in Air Traffic Control, the retail financial services sector, museums and libraries, domestic environments and public spaces. Most of the data we use is directly taken from our own observational studies in a variety of contexts.

## **Instructor Biographies**

Both instructors have worked and continue to work on projects involving the use of ethnographic techniques for systems requirements capture. These projects have variously involved members of the departments of Sociology and Computing at Lancaster University and Manchester Metropolitan University.

Dave Randall, a senior lecturer at Manchester Metropolitan University, has been involved in a range of projects including; Air Traffic Control (ATC); retail finance; museums and domestic environments.

Mark Rouncefield - <http://www.comp.lancs.ac.uk/sociology/mrouncepp.html> - a Senior Research Fellow at Lancaster University has conducted fieldwork investigations of financial services; managerial work; design; healthcare and domestic environments. He is currently involved in the DIRC ([www.dirc.org.uk/](http://www.dirc.org.uk/)) and EQUATOR ([www.equator.ac.uk](http://www.equator.ac.uk)) projects.

A [website](http://www.comp.lancs.ac.uk/sociology/staff/rouncefield/Fieldwork/Tutout.html) - <http://www.comp.lancs.ac.uk/sociology/staff/rouncefield/Fieldwork/Tutout.html> - has been developed containing references and resources to supplement the tutorial. This includes sections on:

- Theory: online resources on the various theoretical approaches that employ ethnographic methods of data collection.
- Practice: guides to ethnographic methods.
- Fieldwork: extracts from ethnographic fieldwork data.
- Online papers on the use of fieldwork methods.
- Practical Issues: practical aspects of fieldwork including discussions on the use of video and tool support.
- Ethnography & Design Issues:
- Ethics: ethical issues in fieldwork
- Annotated Bibliography

This is an updated version of highly rated CSCW and ECSCW' - tutorials presented by the instructors - to reflect some recent developments in the field.

## **A/V and computer equipment required**

OHP - for showing the tutorial slides

VCR and TV

A facility for accessing and back projecting the tutorial web pages onto a screen

---