

COMP3503/IENV7933

Interaction Design

Week 3—Learning to look:
Ethnography

Overview

- What is ethnography?
- Some practicalities of ethnographic observation

but first.... some clarification

- Human-Computer Interaction
 - **individual, scientific, analytic**
- Computer Supported Cooperative Work
 - **social/organisational, social/technical**
- Ubiquitous Computing
 - **computer all around us**
 - hardware, applications, people
- Tangible interaction
 - **technology-endowed physical artefacts**
- Interaction Design



What is ethnography?

- See ethnography resources section on the course web page for more detail
 - **Thanks to Mark Rouncefield for original slides**

The interest in ethnography

- stimulated by two related motivations:
 1. **dissatisfaction with traditional methods of 'requirements capture'**
 2. **to uncover the context-of-use in which systems are to be placed.**

Ethnography

- The ethnographic method is known by various names - 'participant observation'
- it is not the standard model of social research.
- there are signs that it is becoming more 'respectable' as the 'failure' of the standard methods to provide adequately grounded data becomes more apparent.

The Rationale of Ethnography

- seeing society from the social actor's 'point of view'.
- to display the social organisation of activities as they are revealed through involvement in the natural setting of the activity.
- the study of social life should begin with coming to terms with meaning and the experience of social actors within their natural circumstances
- discovering such meanings requires examining social actors within their natural settings

Displaying the Social Organisation of Activities

- the purpose is to display the 'real world' social organisation of activities - how in actuality the domain of concern is organised by the persons in that domain.
- aims to find the orderliness of ordinary activities rather than imposing an order on them as a product of methodological procedure.
- ethnography insists on approaching the investigation of a setting without theoretical preconceptions as to what will be found there.

Two Guidelines

- IN THE FIRST INSTANCE, AVOID THEORETICAL PRECONCEPTIONS
- RENDER THE FAMILIAR STRANGE YET RECOGNISABLE

Avoid theoretical preconceptions

- Discover the social organisational properties of the setting as it is naturally exhibited.
- The social world is not organised in ways that analysts and researchers want to find it.
- ethnography does not want to impose a framework on the setting but to discover the social organisational properties of that setting as it is naturally exhibited

Render the familiar strange yet recognisable

- 'It is not the fish that discovers the water'.
- Things which are familiar are extremely difficult to see clearly because of their very familiarity.
- What is ordinary to those in the setting has to be made extra-ordinary and yet recognisable as a pattern of organised activities

Framework for the ethnographic analysis of work

- a heuristic to emphasise how work and its activities needs to be looked at.
- not a check list of items but the rough sketch of an analytic framework
- not a set of boxes into which to slot data
 - a framework for understanding

Basic Precepts

- Assume from the outset that the world is socially organised
- See the work as socially organised from within the setting
- Understand the work and its activities in terms that members' understand and use
- Examine work activities in all their detail
- Treat activities as situated
- Attend to the Working Division of Labour

Basic Precepts (cont.)

- Tasks and Activities are Sequenced
- Attend to the Ecological Organisation of Activities
- Don't draw a distinction between expert knowledge and practical knowledge
- Don't treat settings as equivalent
- Be wary of too sharp distinction between activities and technology

What has this to do with design?

- to obtain better information about the 'real world' of work by looking at the social organisation of work setting as natural settings

Advantages of ethnography in this respect

- the 'real world' organisation of work can deal the unaware system designer some nasty surprises
- sensitising to the 'real world' context of work activities.
- used to directly inform design of systems which have more resonance with 'real world' circumstances of use
- help answer important questions about what to leave to human skill and what to leave to the computer
- offer the opportunity to open up design possibilities - greater knowledge of the patterns of life within a setting may alter the frame of reference for design.

The problem of scale

- The main use of ethnography has been within research settings - restricted to relatively small scale and relatively confined environments
- Scaling inquiries up to the organisational level or to processes distributed in time and space is a much more daunting prospect in raising issues of depth and representativeness

The pressure of time

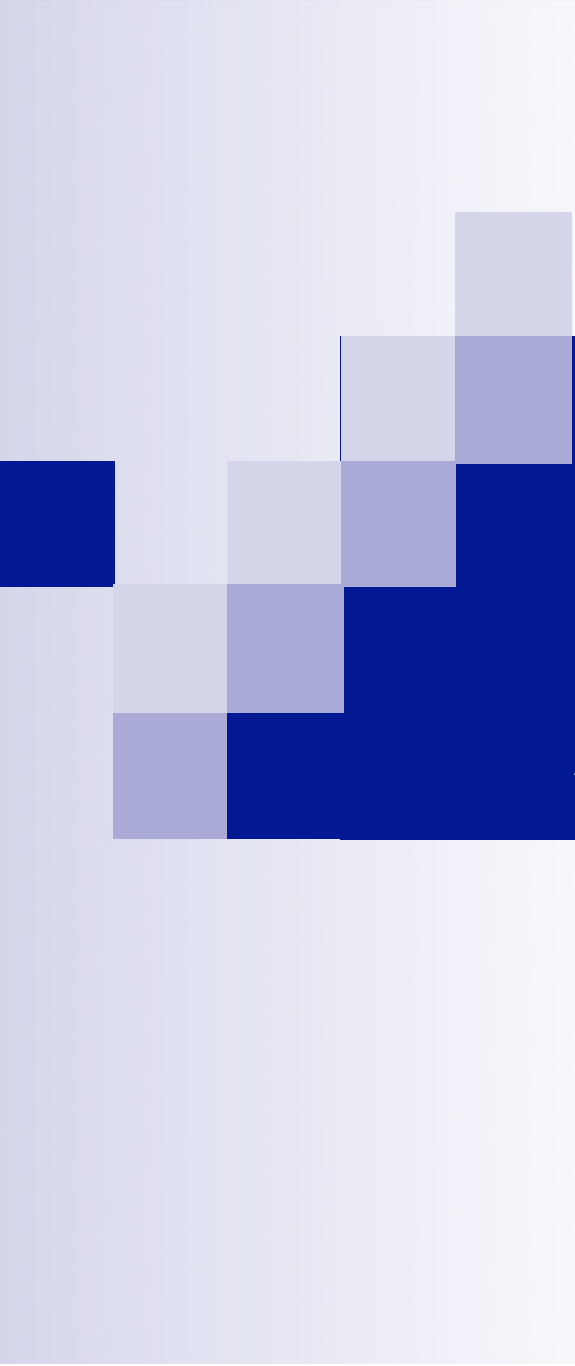
- ethnography is a 'prolonged activity' and in the context of social research can last a number of years

Communication

- communicating ethnographic findings to designers.
- ethnographic analyses are typically discursive and lengthy, looking nothing like the blueprint diagrams which are de rigueur in systems engineering

The role of the ethnographer

- Moving out of the research setting into a more commercial one raises ethical issues
- access to sites vulnerable to the contingencies of the commercial and industrial world.
- Ethnographic inquiries should be conducted in a non-disruptive and non-interventionist manner, principles which can be compromised given that much of the motivation for IT is to reorganise work
- fieldworkers not only require access to relevant sites but also need acceptance on the part of those who work in them.



Some Practicalities of Ethnographic Analysis.

‘Practical’ Matters - Ethnographic Procedure

- do not read methodology books
 - **Ethnography is not an esoteric procedure nor is it searching for things that are hard to find.**
- hanging around is not the point
 - **while much of ethnography does involve ‘hanging around’ this is not its point but a means of achieving the objective of uncovering the sociality of work.**
- shut up and listen.

Access, Sponsors & Gatekeepers

- getting permission for the research
- getting accepted in the research site
 - Obtaining permission is usually a matter of going through 'official channels' and arguing one's case to relevant authority.
 - finding who the relevant authorities are is often not a straightforward business
 - 'sponsors' can be invaluable since they are likely to know not only whom to see but how to go about presenting the case.

Lessons from the field

- Gear fieldwork requirements to what the organisation can reasonably provide
 - permission is more likely to be forthcoming if there is a strong reassurance that the research will not involve too much disruption
- Do not be deceitful about requirements
 - be as clear as possible about what is needed
- What is in it for the organisation?
 - think about how the organisation and/or the managers, could benefit from the research
- Be clear about arrangements
 - establish clear contact points, dates and other arrangements that will be necessary.

Fieldworker Demeanour

- principles of conduct which should be followed as far as possible.
 - respect the setting and its participants
 - be courteous
 - .but don't be a doormat.
 - show your interest
 - preserve the anonymity of those in the setting
 - if they work shifts, so do you
 - don't just disappear without saying goodbye

What does the fieldworker collect by way of data?

- Data collection is the least of the problems of ethnography.
- The information is, very often, laying around in plain sight but no one has bothered to collect it up.
- There is nothing special to look for, nothing to find that is hidden.

What can be collected?

- an illustrative list of the sorts of things that can be collected and recorded:
 - **conversations**
 - **descriptions of activities**
 - **diagrams of places**
 - **descriptions of places**
 - **rough sociograms of who talks to whom and when**
 - **jokes**
 - **interviews**
 - **job descriptions**
 - **memos, notices, graffiti**
 - **happenings**
 - **transcripts of meetings**
 - **forms**
 - **war stories**

‘Doing’ Ethnography

■ Beginning fieldwork

- **“You arrive, tape recorder in hand, with a grin rigidly planted on your face. You probably realise that you have no idea how your grin is being interpreted, so you stop and nervously attempt a relaxed pose. Then you realise you have no idea how that is being interpreted. Soon you work yourself into the paralysis of the psychiatrist in the strip joint - she knows she can’t react, but she knows she can’t not react. It is little wonder that sometimes people hide in a hotel room and read mysteries.” (Agar 1980)**

Getting started

- the initial phase of an organisational ethnography is one of familiarising oneself with that organisation
 - characterised by the frantic collection of every piece of information that the ethnographer is exposed to; make notes on everything that you see and hear, on what you're told directly and on what you hear on the other side of the room; sketch plans of office spaces and desktops; glance at official documents and scribbled notes; tape record anything that you can.
- start anywhere you can

Summary

- Ethnography is essentially about uncovering what really happens
- Rich, detailed, situated descriptions of activity
- Requires a degree of modification for use as a commercial approach to informing design
- Lebbon, C., Rouncefield, M. and Viller, S. (2003) Observation for innovation, In *Inclusive Design: Design for the whole population* (Eds, Clarkson, J., Coleman, R., Keates, S. and Lebbon, C.) Springer, London, pp. 402-419.