# Qualitative approaches

Background and motivation

Christopher Frauenberger

User-Research Methods VU 2017

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# What is an **ethnographic approach** and why is it relevant for design?

# Ethnography

- **observing** interactions in social settings
- **living** with the cultures under study
- deep **hanging out**

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# Anthropology

Bronislaw Malinowski (1884-1942) Trobriand Islands

# Anthropology

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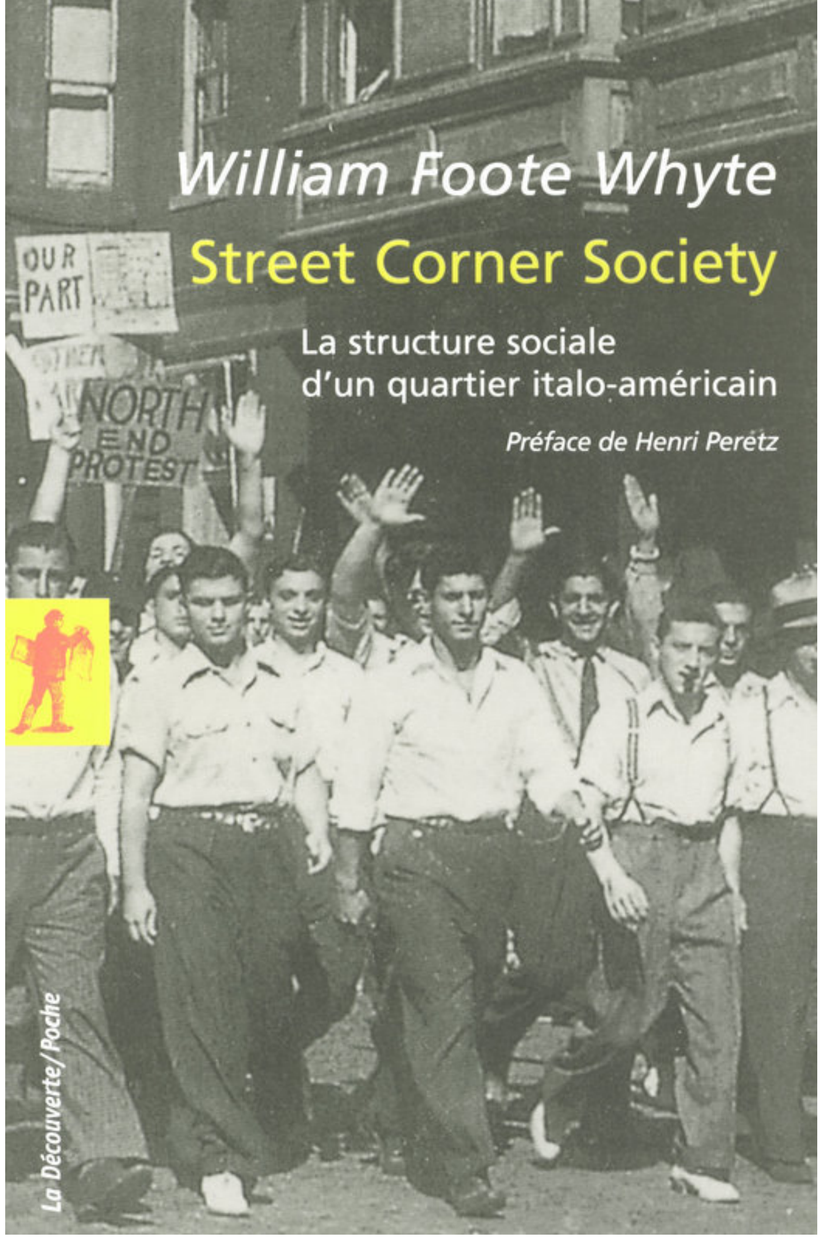
Margaret Mead 1901-1978 Cultural anthropologist

**Coming of Age in Samoa** 1928




# William Foot-Whyte

Sociologist – Chicago School

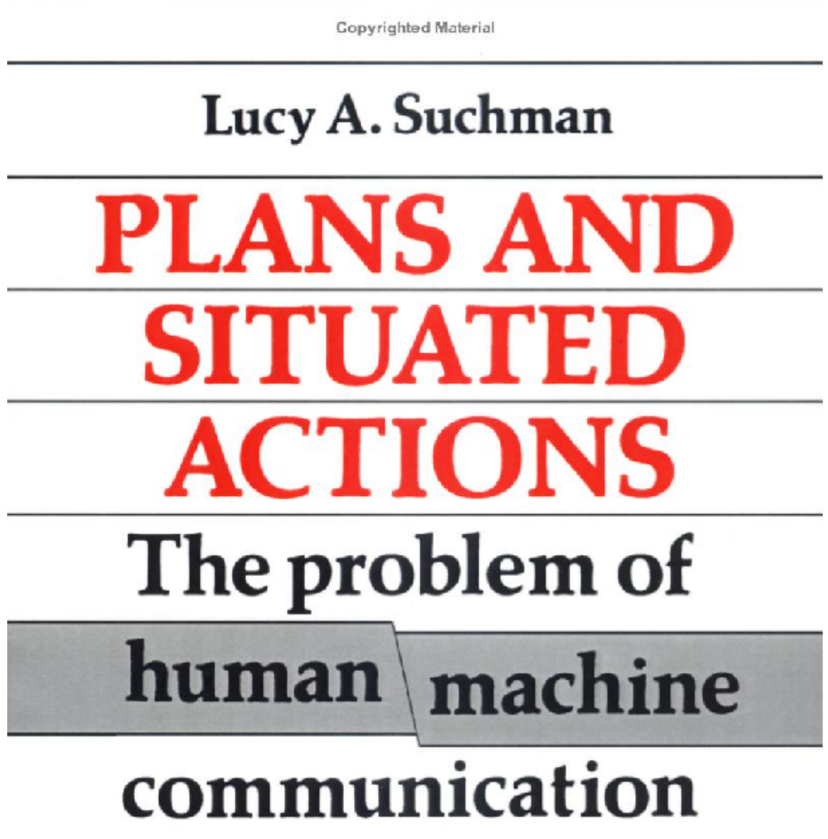
One of the first to be applied within western culture

Urban sociology, researching **selves** as well as **others**

Street Corner Society (1943)

**Lucy Suchman**

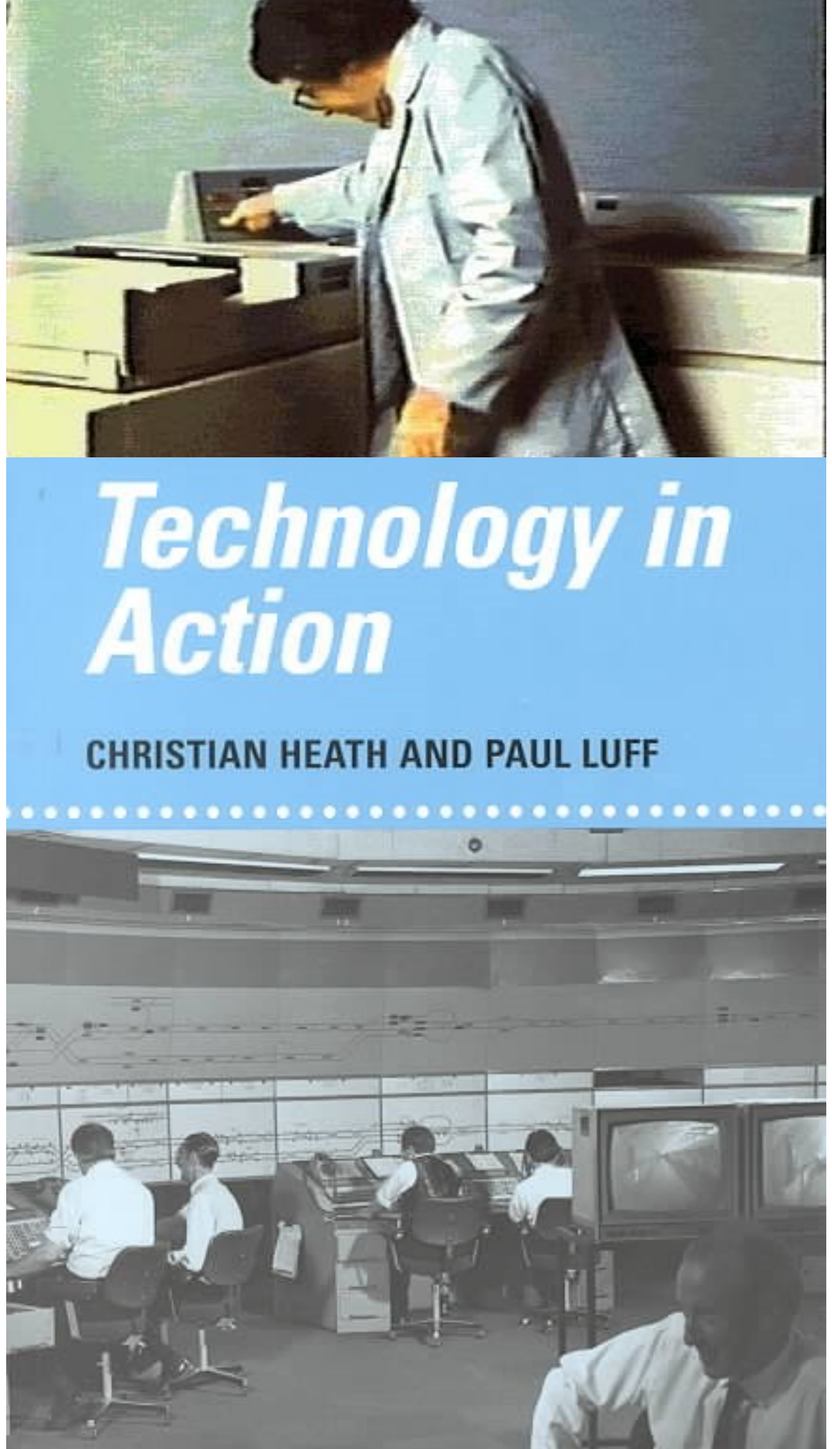
Cultural anthropologist




Seminal PhD study of photocopier use at PARC

**Plans and Situated Action** (1986)

**Human-Machine Reconfigurations** (2006)




**CSCW** names

**John Hughes et al** Lancaster Uni

Classic: Air traffic control studies CSCW92

**Christian Heath & Paul Luff** Kings College London

Classic: London underground studies ECSCW91

# Ethnography for Design

| Differences | Similarity |
| --- | --- |
| **Shorter** time frames<br>Hours to weeks rather than months to years | Going **into the field**<br>Observations in-situ |
| Different goals<br>Ultimately for **informing technology** design / evaluation, not cultural theory per se | **Understanding** not just what people say but what they actually do, where, when, why, how, with what etc. |

# Definition

Ethnography informs design by revealing a **deep understanding of people** and how they make sense of their world.

Ethnography is a research method based on **observing people in their natural environment** rather than in a formal research setting.

When ethnography is applied to design, it helps designers **create more compelling solutions**.

[»An Ethnography Primer« AIGA - the professional association for design – founded 1914, represents 22,000 members]

# Basics

**Observations**, Interviews (& digital ethnography)

**Seeing** through others' eyes

Prolonged immersion lends itself to depth of understanding of how participants make sense of their world

**Learning** »native« language & informal aspects of culture

**Identifying** what's taken for granted, tacit knowledge

What people say they do versus what they actually do

Seeing things that people would not think to talk about

The rituals of routine practices

**Building** sensitivity to context and action-in-context

**O'Reilly**

Ethnographic Methods

## Reflexivity

Being aware of limitations and advantages of studying other people's lives

Reflexive about limits and advantages and impacts of choices

## Holism

Holism recognises interconnecteness of all aspects of social life

Pays attention to the wider structures and thoughts/feelings/everyday actions of people in context »practice of social life«

## Iterative-inductive

Data collection, analysis, writing not discrete phases but inextricably linked

# Why

Increasingly **complex** and **situated** applications of technologies

Diverse settings: office, home, public spaces, care etc

Diverse design-relevant issues: social, spatial, temporal, aesthetic, experience

**Challenges** traditional requirement engineering

Tame vs wicked problems

Neat models vs messy world

**Challenges** traditional data gathering methods

surveys, focus groups, lab studies, usability studies

only find out what you ask about

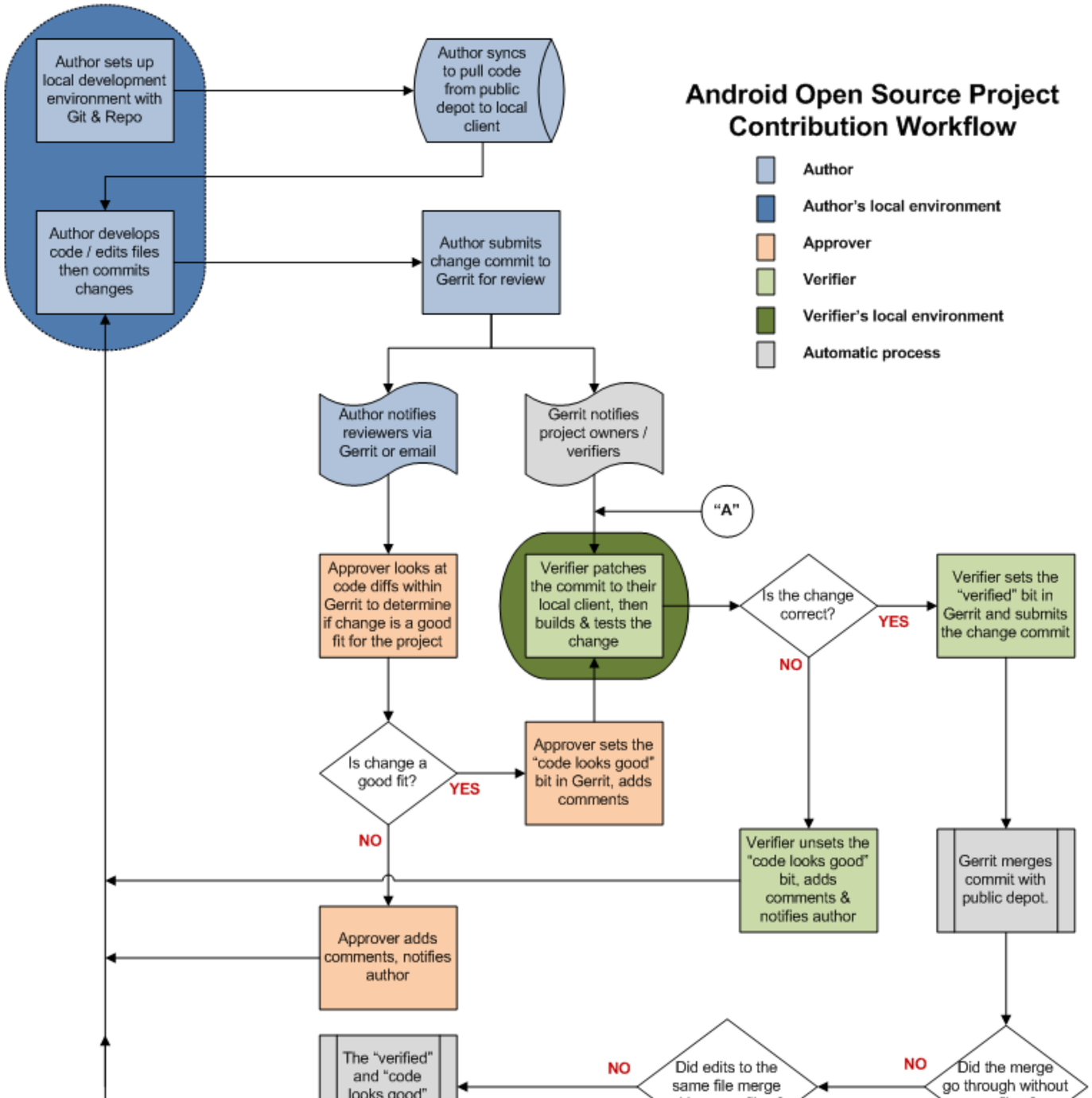
no context information

little or no design insights

# Why

For technology design to work, it has to be **sensitive** to the practical accomplishment of interaction in **real** settings

# Limitations of models

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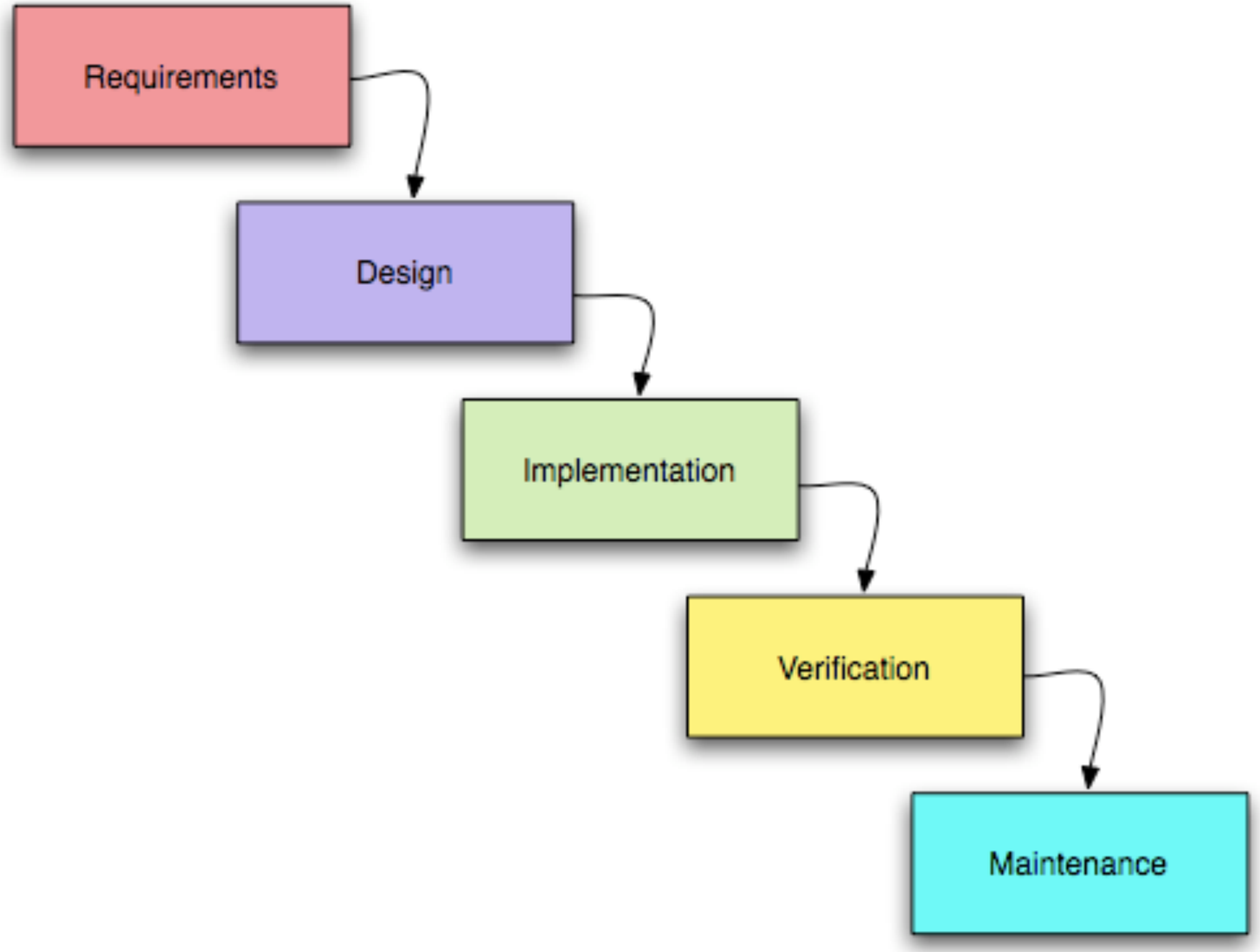
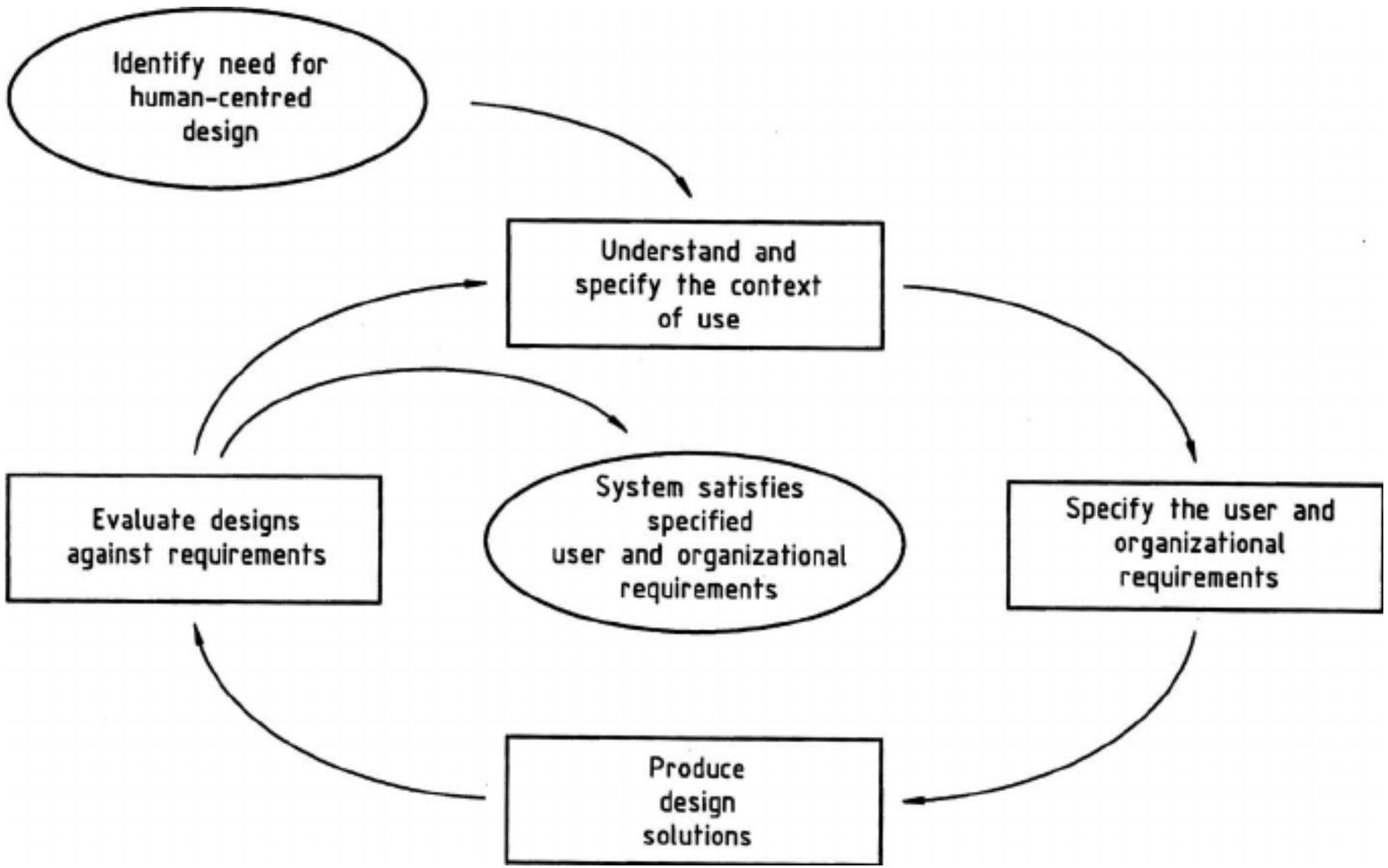
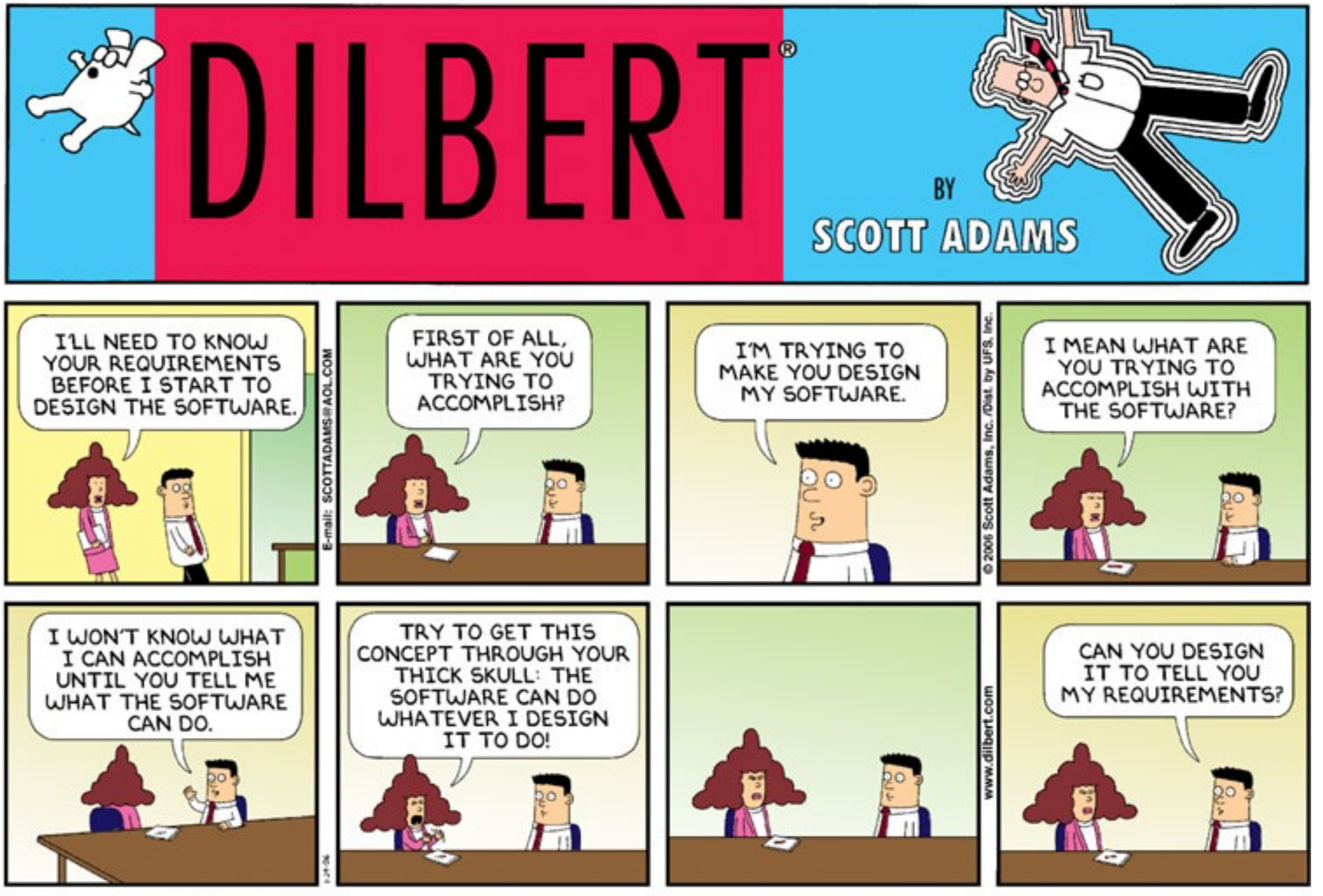
# Analogy to SW Development



# Analogy to User-Centred Design Model



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# What ethnography can contribute

Enhance **understanding** of developers/designers

How people interact with technology within the domains and contexts

Sensitising and informing requirements

Provide **generative tools**

That support innovation and creativity

Provide a **critical lens**

For evaluating and prioritising design ideas

For evaluation

Serve as a guidepost or **point of reference**

[from Blomberg, Burrell & Guest, 'An ethnographic approach to design' in Handbook of Human Computer Interaction, 2003]

# Types of ethnography

## Concurrent ethnography

to accompany development with parallel ethnographic study.

## Quick and dirty ethnography:

to provide a general but informed sense of the setting for designers.

## Evaluative ethnography

to verify or validate a set of already formulated design decisions.

## Re-examination of previous studies

to inform initial design thinking.

## Relevance to academic fields

Commonly used research method in:

- human computer interaction (**HCI**)
- user centred design (**UCD**)
- computer supported cooperative work (**CSCW**)
- related areas (**mobile**, tangible, pervasive, learning etc)
- increasingly common in Information Systems / **Business** areas

Relationship between ethnography & design subject of ongoing debate and discussion!

# Relevance to industry

Promoted by **professional** associations

- AIGA design professionals
- Interaction design
- User experience

**In-house** capabilities – research and product development

Intel, IBM, Xerox, (Sapient), etc

Specialist **consultancies**

- Part of UCD offering (usability companies)
- Specialised user research

Relationship to **market research**

BUSINESS INSIDER STRATEGY

# Here's Why Companies Are Desperate To Hire Anthropologists

Drake Baer

Mar. 27, 2014, 4:22 PM 113,967

FACEBOOK LINKEDIN TWITTER EMAIL PRINT

At a time when we're debating the value of majoring in the humanities, major companies are increasingly hiring anthropologists.

Google, for example, hired an ethnographer to ferret out the meaning of mobile. Intel has an in-house cultural anthropologist, and Microsoft is reportedly the second-largest

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http://www.businessinsider.com/heres-why-companies-aredesperateto-hireanthropologists-2014-3

Google, for example, hired an ethnographer to ferret out the meaning of mobile. Intel has an in-house cultural anthropologist, and Microsoft is reportedly the second-largest employer of anthropologists in the world.

So the question becomes: Why are giant corporations now seeking cultural expertise?

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# IoT Needs Qualitative User Research

Qualitative research can be as easy as talking to someone, and it's definitely worth it.

Sameer Srivastava • Sep 23

MEDIUM
https://medium.com/iotforall/iot-needs-qualitative-user-research-37426f3afbb7

# Challenges

Limited **scale** - Confined in space and time

Good for smaller scale and where interactions are visible; problematic for larger scale or longer lived interactions and where work distributed

**Time** and **cost** - Resource intensive

Researcher time, effort and skill in the field & in analysis

Understanding **radical** new possibilities

How to go beyond what people do?

Problem of **communication** & **interpretation**

Move from rich messy dense data to communicating insights for design

# Responsibilities

Decisions

- Research focus/motivation
- Field, participants, timeframes, etc
- What you pay attention to / what gets included or not
- What methods you use (data collection, analysis etc)

Thus, its of critical importance

- Making **choices explicit** and **accountable**
- Being a **reflective practitioner**
- Background **assumptions**, tacit knowledge, biases etc
- Impact/**influence** of your choices on study

# Terminology

## User

Complex situated social contexts – more than one user!
user puts tech at the centre, not people being/living/doing etc

## Ethnographer

As HCI researchers we are not trained ethnographers but HCI magpies

# Terminology

Out of respect for the deep skills of people who are, perhaps better to talk about:

- Participant/non-participant observation
- Observational methods
- Qualitative methods
- Ethnographically informed methods
- Adopting/adapting ethnographic methods for the purposes of design

[Forsythe, D. (1999) "It's Just a Matter of Common Sense": Ethnography as Invisible Work, CSCW 8: 127-145]

# Methods

| We will look into | Chapters |
|---|---|
| • Observations | [4] |
| • Interviews | [5] |
| • Group-techniques | [6] |
| • Online-research, digital ethnography | [7] |
| • Experience Sampling and Diaries | [7] |
| • Probes | [7] |
| • Auto-ethnography | [7] |
| • Bio-metric data | [7] |
| • Surveys | [11] |
| • Lab-based-studies | [12] |