

Introduction to IN 5000/9000 Qualitative Research Methods in Information Systems

IN 5000/9000

January 17, 2024

Guri Verne,

Design of information systems group

Lectures: Wednesdays 14.15-16

Room: Smalltalk

The slides will be available on the course page after the lecture
You will find a detailed overview of the semester on the course page

- Lecturer
- Lecture topic
- Curriculum

Feedback (and some seminars): Thursdays 10.15-12

Room: Smalltalk

A schedule will be provided

Teachers

Guri

Fabiano

TA: Vetle

Guest lecturers

Research versus journalism or opinionating

My advice after a year without tech: rewild yourself
Mark Boyle

We can't all go and live in the woods, of course. But if we resist debt, resist gadgets, and reconnect with nature, the world might just change



The long read

Becoming a chatbot: my life as a real estate AI's human backup

For one weird year, I was the human who stepped in to make sure a property chatbot didn't blow its cover - I was a person pretending to be a computer pretending to be a person

by [Laura Preston](#)

Illustration: Getty/Guardian Design

Tue 13 Dec 2022 06.00 GMT



The recruiter was a chipper woman with a master's degree in English. Previously she had worked as an independent bookseller. "Your experience as an English grad student is ideal for this role," she told me. The position was at a company that made artificial intelligence for real estate. They had developed a product called Brenda, a

Discuss with your neighbor:

What can be differences between opinionating and research?

My advice after a year without tech: rewild yourself
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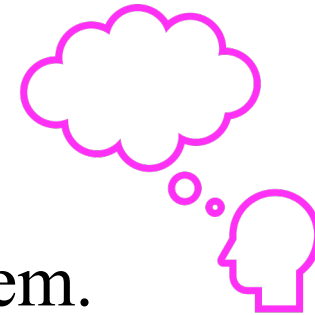


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Research produces new knowledge



... by asking questions and answering them.



There are different kinds of research
+ different kinds of questions
+ different approaches to answering them



Research logically begins with a question:
the Research Question



Different kinds of research



Natural science
Social science
Cultural science
.....



For example
Qualitative research
Quantitative research
Technology research
Design research



Different kinds of questions

Descriptive:

opens up for descriptions of conditions or situations, and explanations of how something changes or stays unchanged.

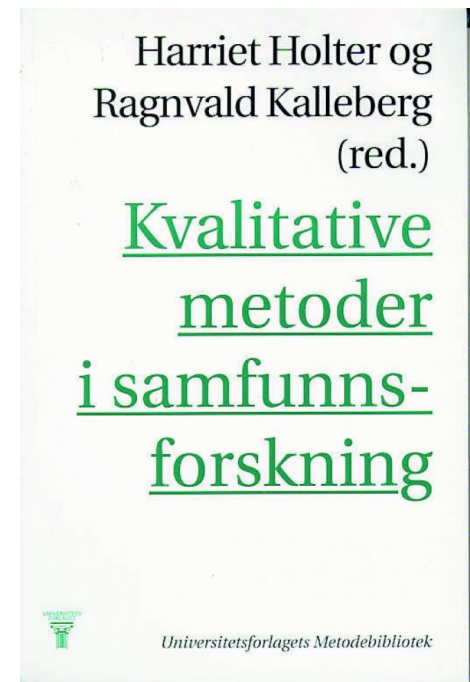
Evaluative/ normative:

we ask which value something has. Normative arguments are required to answer evaluating questions.

Constructive:

evaluating something can logically be used to suggest and discuss improvements to it.

(Kalleberg 1992, 2002)



Different approaches to answering

Qualitative research

Aimed to understand a social phenomenon

Working with qualitative data

Quantitative research

Originally from the natural sciences to study natural phenomena

Working with quantitative data

Include survey methods, laboratory experiments, formal methods (e.g. econometrics) and numerical methods such as mathematical modelling.

(Qualitative Research in Information Systems, Myers living version)

Qualitative research

“Qualitative research methods are designed to help researchers understand people and the social and cultural contexts within which they live. [...] the goal of understanding a phenomenon from the point of view of the participants and its particular social and institutional context is largely lost when textual data are quantified” (Myers living version).

Qualitative research involves working with *qualitative data*

- interviews,
- documents,
- participant observation data,
- photos,

to *understand and explain social phenomena**.

* Here, we see use, design and development of technology as social phenomena.



Verne og Bråthen (2014)

QUALITATIVE - QUANTITATIVE

- Observation
- Interview
- Texts/documents
- Audio / video
- Small numbers (focused)
- In-depth
- How, what, how come
- Questionnaires
- Surveys
- Experiments
- Statistics
- Large numbers (broad)
- Broad rather than in-depth
- How many? Why (causality)?

What is best?

No research approach (quantitative or qualitative) is better than any other.

In choosing a method, everything depends upon what we are trying to find out. Thus, it depends on your research question (Silverman 2005).

An example: Dinh's experience from Kali Eskrima



Dinh Uy Tran

Video of opponents before a fight

Analysis of techniques

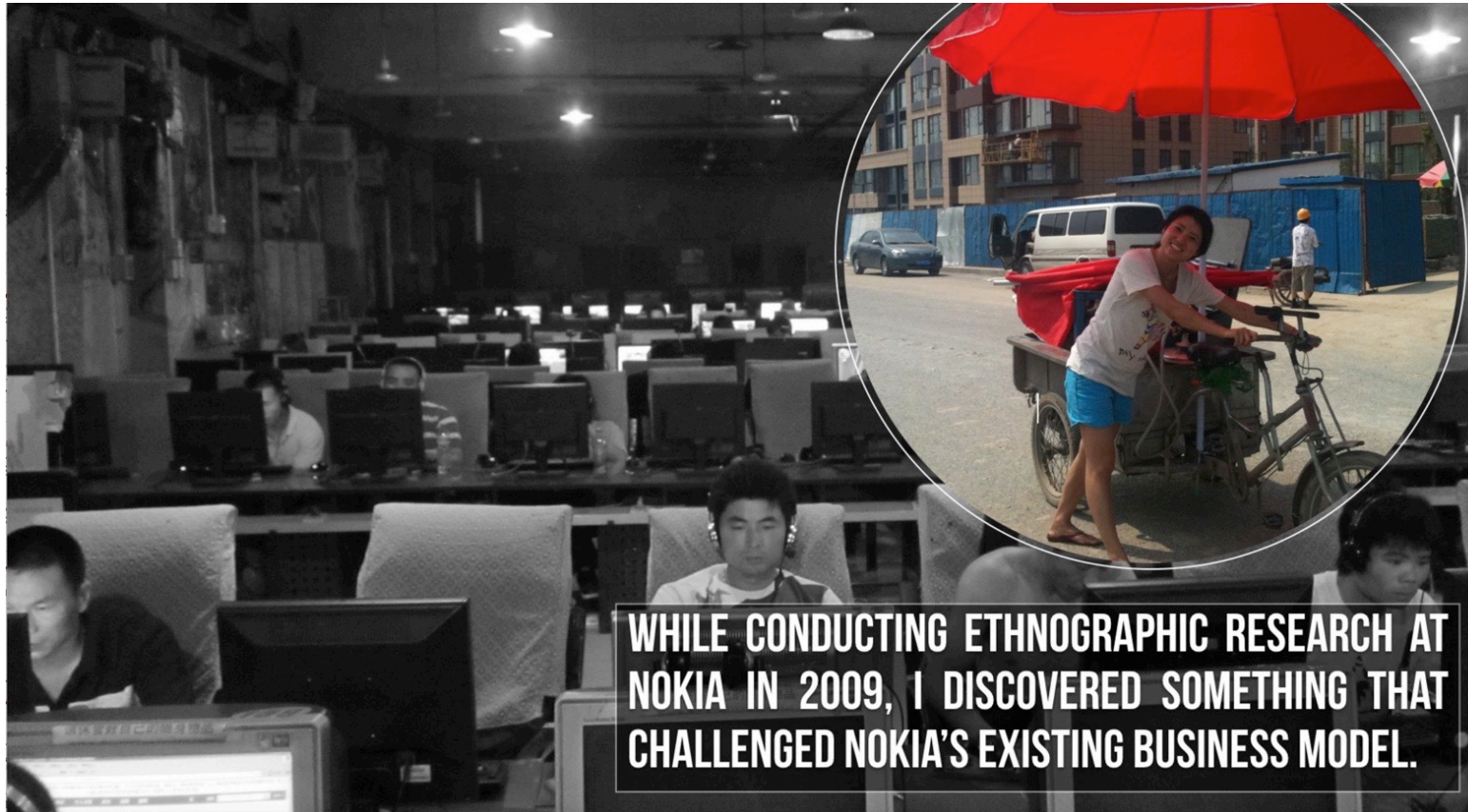
- Quantification
- But, this gives only a small piece of what they need: The opponent can be injured, or adapt techniques to a different opponent.
- You need to know own strengths and weaknesses.

In practice they make a qualitative assessment, with Plan A, B and C for eventualities



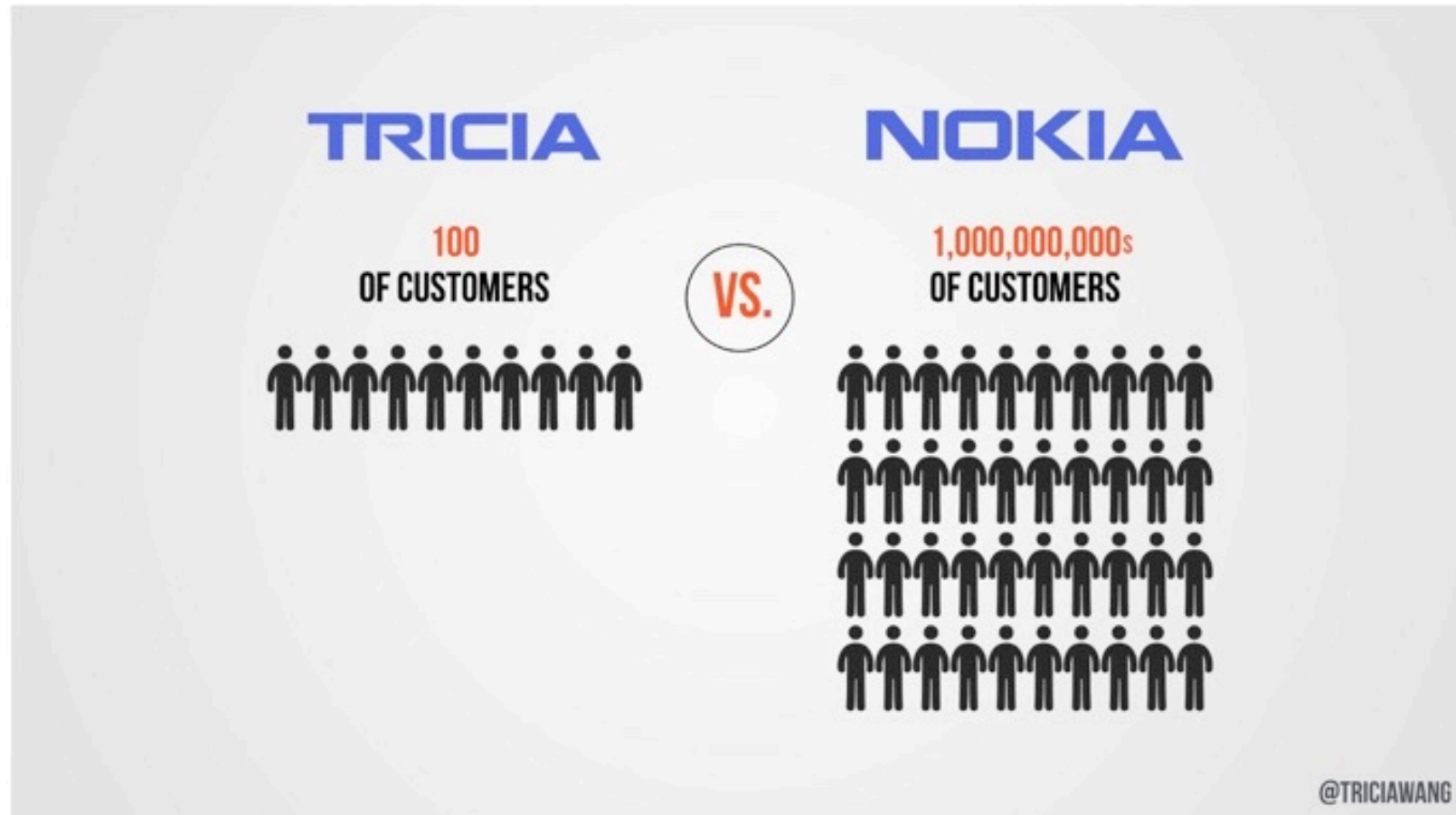
CC image courtesy of Boso

Big data versus thick data



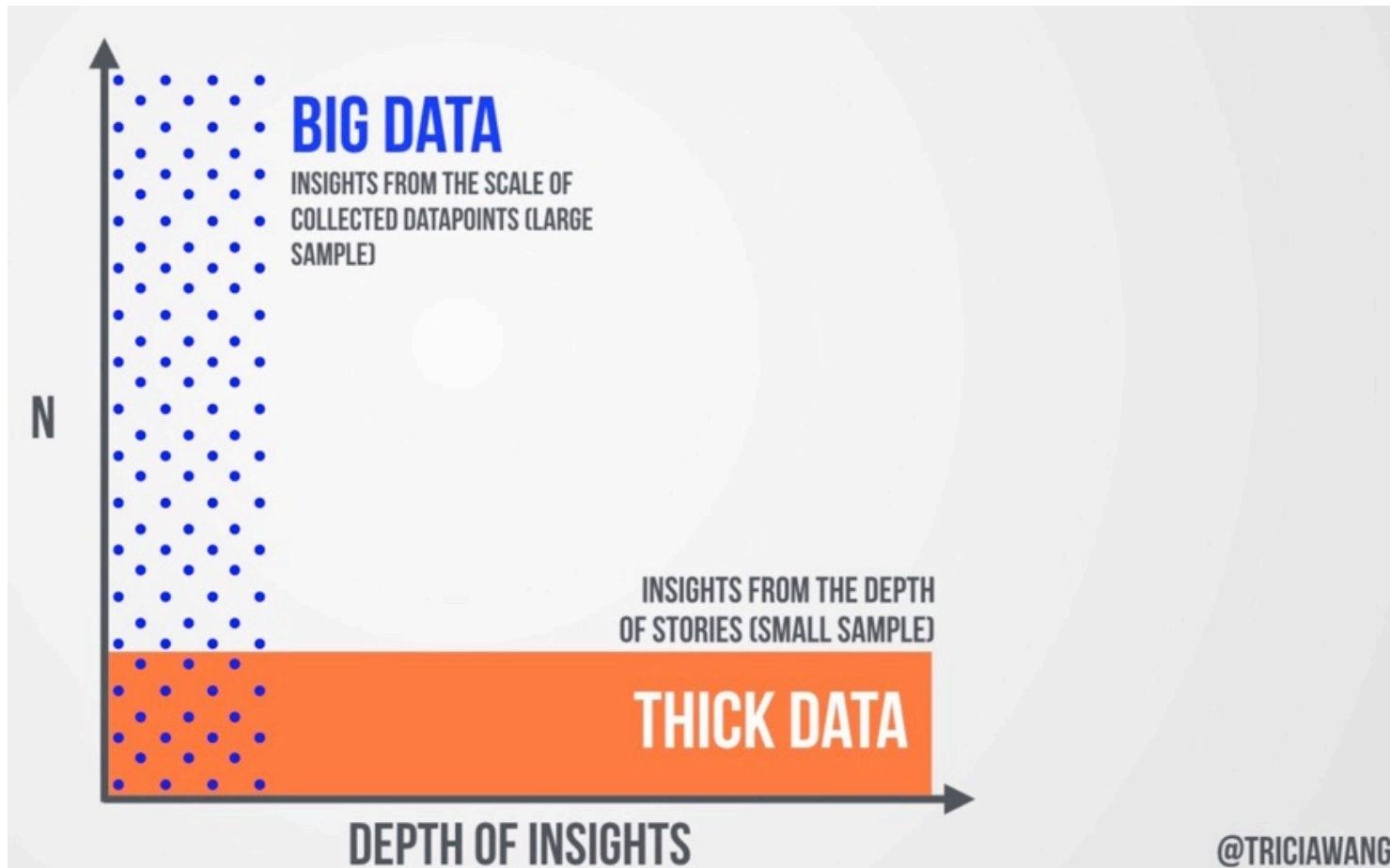
Tricia Wang, 2016,

<https://medium.com/ethnography-matters/why-big-data-needs-thick-data-b4b3e75e3d7>



We know what happened to NOKIA....

Big data and thick data



Discuss with your neighbors

Do you have previous experience with qualitative or quantitative research?

What is your experience with qualitative research?

Philosophical assumptions

All research is based on some (explicit or implicit) underlying **philosophical assumptions** about what constitutes valid research and which research methods are appropriate.

These assumptions are called **paradigms**.

In this course, we talk about research within three paradigms:

- Positivist
 - Interpretive
 - Critical
- } research

What is Hanne Cecilie doing here? (different paradigms)



Positivist research
- Reality is objectively given



Interpretive research
- Access to reality is only through language or other social phenomena



Critical research
- social critique to uncover restrictive conditions

Having passed IN5000

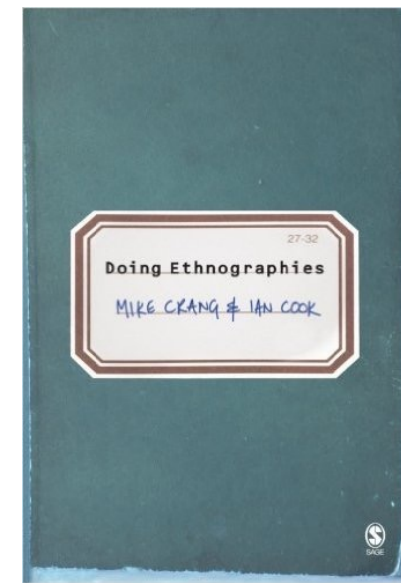
After you have completed this course, you can

- explain and compare different qualitative research paradigms including the interpretive, critical, and positivist paradigms
- explain and compare different qualitative methodologies including case studies, action research, and ethnography
- explain and compare different methods used in qualitative empirical research in informatics including interviews and observations
- explain and illustrate the relationships between research questions, paradigms, methodologies and methods
- position and discuss your own and others' research with respect to the qualitative research paradigms
- make qualified and well-motivated choices of research methodology for your own research and assess others' choices of methodology
- perform interviews and observations and analyze the resulting empirical data



+
photos and
documents

+
design
methodologies

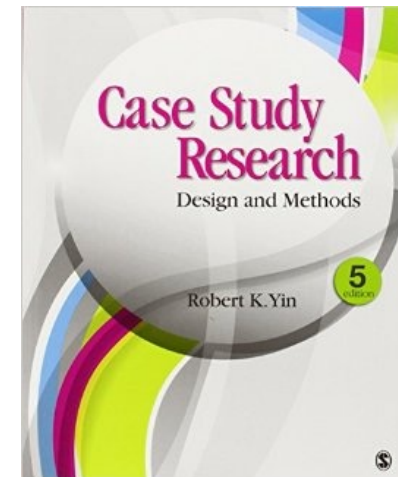
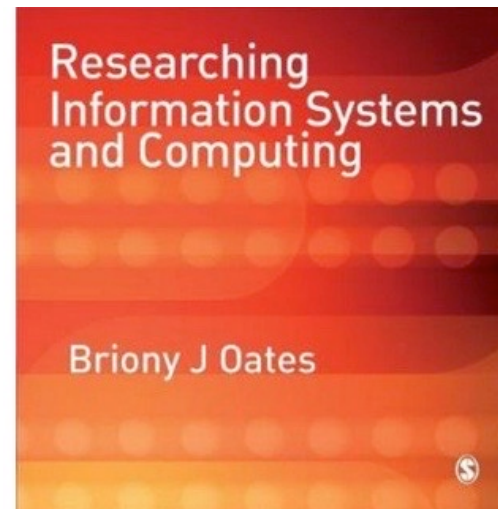
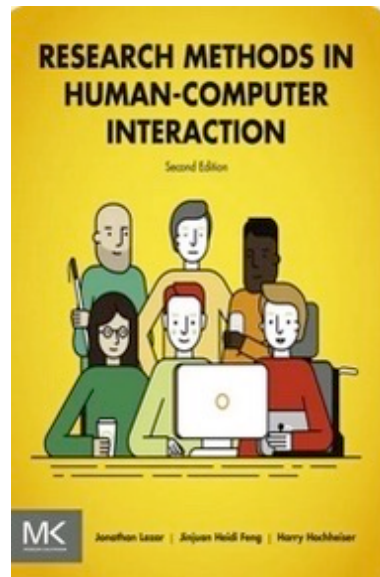
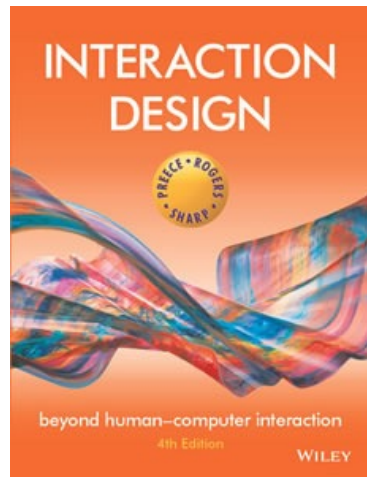


You'll learn about different types of research (as sketched above).

- How to do it yourself (assignments are central for learning), and how to analyze and write up your findings.
- The course has one course book (Crang and Cook (2007)).
- In addition, we will work with a number of articles, both discussing methodological issues and as exemplars of these different types of studies.
- See course page for literature (syllabus) + detailed teaching plan for readings and assignments.

A word of caution

You may have experience with other textbooks, e.g.:

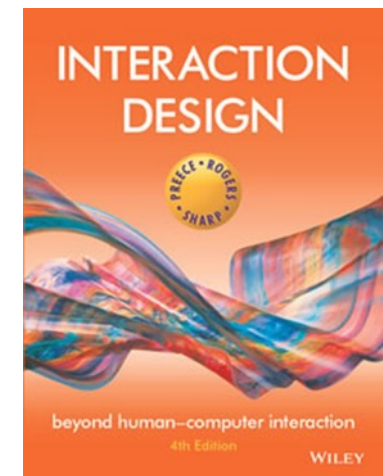


They take other approaches that is different from what we teach here. This can be a risk at the exam!

Preece, Sharp and Rogers on data gathering

«.. data gathering is a central part of **establishing requirements**, and of **evaluation**. Within the requirements activity, the purpose of data gathering is to collect sufficient, accurate, and relevant data so that **a set of stable requirements can be produced**, within evaluation, data gathering is needed in order to **capture users' reactions and performance with a system or prototype**»

Yvonne Rogers, Helen Sharp, Jenny Preece (2015, p 226)



Comparing Rogers, Sharp and Preece with Crang and Cook on data gathering

RSP:

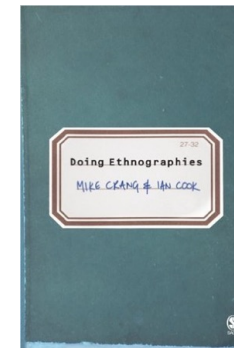
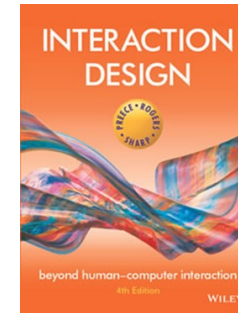
«.. data gathering is a central part of **establishing requirements**, and of **evaluation**».

CC:

«... research must involve the struggle to produce *inter-subjective truths*, to **understand** why so many versions of events are produced and recited».

Rogers, Sharp and Preece (2015, p 226)

Crang and Cook (2007, p 14)



Questions so far?

Before I turn to practical matters



There are five mandatory assignments

Assignment 1: observation

Assignment 2: interview

Assignment 3: reflections on qualitative research

Assignment 4: Research proposal v. 1

Assignment 5: Research proposal v. 2

Only for IN 9000 students:

Mandatory seminar in ca April

- Date to be decided

Groups or individual?

We aim to combine the strengths of working in groups and working to prepare for your your master work.

Next Thursday we form groups

Feedback on assignments: Thursdays 10.15-12

Room: Perl

Assignment	Delivery	Feedback
1: Observation	To be decided	To be decided
2: Interview	To be decided	To be decided
3: Reflections on qualitative research methods	To be decided	To be decided
4: First draft of RP	To be decided	To be decided
5: Final draft of RP	To be decided	To be decided

IN9000 seminars: to be decided

How to submit assignments

Deliver as email to

guribv@ifi.uio.no and vetleu@ifi.uio.no

Oral Exam

- The exams will be individual
- 20 min each
- ca 10 min to talk about a chosen topic
- ca 10 min to answer questions and discuss with the examiners

- Grading scale A-F for IN 5000
- Grading scale pass/fail for IN 9000

- Probable dates:
- Between Monday 3rd and Friday 7th of June