

# Overview of the field

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(adapted from Sisse Finken)

# Qualitative – Quantitative

- Observation
- Interview
- Texts/documents Audio / video
- Small numbers (focused)
- In-depth
- How, what, how come
- Questionnaires
- 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).

## 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).

# 3 PARADIGMS WITHIN THE IS-FIELD

## Positivist Research

- Reality is objectively given
- Reality can be described by measurable properties independent of the observer and his instruments
- Theory testing
- Variables: emphasis on quantitative data
- Statistical tools are an essential element

(Myers living version + Klein & Myers 1999)



# 3 PARADIGMS WITHIN THE IS-FIELD

## Interpretive Research

- The aim is to understand phenomena through the meanings people assign to them.
- Not predefined dependent and independent variables, but focuses on the full complexity of human sense-making as the situation emerges.
- Interpretive methods of research in IS are "aimed at producing an understanding of the context of the information system, and the process whereby the information system influences and is influenced by the context" (Walsham 1993, p.4-5).



# 3 PARADIGMS WITHIN THE IS-FIELD

## Critical Research

- Social reality is historically constituted and it is produced and reproduced by people
- People's ability to change social and economic circumstances is constrained by various forms of social, cultural and political domination
- Focuses the oppositions, conflicts and contradictions in contemporary society, and seeks to be *emancipatory* (i.e. help eliminate the causes of alienation and domination)  
(Myers living version + Klein & Myers 1999)
- Within IS, the Scandinavian approach (participatory design) is an example of critical research.



# METHODOLOGIES

While paradigms are philosophical assumptions about the world, methodologies are strategies of inquiry.

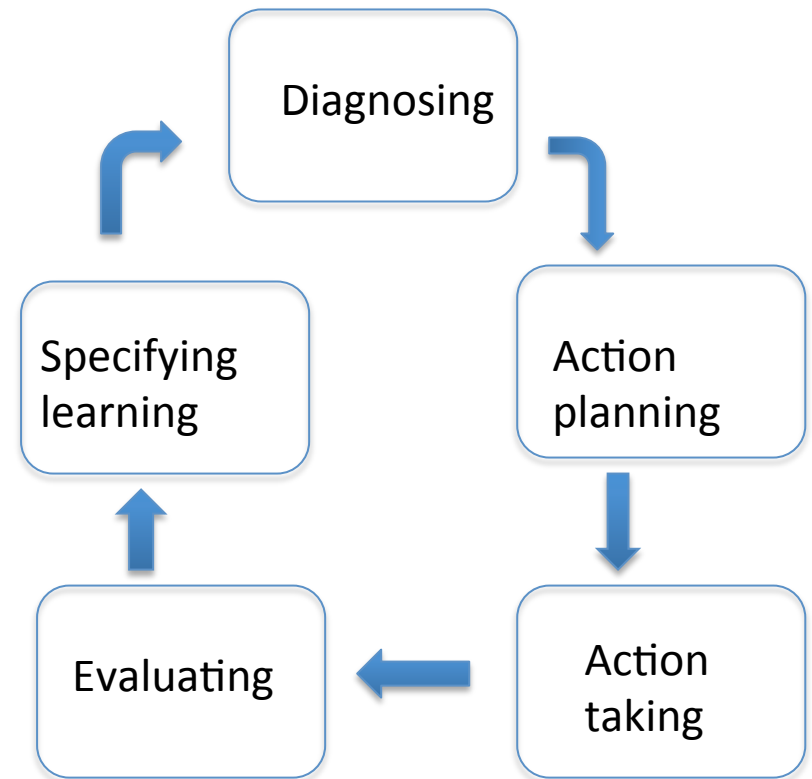
## **4 methodologies discussed in this course:**

- Action research
- Case study
- Ethnography
- Grounded theory

# Action Research

- Collaboration with a group of people experiencing a problem
- Researchers help to find what the problem is and implement possible solution
- An iterative cycle:
  - diagnosing a problem, action planning, action taking, implementing, and evaluating outcomes.
  - Evaluation may lead to a new diagnosis, cycle is repeated.
- Contribution to practical concerns in parallel with theory building
- Vision: researchers have a vision on how the reality should be – not value free
- Action research can be both positivist, interpretive, and critical

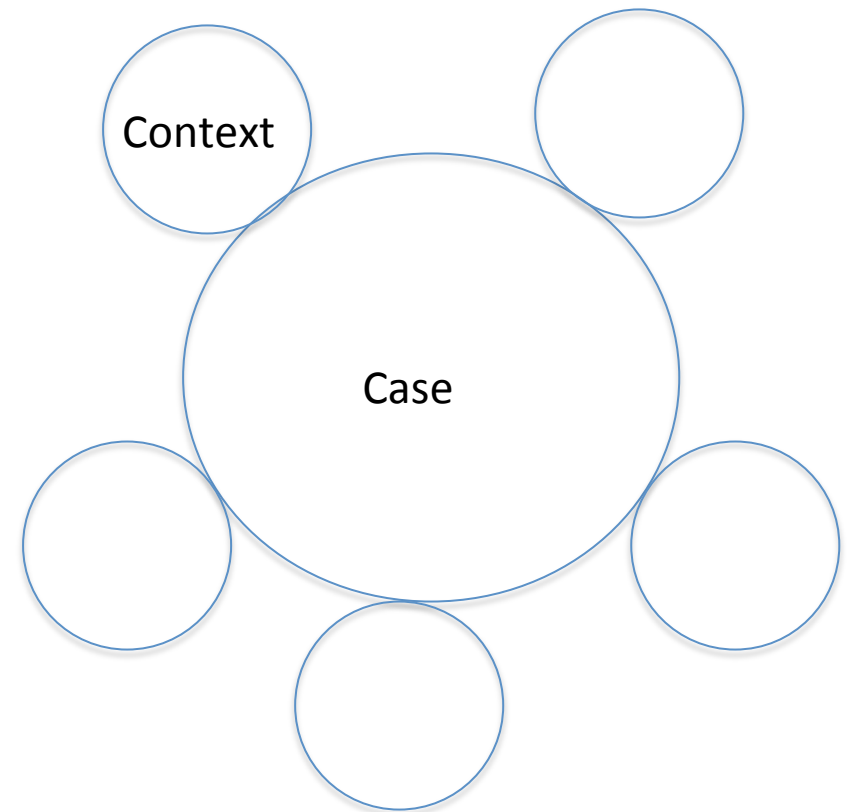
(Myers living version)



See Baskerville et. al 2002, p. 10

# Case Study

- Case studies involve in-depth examination of a single instance, event or example: a case.
- A case study is an empirical inquiry that:
  - investigates a contemporary instance or event within its real-life context
  - IS research: the study of information systems in organizations (not just technical issues)
- Case study research can be positivist, interpretive, or critical
- Basic methods: interview, observation, document analysis



See Stake 2005 (p. 446) for a figure outlining the relation between a case and its context.



# Ethnography

- Social and cultural anthropology
- Explicit interest in understanding social practices and interactions in diverse communities as they unfold in everyday life.
- It seeks descriptions of what people do rather than what they say they do
- Ethnographers immerse themselves in the world / lives of the people they study
- Understanding the informants' point of view
- Basic methods: participant observation, interview
- Field notes are essential in ethnography

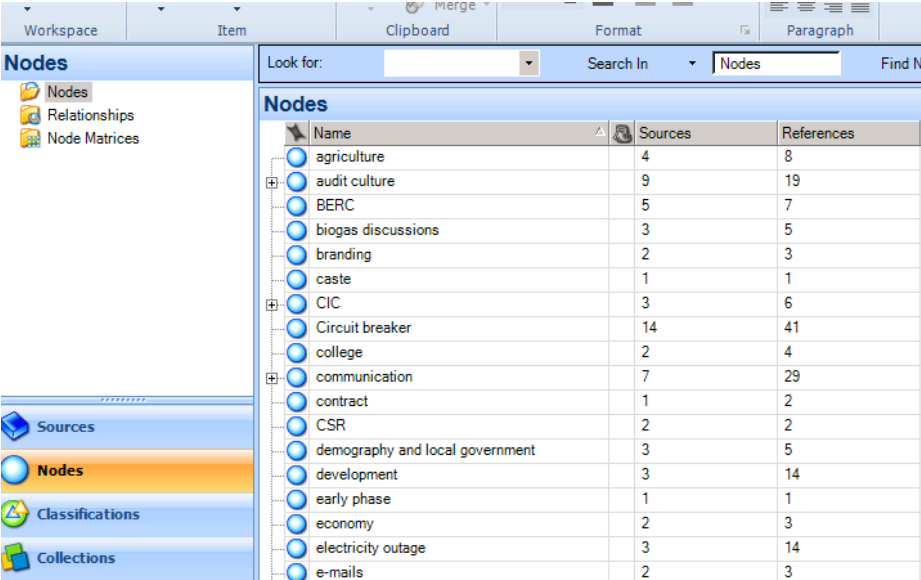


# Grounded Theory

- Developed by the sociologists Glaser and Strauss
- "Grounded theory is a methodology that seeks to construct theory about issues of importance in peoples' lives" (Mills et al. 2006: 26).
- Taking pre-defined concepts as point of departure means imposing an external structure on the data
- Enter the field with as few pre-determined ideas about what to find there as possible
  - Avoid hypotheses
  - Avoid bias
  - Sensitivity to the data, but not tabula rasa

## Techniques of grounded theory:

- Special emphasis on continuous interplay between data collection and analysis
- Asking questions aimed at exploring properties, connections, similarities and dissimilarities.
- Developing gradually more abstract ideas from the data



Name	Sources	References
agriculture	4	8
audit culture	9	19
BERC	5	7
biogas discussions	3	5
branding	2	3
caste	1	1
CIC	3	6
Circuit breaker	14	41
college	2	4
communication	7	29
contract	1	2
CSR	2	2
demography and local government	3	5
development	3	14
early phase	1	1
economy	2	3
electricity outage	3	14
e-mails	2	3

# METHODS

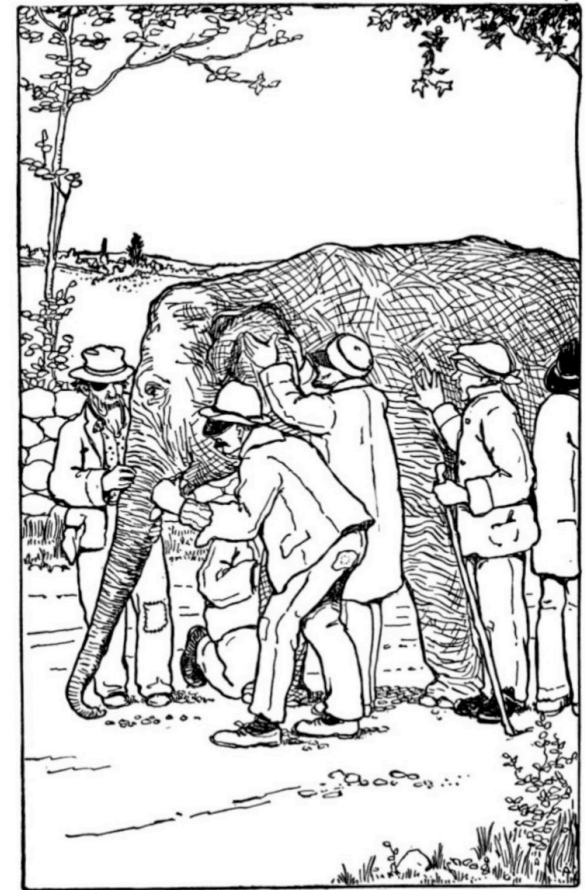
While paradigms are philosophical assumptions about the world and methodologies are strategies for gaining knowledge about it, methods are techniques for generating data.

- Observation: passive and participant (naturally occurring settings)
- Document analysis: e.g., screen dumps, newspapers, letters, agreements, brochures
- Interviews: structured, semi-structured , open-ended (not naturally occurring settings)
- Video and audio-tapes can be studied over and over and be transcribed
- Note taking: Describe what you observe/encounter/hear/smell/engage in. Remember: date, time, place, persons present (roles, occupation, affiliation).



# Researcher's reflexivity

- Do we see the same regardless of who we are and where we come from?
- **Positivist paradigm:** We will see the same if we use proper methods for data collection and analysis.
- **Interpretive and critical paradigms:** Knowledge about how people make sense of and experience the world can only be accessed through representations (e.g., language).
- Your previous experiences will influence how you interpret what you encounter.
- How you appear to the informants will influence how they relate to you as a researcher.



# Conducting field work + analyzing field material

- What are people doing? What are they trying to accomplish?
- How, exactly, do they do this? What specific means and/or strategies do they use?
- How do members talk about, characterize, and understand what is going on?
- Which assumptions are they making?
- What do I see going on here? What did I learn from these notes?

(Emerson et al. 1995:146)

# Concepts

- **Paradigm:** a pattern of thinking, a set of philosophical assumptions.
- **Theory:** a set of propositions providing the principles of analysis or explanation.
- **Analysis:** breaking something down into smaller parts to gain understanding of it. Put it together in new ways.
- **Ontology:** theory of reality, existence, being (what is reality, how does something come into being).
- **Epistemology:** theory of knowledge (why do we believe as we do? – how do I know the world?).
- **Methodology:** research strategy, strategy of inquiry (how do we gain knowledge of the world?).
- **Method:** a way of arranging the generation, analysis, and writing up of material.
- **Reflexivity:** the process of reflecting critically on approach, positioning, and relationship between what you encounter in the field how you represent it.
- **Inductive approach:** theory building bottom-up
- **Deductive approach:** theory building top-down (hypothesis testing)

# How it connects

Researchers have different philosophical assumptions (**paradigms**) about the world: how we are to understand it, and how we are to study it. This has led to different strategies of inquiry (**methodologies**) and to different ways of approaching how we gather empirical material and analyze it (**methods**).

paradigms

methodologies

methods

# Group discussion

- Identify and describe the three paradigms
- Get to know each others' academic bakground:  
Do you have a special affiliation with one of the paradigms? Are you particularly comfortable with, or interested in, one of them?