

Selection of a research topic, recapitulation & practice



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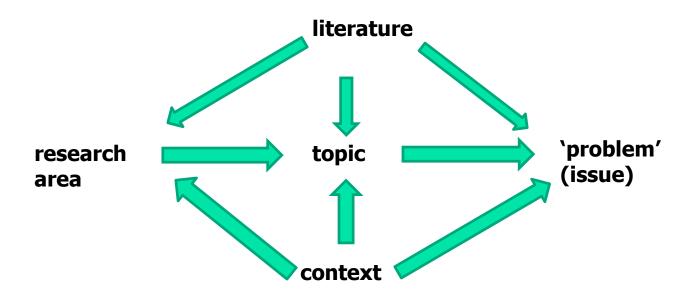
Topic selection - How to begin?

- Issues that are interesting or attractive for us (among other things[©]) or issues we can relate to
- Critical assessment whether the topic can be turend into a thesis
- 'To have an issue...'
- 3 key questions:
- WHAT?
- WHY?
- HOW?





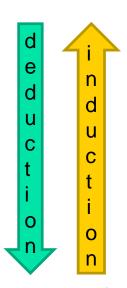
Developing a topic - may be a recurrent proces...





Developing a topic

- Research area
- ... (may include one or more steps further specifing the topic)
- Research topic
- Research question(s)/hypothesis
- Specific research questions
- Particular questions related to data mining/collecting... (interviews)
- Let's give it a try...





Developing a topic

- Keep in mind:
- availability of sources (sometimes relates to methodology)
- deadlines
- topicality
- what falls within the area/topic and what does not
- ...



Research type

Basic

- unique, focused on collecting and processing information and data for a particular purpose
- academic research
- not necesarily applicable in practice

Applied

- built on data/information collected before/for similar purpose
- aimed on commercial use of (practically applicable) outcomes



Mixed remarks on topic selection

- What do we want to study?
- What methodology should we use?
 - qualitative/quantitative
- Scope of the research (large number of cases/low number)
- Level of examination (macro/micro)
- Timeframe
- Purpose, targeted audience
 - academia
 - general public
 - decision makers



Research design

- Research plan
 - most typical
- Part of the research proces
 - narrower definition
- Product of the proces
 - a method applicable somewhere else



Qualitative vs. quantitative research

- 2 anatgonistic approaches?
- Rather a part of a single continuum/axis
- No clear quali/quanti approach can be found in social sciences
 - the difference is in emphasis on one or another
- The decision which would be more suitable should follow AFTER the topic selection
 - basically all issues can be studied with both approaches
 - the difference is in focus
- It is not about numbers vs. words



Qualitative vs. quantitative research

Different requirements on reduction of data

Quantitative	Qualitative
Reduced amount of information about large N	Detailed information about large N
Smaller number of variables and observed relations	Reduced amount of N
Generalization is easy	Generalization is inaccurate if not impossible

- The main difference is in the research logic
 - Quantitative research deduction (from generalization to individual occurences
 - Qualitative research induction (from individual cases to general population)



How can we use the tension between quali & quanti?

- Don't get bothered by the urge to decide which one to use
- Ask yourself:
 - Will the research aim on the whole picture or its part?
 - Will I start with something smaller and try to generalize as a result or vice versa?
 - How much the data will be reduced?
 - How will I treat my data?
- Only after ansewring these questions you might find that some methodologies fit in your plans and some do not

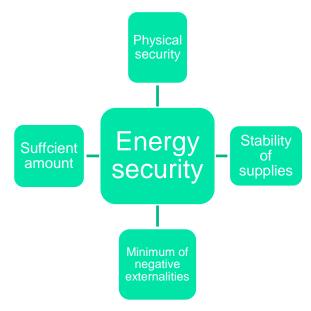


Conceptualization

Concept – idea, notion or collection of labels describing a phenomenon

Conceptualization – defining a certain part of reality by terms that make it unique and

observable





Operationalization

- How can we recognize/identify particular concept
 - Measureable
- E.g.: Energy security is reached when all features are secured



Indicators

- Signal pointing to a certain state/condition/change
 - "litmus papers"
- E.g.: fluctuating or insufficient energy supplies polluting environment point to low energy security