

# **Why are we here?**

- 1. To get an idea about our aims  
(the purpose of our qualitative data analysis)**
- 2. To learn about techniques for 'early stage' data analysis  
(coding and qualitative content analysis)**
- 3. To discuss the role of our interpretations in early  
stages of data analysis**
- 4. To develop ideas about securing comparability of  
qualitative data analysis in cross-country  
collaboration.**

# **Plan of the workshop**

- 1. Half-day strategy of data analysis**
- 2. Half-day presentation of two techniques**
- 3. One day experimenting with the two strategies**

# **Prior experiences with qualitative data analysis**

**Research questions**

**Methods of data analysis**

**Any software used**

# **Research questions**

- 1. Why are they important?**
- 2. What are our research questions?**
- 3. What do we want to explain?**

# Explanatory strategies in the social sciences

```
graph TD; A[Explanatory strategies in the social sciences] --> B[Identifying causal conditions]; A --> C[Identifying causal mechanisms]; B --> D[Most systematic approach: Qualitative comparative analysis (Ragin)]; C --> E[Process tracing];
```

## Identifying causal conditions

(= conditions that are necessary or sufficient for a specific effect to occur)



**Most systematic approach:  
Qualitative comparative  
analysis (Ragin)**

## Identifying causal mechanisms

(= frequently occurring sequences of causally linked events that are triggered by certain conditions and produce a specific effect)



**‘Process tracing’**

# Qualitative Comparative Analysis (QCA)

**Basic idea: Comparing cases according to**

- \* conditions present or absent**

- \* effects**

**Truth tables (Boolean logic)**

<b>Case</b>	<b>Condition 1</b>	<b>Condition 2</b>	<b>Effect</b>
<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>2</b>	<b>+</b>	<b>-</b>	<b>1</b>
<b>3</b>	<b>-</b>	<b>+</b>	<b>1</b>
<b>4</b>	<b>+</b>	<b>+</b>	<b>1</b>

# Qualitative Comparative Analysis (QCA)

## Problems:

1. QCA works only if all combinations of occurrences of conditions are represented by cases.

See e.g. Lieberman, “Small N’s and Big Conclusions”: drunk driving does not cause accidents

Accident	Drunk Driving	Car Entering from Right-Hand Direction	Driver Speeding	Runs a Red Light
Yes	Yes	Yes	Yes	Yes
No	Yes	No	No	Yes

# Qualitative Comparative Analysis (QCA)

## Problems (continued):

2. QCA works only if all causal conditions that vary between cases are explicitly included.
3. QCA requires to reduce empirical data to the dichotomy of 'condition present' – 'condition not present' (fuzzy set QCA avoids that to a certain degree)



# Process tracing (finding causal mechanisms)

**Process tracing = finding causal mechanisms**

(Unfortunately, the literature does not tell us how to do this.)

1. Write a detailed historical narrative
2. Transform it into a theoretical explanation

(George and Bennet 2005: 210-212)

**Question:** How would we approach the 'drunk driving' cases with process tracing?

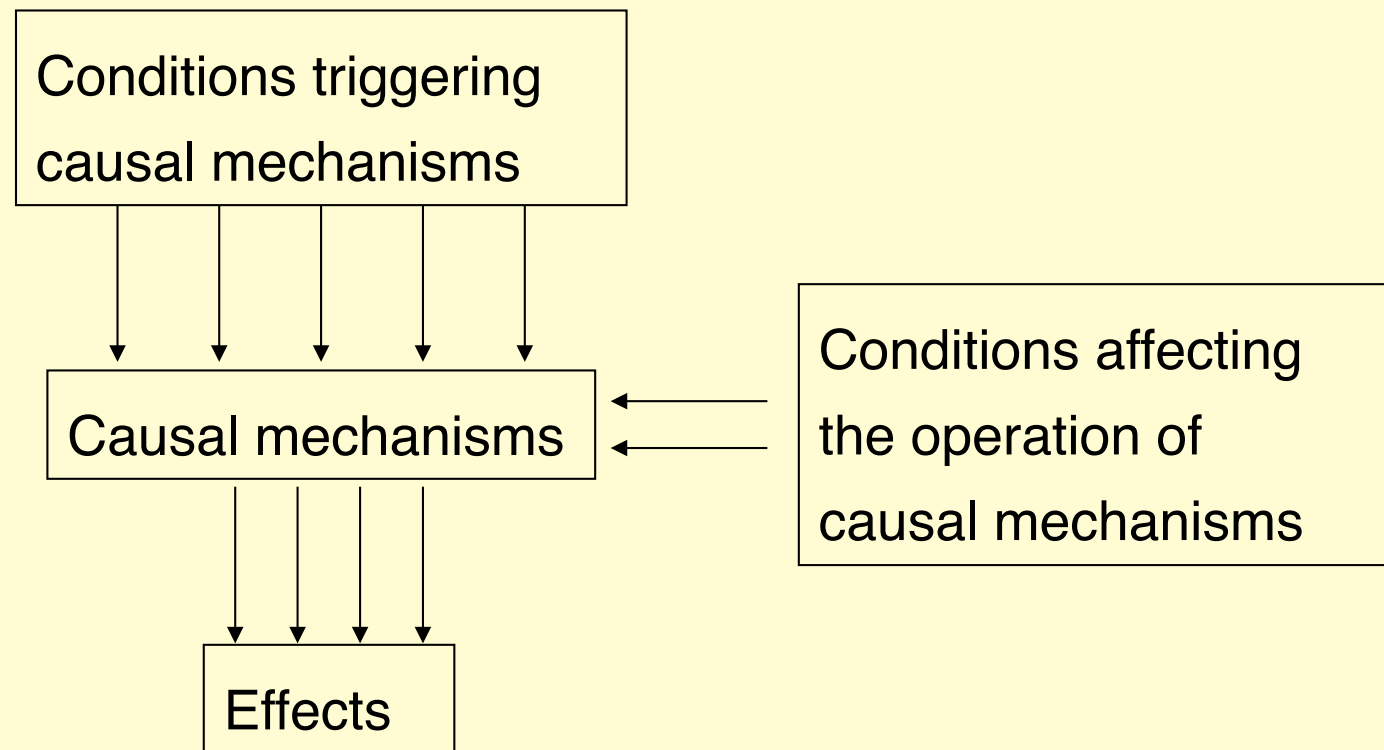
# **Process tracing (finding causal mechanisms)**

## **Problems:**

1. Data on the whole uninterrupted causal path required
2. Equifinality (several causal mechanisms may produce the same outcome, some of them even from the same initial conditions)

# Working backwards

**Result:**



# Working backwards

**Linking raw data to the research question**  
(identifying, locating, structuring)



**Consolidating raw data**



**Empirical data in easily manipulable form**

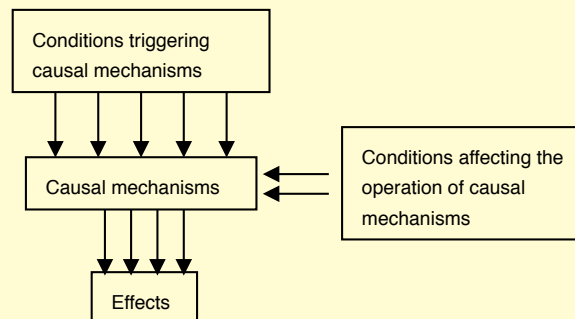


**Identifying patterns**  
(of conditions and sequences of events)



**Integrating patterns**  
(of conditions and sequences of events)

**Result:**



# Linking raw data to the research question

## The problem:

years, I think, after completing your doctorate. And then the expectation is that you'll gain external funding. So, the two well known ones are the early career staff one and the new career researcher, which are both in the 10,000 to 15,000 - 10,000 to \$12,000 range, as long as your project is approved and it's - yeah.

**I: So therefore you have to**

Yeah, yeah, that's right.

**I: There's nothing that you**

No, no, that's right. But that's through the centre, I employ would. So, we work out a professional fee which is based upon my expertise because I'm supervising the project, and there's a differential there between what we charge out to the client and what the student is paid, like the student is paid as a researcher

**I: And you make some profit?**

Y makes a profit. So, as a result, there is money building up in an account for the centre, and up til n like new computers, book purchases for the library. I've put money into the departmental j journal, "The University of Queensland: Historico Proceedings", and I now fund that journal through various ways. And also the publications of the centre itself, and we publish a - like history studies, a series; and we publish a section within proceedings is also dedicated to the applied history field. And all of those publications are funded thro consultancy money. And so, theoretically, in the future that's a reserve of money which I can call v arch if I wanted to, but I would rather treat it as an expense for the centre, not as a private resea spent on things that are appropriate for the centre, as whole, not to me individually as a resea

**I: Yeah, okay. We were interrupted here.**

That

**I: W**

That e that was happening at the Arts Faculty. The Ipswich Railway Workshops was originally being considered as a site for the university up at Ipswich. In the end it wasn't taken, but for a while there, the univ one of Railv beca connection with Ipswich, and that the university now has a campus up at Ipswich. And so that was a project where they got a number of people from across the university to do research and to write interpretive essays on aspects of the site's history and herit talogue

## Text contains raw data and irrelevant information

## The solution:

### Read the text.

### Assess the content.

### If you find relevant information (=raw data) in a text segment:

### Stick a note to it that describes what's in there (code it).

or

### Take the information away and store it somewhere else (extract it).

# **Linking raw data to the research question**

**Why did we name this step “linking raw data to the research question”?**

**RQ is basis for deciding what's data and what's noise.**

**RQ is basis for the structure given to the data.**

# Typologies

## What is a type?

Abstract construct that represents a sub-class of empirical objects by expressing the combination of properties distinguishing that sub-class from the others.

## A type ...

- Requires a more general concept (type of what).
- Requires at least one dimension in which properties vary.
- Never comes alone.

# **Consolidating raw data**

**[only possible and necessary if you extract information]**

Compress information, correct errors



# Databases for finding patterns

**[if we want more than just a description of a case]**

We want to 'play around' with the data – sort them, combine them – until we see something interesting.

Ideas for rearranging data come from the research question and the data.

Data must exist in a form that supports rearranging.

Coded text

Tables

# Typologies

**Is RHESI a type of project?**

**To what types of projects does RHESI belong?**

- internationally collaborative
- grant-funded
- three-year
- Social science
- multi-lingual

# Typologies

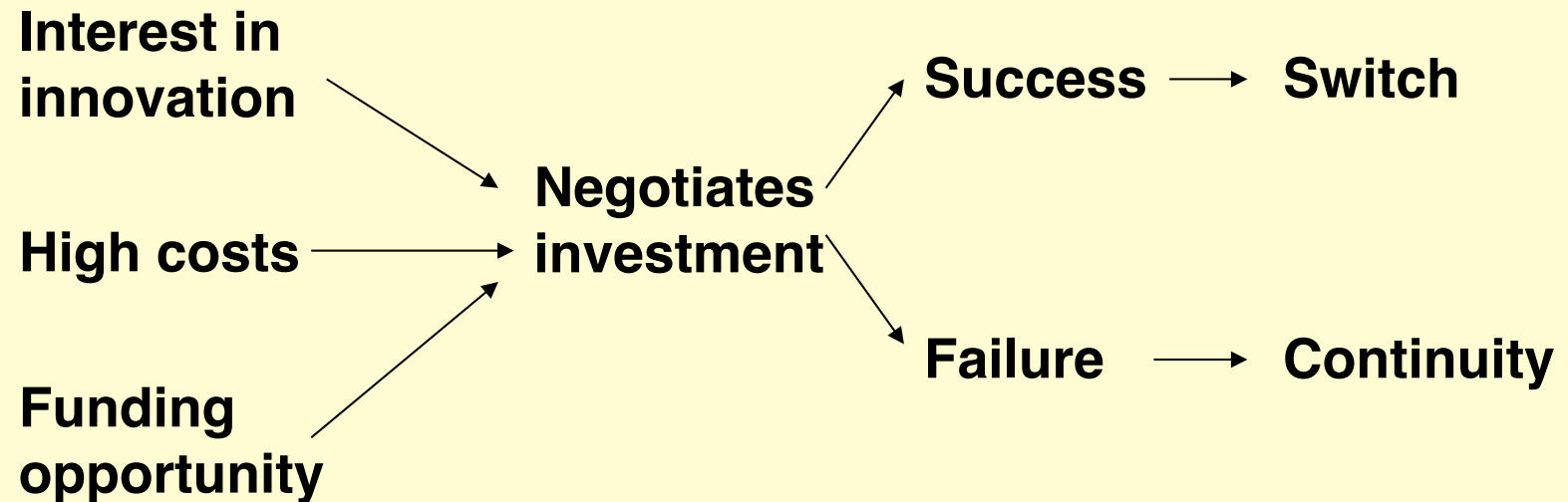
**What typologies are we currently exploiting in the RHESI project?**

- Innovations
- fields
- Switching costs

**What other typologies could be interesting?**

# Mechanisms

**What could mechanisms we search for look like?**



**What does the self-fulfilling prophecy have to do with RHESI?**