Methods Core Workshop: Week 1

Introductions

Today's agenda

1. Introductions by TA

2. Course info
   a. Aims for the Course (from TAs' perspective)
   b. Key deadlines (put them in your cal!)
   c. CUREC

3. Introductions by students

4. If there's time, group discussion about hypothesis formulation

TAs

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Hannah is a 3rd year DPhil candidate in Social Data Science. Her research focuses on China's use of state-sponsored digital disinformation. She employs both quantitative text analysis and social network analysis to explore, for example, China's use of bots and the ways that external audiences engage with these bots.

Aims for the Course

- Know how to assess the strengths and weaknesses of research methods used in published studies

- Know how to assess the strengths and weaknesses of research methods for a research project you want to do / your research aims

- Feel confident later in the year when you have to propose your MSc thesis topic and eventually prepare your research plan

Key Deadlines

- **Formative Assignment** due on Monday, **24 October (Week 3**)
    - **Topic paper (2 pages):** Propose a research topic. Describe the importance of the topic, relevant theory, and your choice of methods. The methods are the most important part and should receive most attention.
    - Save file in following format: SURNAME_formative.pdf

- **Summative Assignment** due on **Friday, 2 December (Week 8**)
    - The summative assessment (2,500 words) will be based on a **methodological critique of a topic**. Your paper should critically describe methodological strengths and weaknesses of current research on your topic and suggest possible improvements or limitations in these methodologies.
    - Save file in following format: EXAM_NUMBER_summative.pdf

- Remember your **statistics exam** will take place in w/c **5 December (Week 9**)
    - Teaching team is still waiting for confirmation of date from Examination Schools.

CUREC ?!?

- You are going to hear a lot about CUREC this year

- CUREC stands for the **Central University Research Ethics Committee**

- Before every research project (e.g. your MSc thesis and methods courses next term), you will have to apply for **research ethics approval**

- You don't have to complete a CUREC form for this class but it is something to bear in mind in the next two terms

Introduce yourself

1. What is your prior research & methods training?

2. What do you want to research during the MSc?

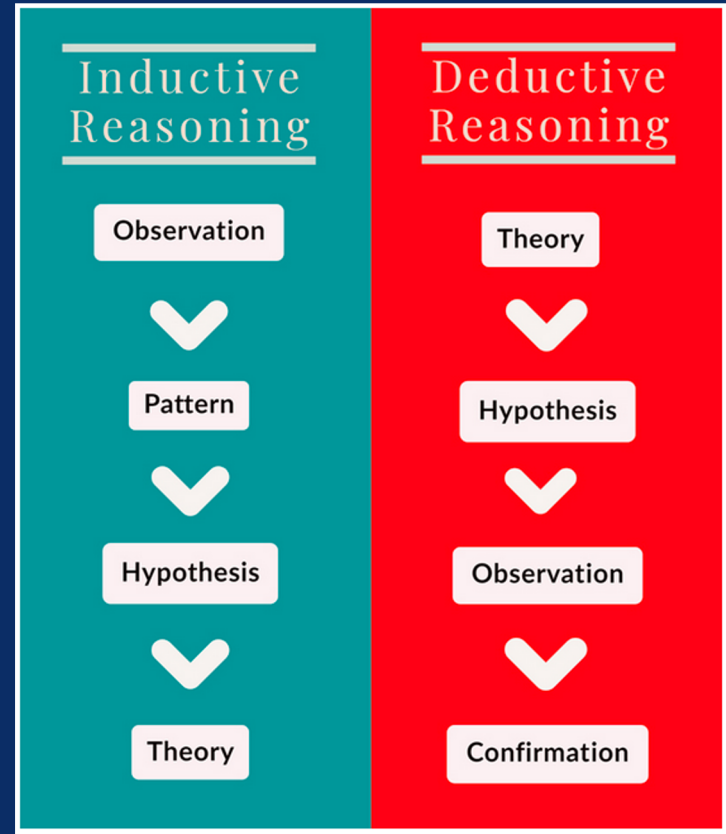3. What you want to get out of the course?

TLDR on Week's Readings

Karl Popper's 'Principle of Falsification'

- **Falsification** is a way of demarcating science from non-science

- It suggests that for a theory to be considered scientific it must be able to be **tested and conceivably proven false**. For example, the hypothesis that "all swans are white," can be falsified by observing a black swan.

- For Popper, science should attempt to disprove a theory, rather than attempt to continually support theoretical hypotheses.

Both **deduction** and **induction** are legitimate approaches to research

- **Deduction** begins with an expected pattern that is tested against observations
  - "Top-down approach"

- **Induction** begins with observations and seeks to find patterns
  - "Bottom-up approach"

Group Discussion

- While hypothesis-driven research is typical in quantitative social science, it is not typical in qualitative social science research. That is to say, **you don't need to take a hypothesis-driven approach**.

- In small groups, discuss whether you take a hypothesis-driven approach to your research? If you do qualitative research, do you use hypotheses at all? Do you find other concepts such as "assumptions", "expectations", or even "biases" more helpful than "hypotheses"? Discuss!