POLS2044 WEEK 12
Summing up

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In Week 12 of POLS2044 we will be wrapping up this term by both reflecting on what we have learned this term as well as the costs and benefits of using mixed methods.

Reading notes and questions

There are three readings for this week. They are all focused on making their own points, but there are several important overlapping questions. How do we study political outcomes? How to best explain both specific political outcomes and general trends? How can the field move forward with varying approaches to knowledge and evidence?

Merriam, Charles. 1921. "The Present State of the Study of Politics." ***American Political Science Review*** **15(2): 173–85.**

This article is now over a century old, but it never ceases to amaze me how the underlying focus is akin to today's debates. Merriam highlights the similar and varying approaches of both natural sciences and other social sciences and urges political scientists to adopt some of the best practices of other fields. The following excerpt (p. 174) stands especially out to me:

> "Again, in our day the measuring scales of facts and forces have been made much finer and more exact than ever before in the history of the race. The measuring and comparing and standardizing process goes on its way, impelled by the hands of thousands of patient investigators who pursue the truth through the mazes of measurable and comparable facts. To what extent has this increased accuracy of measurement and facility in comparison of standardized observation found its way into the field of the political?"

1. Can you spot any parallels between Merriam's argument and those in other articles we have read this semester?
2. What do you think people in fifty or a hundred years think about Merriam's critical perspective of early political science let alone how you have been taught and what you have read of political science so far?

Another excerpt (p. 178) also stands out:

> "[T]he methods of politics, as of social science in general, are constantly in need of scrutiny and revision in order to avoid falling into a category that is neither scientific science nor practical politics."

3. As a field, do you think that political science is still "constantly in need of scrutiny and revision" or has it progressed sufficiently in the last century?

One final excerpt (pp. 179-180):

> "Statistics, to be sure, like logic can be made to prove anything. Yet the constant recourse to the statistical basis of argument has a restraining effect upon literary or logical exuberance; and tends distinctly toward scientific treatment and demonstrable conclusions. The practice of measurement, comparison, standardization of material—even though sometimes overdone—has the effect of sobering the discussion….We know that statistics do not contain all the elements necessary to sustain scientific life; but is it not reasonable to expect a much greater use of this elaborate instrument of social observation in the future than at present."

4. Have you seen either literary or logical exuberance in either your own writing or thinking before this term, and has this class (or others you have taken) had a restraining effect on such exuberance?
5. Can we retain our exuberance for the substance of what we study while still using scientific treatment to reach demonstrable conclusions?

Mahoney, James, and Gary Goertz. 2006. "A Tale of Two Cultures: Contrasting Quantitative and Qualitative Research." ***Political Analysis*** **14(3): 227–249.**

This article was very influential over a decade ago in describing in concrete terms several of the differences in approach between quantitative and qualitative research. It is notable that the article was published in *Political Analysis*, a journal that often publishes the most advanced quantitively methodology papers. They are indeed "qualitative researchers who seek to communicate with quantitative researchers," (p. 228). As of today, this article has been cited 1,450 times (a.k.a. *a lot*), and the authors have expanded this article into an entire book ("A Tale of Two Cultures"). It highlights ten areas where the qualitative and quantitative research traditions diverge. Table 1 (p. 229) provides a useful summary of the paper's main points. Hint, would summarizing your theoretical approach work in a table or path diagram also help summarize your argument?

6. Has your experience of the discussion of methodological approaches in this and other classes also "call to mind religious metaphors"? (p. 227). Why do you (and the authors) think this is the case?
7. To what extent has this class accurately reflecting these "alternative cultures"? (p. 227)

The most moving description of both approaches to me was the very first element—the (qualitatively focused) "causes of effects" versus the (quantitatively focused) "effects of causes."

8. What are the crucial differences between focusing on explaining the causes of effects (what are the causes of WWII?) and the effects of causes (does non-democracy cause conflict?).
9. What is INUS causation?
10. How do the two approaches differ in their focus on generalizability?
11. What does "equifinality" mean? Why is it important? Are quantitative researchers not focused on alternate causal paths to the same outcome?
12. Why do qualitative scholars focus more on clusters of explanations rather than additive models?
13. How do the two approaches think about weighting observations?
14. How do the two approaches think about the falsification of causal theories?

15. How do the two approaches think about selecting on the dependent and independent variables?

Lieberman, Evan S. 2005. "Nested Analysis as a Mixed-Method Strategy for Comparative Research." ***American Political Science Review*** **99(3): 435-452.**

This article was also very influential in its day (1,795 citations and counting), but it is a harder read than the previous article. Nevertheless, the intuition is simple. Scholars should think about using a mixed-method strategy, and Lieberman (2005) proposes the clearest strategy I have seen to date.

16. What are LNA, SNA, Mt-SNA and Mb-SNA?
17. Could you adopt a similar approach to your own paper?

Indeed, it is my hope that some ambitious soul does try to merge the best of their qualitative essay's discussion with their quantitative research. It is not easy, and 3,000 words is not a lot of space. However, I would encourage you to think about whether your qualitative case might be useful as either a model-building or a model-testing case study.

18. Try and work through the steps in Figure 1 (p. 437). How does each step of the process help move our research forward?
19. What is the difference between "on-the-line" and "off-the-line" cases?

LECTURE PART 1: The current art & science of political science

Zancan NFTs an example of the blend of art and science

Piter Pasma's (2022) Industrial Devolution created with less than 4,000 characteristics.

Harder to see the (very real) theoretical and empirical artists here…

Geertz (1972 [2005])

Fariss (2014)

The broad applicability of the scientific method

KKV's (1994) characteristics of scientific research
1. The goal is causal inference.
2. The procedures are public.
3. The conclusions are uncertain.
4. The content is the method not the subject matter.

Often the scaffolding of intellectual buildings are taken down after being built.

Developing new theoretical arguments

Offer an answer to an interesting research question.
Solve an interesting puzzle.

Identify interesting variation (across time or space)
Move from a specific event to more general theories
Drop the proper nouns
Use a new Y
Use a new X
Add a new Z
Use the literature
Make sure the theory can be disproven.

We still can find gold using shoe leather

Zhukov (2015) study of USSR's forced resettlement programs from 1920-1952.

Roger and Sobecki (2022) article on Geoffrey Chaucer

2022 course outline's learning outcomes and topic overview.

My goal 1: Help you consume research

Goal 2: help consume information

Goal 3: help you produce research

Our main research activity this term was hypothesis testing.

Hypothesis testing important takeaways

LECTURE PART 2: Choosing a methodological approach

Motivating question

Which method should I choose to answer my research question?

Mahoney and Goertz (2006)

Table 1 Contrasting qualitative and quantitative research

Section	*Criterion*	*Qualitative*	*Quantitative*
1	Approaches to explanation	Explain individual cases; "causes-of-effects" approach	Estimate average effect of independent variables; "effects-of-causes" approach
2	Conceptions of causation	Necessary and sufficient causes; mathematical logic	Correlational causes; probability/statistical theory
3	Multivariate explanations	INUS causation; occasional individual effects	Additive causation; occasional interaction terms
4	Equifinality	Core concept; few causal paths	Absent concept; implicitly large number of causal paths
5	Scope and generalization	Adopt a narrow scope to avoid causal heterogeneity	Adopt a broad scope to maximize statistical leverage and generalization
6	Case selection practices	Oriented toward positive cases on dependent variable; no (0,0,0) cases	Random selection (ideally) on independent variables; all cases analyzed
7	Weighting observations	Theory evaluation sensitive to individual observations; one misfit can have an important impact	All observations are a priori equally important; overall pattern of fit is crucial
8	Substantively important cases	Substantively important cases must be explained	Substantively important cases not given special attention
9	Lack of fit	Nonconforming cases are examined closely and explained	Nonsystematic causal factors are treated as error
10	Concepts and measurement	Concepts center of attention; error leads to concept revision	Measurement and indicators center of attention; error is modeled and/or new indicators identified

Let's try something…

I am going to ask ten questions.
For each of the questions, I want you to decide whether the first or the second answer is closer to how you view research.
If you choose the first, you get a score of 1.
If you choose the second, you get a score of 0.
At the end of the ten questions, add up your score, which will range from 0 to 10.

1. How should we approach causal explanation?

Should we explain individual cases through a "causes-of-effects" approach or estimate the average effect of independent variables through an "effects-of-causes" approach?

2. How do we think about causation?

Are we interested in necessary and sufficient conditions are we interested in probabilistic and correlational causes?

3. How do we deal with multiple causes?

Do we think there are multiple pathways (e.g., groups of factors) to an outcome or are we interested in individual average effects considered additively?

4. How do we deal with equifinality?

Do we think that there is "multiple conjectural causation" for a particular case or are we more interested in individual causal effects?

5. What do we think about scope and generalisability?

Are we mainly focused on explaining one particular case, or are we interested in broader generalisability?

6. How do we select cases?

Should we select on the dependent variable, or should we randomly select cases representative of the general population?

7. How should we weight individual case findings?

Should our conclusions be shaped by individual cases, or are are all cases equally important, and one outlier does not invalidate a general pattern?

8. Which cases should we focus on?

Should we focus on substantively important cases, or are we focused on more general patterns with all cases?

9. How should we approach lack of fit?

Should we focus on cases that do not conform to expectations, or should we treat outliers as outliers and atypical causes as part of the error term?

10. Should we focus on concepts or measures?

Are we primarily focused on concepts, or are we concerned about linking concepts to consistently measured proxies?

What's your score?

Please submit your answer to pollev.com/pols.

One other final question

How important is falsifiability to the accumulation of knowledge?

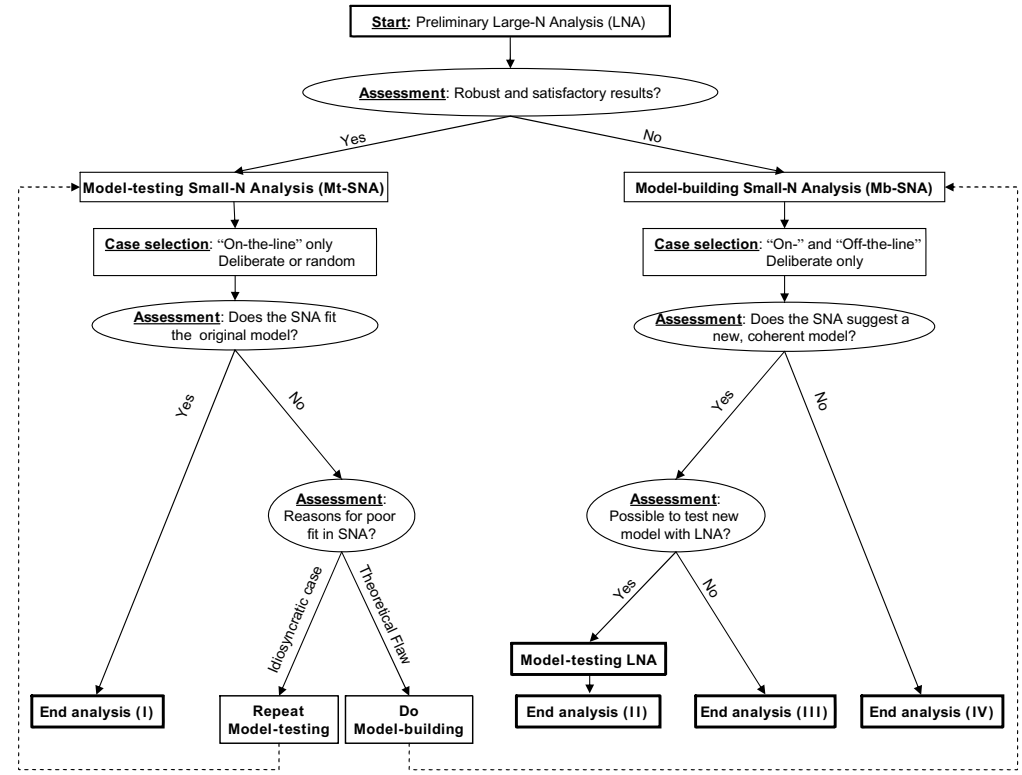
LECTURE PART 3: Mixed methods/nested analysis

There have been many attempts to use triangulation.

Individuals and teams of scholars have used multiple methods to approach their topic from multiple directions.

Lieberman's (2005) mixed methods strategy

FIGURE 1. Overview of the Nested Analysis Approach



Strengths and weaknesses of such an approach?

What do you think are the strengths and weaknesses of such an approach?

LECTURE PART 4: The present and future of political science

The present state of the study of politics

Merriam (1921) quotes

What do you see as the present state of political science?

Theoretical contributions
Empirical contributions
Policy contributions
Useful job skills

2022 course outline

Future trends?

What do you think political science will look like in another 100 years?

Research questions
Theories

Methods

Please complete your SELTS!

And let us know if you have any final essay questions.

TUTORIAL ACTIVITIES

Over the last twelve weeks we have covered almost all the steps in the scientific method we discussed back in week 1. In your written assignments you are applying this method to a research topic of your choice. In this final tutorial, you have a choice. You and two or three of your fellow students will decide whether to (1) look back and reflect on the semester and your research project or (2) look forward and apply what you have learned to a new research area. The first part of today will be group work and the second part will be sharing your results with the rest of the tutorial

Part 1: Choose your own adventure (~30 minutes)

Please divide up into groups of three or four students and choose your own adventure:

Look back

One of the hardest parts in conducting research is being clear in your own mind about what you are doing and why it matters. Please individually spend a bit of time to think about how you might give an elevator pitch of your research project.

If you are unclear what an elevator pitch is, its Wikipedia page gives a brief overview.[1] The basic idea is that if we truly understand our contribution we should be able to clearly describe what we are researching, why we are researching it, and why it matters in a short amount of time. It can be deceptively hard to do.

> Step 1. Put together a brief (60-120 second) summary of your final paper project including (if you can) your current questions or concerns with your approach.
>
> Step 2. Each student in your group takes a turn sharing their elevator pitch.
>
> Step 3. After all students have taken their turn, the other students ask questions and provide feedback.

Once you are complete, jot down your answers as a group to the following questions:

1. What was the easiest part of your projects to articulate?
2. What was the hardest part of your projects to articulate?
3. What parts are you still unclear about at this stage?
4. Were the other members of your group able to give you useful feedback?

[1] https://en.wikipedia.org/wiki/Elevator_pitch

After the tutorial, if you are curious, videos of the finalists of the ANU's annual Three Minute Thesis competition are available on ANU's YouTube webpage.[2] These graduate students were able to do something similar, however for this event they had to describe four years' worth of work into three minutes.

Look forward

If you prefer to look forward, this option allows you to apply the skills and topics you covered in this semester to a new topic of your choice. As a group of three or four students, you are going to try and put together a brief research proposal on a new topic. You can imagine that you are all either interning for a research institution while you are current ANU students or have jobs with such an institution after graduating.

Further imagine that your institution wants you to generate a research report that includes all the elements of the scientific method we talked about this term (and is summarised in this week's lecture slides).

Step 1—Choose a research topic

Step 2—Draft a rough research plan

- A research question
- A potential causal theory
- A null hypothesis and an alternate hypothesis
- A rough description of an empirical test (which could be qualitative, quantitative, or mixed methods)
- How you would evaluate your hypothesis given results from the above test
- How you would evaluate the causal theory given the previous point

If you need inspiration, the following two organisations have summaries of their research plans which focus on crucial current political issues. If your group is more interested in Australian politics, look at The Australia Institute's webpage dedicated to summarizing their six research programs (https://australiainstitute.org.au/). If your group is more interested in global politics, look at the International Crisis Group's list of their global issues at the bottom of the following webpage (https://www.crisisgroup.org/who-we-are). Finally, if your group is more interested in economic and social development, look at the United Nations' seventeen Sustainable Development Goals (https://sdgs.un.org/goals)

5. What was the easiest part of the research plan to develop?
6. What was the hardest part of the research plan to develop?
7. Was it easy for your group to decide on a topic, or do you think that it would be easier for members of your group to develop (and potentially execute) their own research plan? Explain.

Part 2: Sharing your results (remainder of the tutorial)

With the remainder of the time available, please come together as a tutorial and discuss your groups' process and outcomes. Hopefully, you will learn from others' experiences as well as

[2] https://www.youtube.com/user/ANUchannel/videos.

see the myriad research outcomes that can use the theoretical and empirical tools we have explored this term.

Thanks from the POLS2044 team for being part of this class!