Class 3 - Research III: Practices

Agenda

- Skills corner: Note taking (5 minutes)
- Conceptual grounding (10 minutes)
- Core paper discussion (40 minutes)
- *Break*
- Compare-contrast presentation (40 minutes)
- Summative lecture on concepts (20 minutes)

Skills corner

Strategic note taking for scholarly articles

- Note taking and reading are two sides to the same coin in scholarly work
- Typically note taking / highlighting happens in the 'later' passes of reading, once a applicability threshold is reached
- Pro tip 1: As soon as you think a paper has any relevance, download it in annotable format and start taking notes!
- Pro tip 2: Develop a system for organizing your notes and stick with it! An example

OK - what notes should I take?

- Narrowly
  - Your interpretation of what the paper is about
  - Key claims of the paper and their support (or not)
  - Connections you noticed to other papers and ideas
  - The 5Cs of the paper, the parts you could follow, and what you agree with (or not)
  - As I get on in this business, I tend to highlight and notate less

OK - what notes should I take?

- Broadly:
  - Citations related to key ideas and passages to chase down later
  - Methods and measures used that could be useful in future
  - Theories and constructs that you want to learn more about
  - Synonyms for terms that are important to you
  - The logic and supporting argumentation for key claims raised
  - Stylistic elements and ways of organizing a paper that you like

Grounding

Building a toolbox of practices

- The building blocks of an article - The 5Cs
- The building blocks of a design - The MIR Framework
- The building blocks of a study - What to do before collecting data
- The building blocks of a contribution - Two complementary perspectives

Readings for Today

Common Readings

1. Lange, D., & Pfarrer, M. D. (2017). Editors' Comments: Sense and Structure—The Core Building Blocks of an AMR Article. Academy of Management Review, 42(3), 407-416. https://doi.org/10.5465/amr.2016.0225
2. Tobi, H., & Kampen, J. K. 2018. Research design: the methodology for interdisciplinary research framework. Qual Quant, 52(3), 1209-1225.
3. Aguinis, H. & Vandenberg, R. J. (2014). An ounce of prevention is worth a pound of cure: improving research quality before data collection. Annual Review of Organizational Psychology and Organizational Behavior, 1: 569-595.

Lange and Pfarrer (2017)

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https://doi.org/10.5465/amr.2016.0225

EDITORS' COMMENTS: SENSE AND STRUCTURE—THE CORE BUILDING BLOCKS OF AN *AMR* ARTICLE

Common ground	A set of premises that an informed party will agree with
Complication	An issue with these premises (perhaps discordant evidence, hidden assumptions)
Concern	Why are these issues not easily dismissed
Course of Action	The plan of attack for resolving this issue that has come to light
Contribution	How the resolution of this issue allows us to move forward from a stronger position

Lange and Pfarrer (2017)

Discussion Questions

- Why might this method be effective? When might this approach hinder, rather than help, exposition?
- How does this align with the lessons of the Pyramid Principle?
- Is this the way the research process must unfold?

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EDITORS' COMMENTS: SENSE AND STRUCTURE—THE CORE BUILDING BLOCKS OF AN *AMR* ARTICLE

"There's more than one way to skin a cat," the old saying goes.[1] Even as we write that, we're imagining coming across a future conceptual exploration of the subject, perhaps in an academic journal devoted to all manner of cat studies. We note the title of this imagined article—something like, "Equifinality in feline pelt removal: A critical examination"—and begin reading. The authors invite the reader in by laying out a noncontroversial starting point. We nod our heads in agreement with the authors as they describe the *common ground*. Yes, cats can be skinned in different ways. That's intuitive, and the authors emphasize the common wisdom of that idea by describing how it has been developed in the academic literature. But, after establishing that common ground with the reader, the authors proceed to throw in a *complication*. They say, "Although that idea about cat skinning is taken for granted, little thought is given to what good it would do you or your cat to separate it from its outer covering." Aha; now we're intrigued. We're beginning to imagine how little utility—and compassion—there would be in a skinless cat, and feel further drawn into the story.

The authors proceed to point out why the complication they've raised is of *concern*. They note that the cat skinning literature, with its increasing emphasis on process over outcome, has become divorced from the real-world considerations of people and cats. The authors have now set the table; the reader is primed and ready to learn the authors' *course of action*—how they plan to solve the important complication they've introduced. The authors then describe that course of action, which involves developing criteria for assessing different approaches to cat skinning and for deciding how and why cat skinning would even be called for. Finally, the authors give us well-reasoned arguments about how their approach, which ultimately throws into doubt the whole idea of cat skinning equifinality, is an important *contribution* to the literature.

[1] No cats (or catfish, to which the idiom actually refers) were harmed in the making of this article.

We close our imagined article and note to ourselves how it featured the five core building blocks that we recognize in virtually all *AMR* articles. We have alliteratively named them—common ground, complication, concern, course of action, and contribution—and will elaborate on them below. We call these the core building blocks, because, simply stated, an *AMR* article, or any quality scholarly article in our field, cannot be complete without them. In making that contention, we note it is not an idea original to us. Rather, we are drawing on work by Davis (1971), Locke and Golden-Biddle (1997), Huff (1999), Minto (2002), and Grant and Pollock (2011), among others, who have talked about how academic writers must find a starting point that will be understandable and agreeable to the reader, and then proceed to challenge the reader's thoughts and assumptions. What we can offer here is a distillation of these ideas and an application of them to effective writing in *AMR*.

We start by providing further explanation of the five core building blocks. We then discuss how those building blocks fit into the structural elements of an article. Following that, we illustrate the building blocks in action in a set of exemplary *AMR* articles. We conclude by describing some ways in which these building blocks could be useful for authors submitting to, or reviewing for, *AMR* or another academic journal.

THE FIVE CORE BUILDING BLOCKS

Management theory development can seem daunting, both hard to write and hard to structure. Authors may find it difficult to know where to start—or, once started, how to proceed—feeling that the seemingly boundless possibilities for developing arguments and structuring an article make choosing one approach difficult. Yet the experienced and successful writer recognizes that there really is only one way to skin a cat. An *AMR* article must establish all five of the core building blocks in a convincing and compelling way. These building blocks will appear in an abridged form in the article's abstract, in an enticing way in the article's introduction, and in

Tobi and Kampen (2018)

Research design: the methodology for interdisciplinary research framework.

> *The MIR framework also introduces an agenda: the research team needs to carefully think through different parts of the design of their study before starting its execution (Fig. 1). First, the team discusses the conceptual design of their study which contains the 'why' and 'what' of the research. Second, the team discusses the technical design of the study which contains the 'how' of the research. Only after the team agrees that the complete research design is sufficiently crystalized, the execution of the work (including fieldwork) starts. (p. 1211)*

Tobi and Kampen (2018)

Discussion Questions

- Does the figure help to put the various elements of research design in context?
- Do you need to perform all of these steps? Which are essential (if any)?

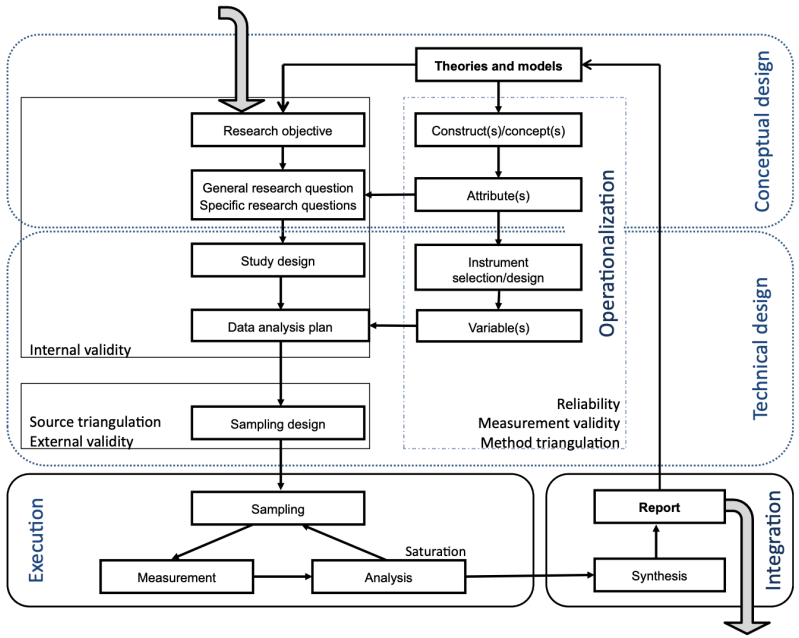

Fig. 1 The Methodology of Interdisciplinary Research framework

Aguinis and Vandenberg (2014)

An ounce of prevention is worth a pound of cure: improving research quality before data collection.

> *The suggestions offered here are motivated by our combined experience as past journal editors, associate editors, and editorial board members. We noted, sadly, that the majority of manuscripts not accepted for publication after traversing the peer-review process could have actually been rejected before the data were collected. The problems with the majority of rejected manuscripts are related to theory, research design, and/or measurement. Rarely are data analyses grounds for rejection because weak analyses can often be fixed if all of the other components are strong. (p 1.2)*

Aguinis and Vandenberg (2014)

Discussion Questions

- Tell me one recommendation that resonated with you and why.
- When might the data collection be sufficiently compelling that it would stand in contraposition to the quote on the previous slide? Are such situations rare?

An Ounce of Prevention Is Worth a Pound of Cure: Improving Research Quality Before Data Collection

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Annu. Rev. Organ. Psychol. Organ. Behav. 2014. 1:1.1–1.27

The *Annual Review of Organizational Psychology and Organizational Behavior* is online at orgpsych.annualreviews.org

This article's doi: 10.1146/annurev-orgpsych-031413-091231

Keywords

theory development, theory testing, research design, measurement, methodology, research quality, validity, causality

Abstract

We rely on classic as well as recently published sources to offer a review of theory, research design, and measurement issues that should be considered prior to conducting any empirical study. First, we examine theory-related issues that should be addressed before research design and measurement considerations. Namely, we discuss how to make meaningful theoretical progress including the use of inductive and deductive approaches, address an important issue, and conduct research with a practical end in mind. Second, we offer recommendations regarding research design, including how to address the low statistical power challenge, design studies that strengthen inferences about causal relationships, and use control variables appropriately. Finally, we address measurement issues. Specifically, we discuss how to improve the link between underlying constructs and their observable indicators. Our review offers a checklist for use by researchers to improve research quality prior to data collection and by journal editors and reviewers to evaluate the quality of submitted manuscripts.

Break

COFFEE BREAK

Compare / Contrast Presentations

Corley, K. G., & Gioia, D. A. (2011). Building Theory about Theory Building: What Constitutes a Theoretical Contribution. Academy of Management Review, 36(1), 12-32. https://doi.org/10.5465/amr.2009.0486

David A. Whetten, 1989. What constitutes a theoretical contribution? Academy of Management Review, 14: 490-495.

Lecture - Practices

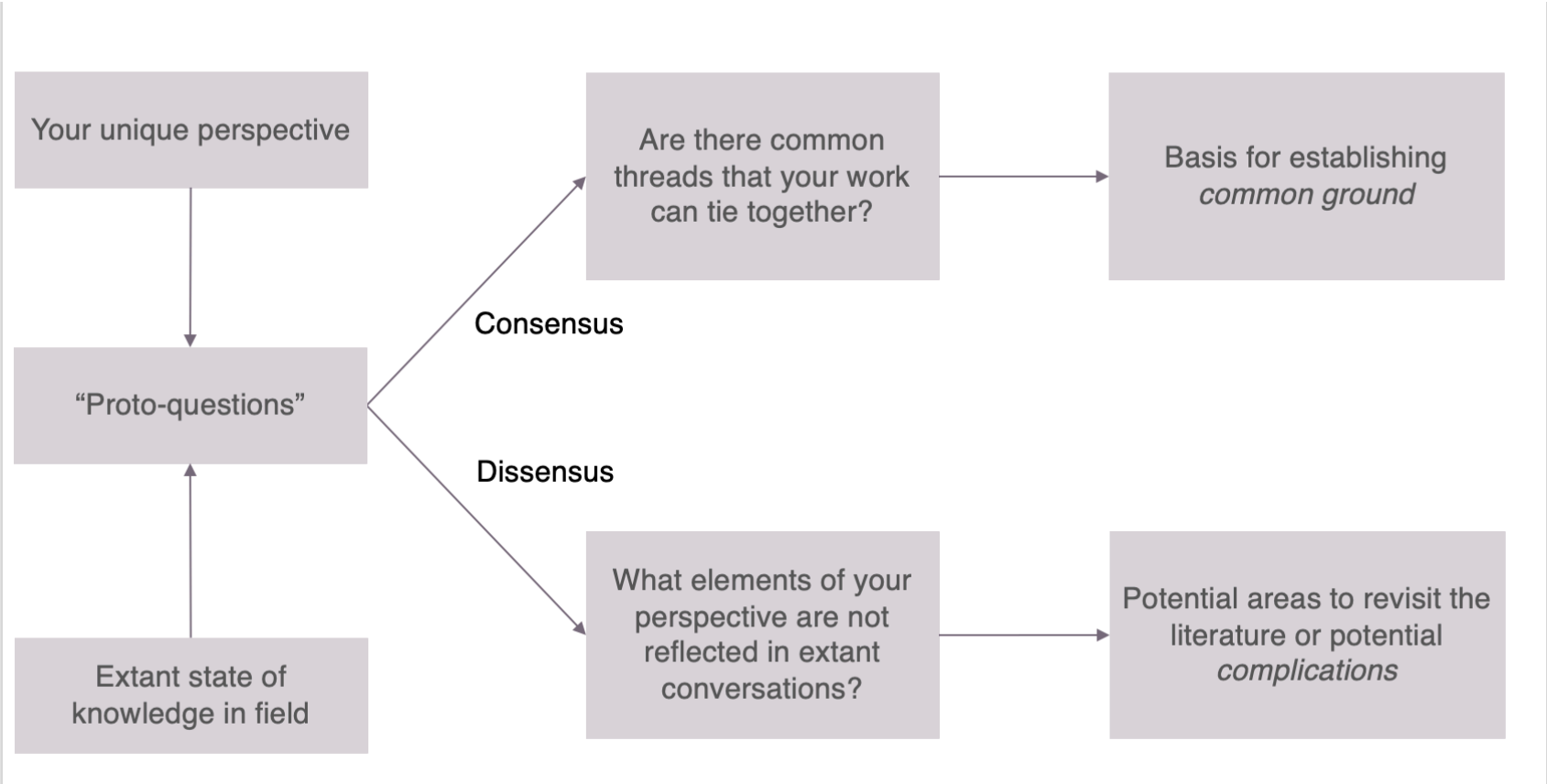
Practices you can use

- The MIR framework - The space of design choices and how they interrelate
- An ounce of prevention - Or how to avoid a wasted data collection effort
- The 5Cs - The introduction as a basis for paper development
- The contribution - And its dependence upon the other practices

The fountainhead - Research questions

- What is the "starting point" of the MIR framework?
- How can increase the confidence that we are tackling a theoretical or practical problem?
- How might the 5Cs help to iteratively identify or articulate a research question?

Consensus creating or shifting research



Crafting research questions using the 5Cs

Common ground / Received wisdom

Relative market share → (+) Increased performance

(as established by the PIMS studies in the 1970s-80s)

X

Complication

What about industries with fast cycle times? Would investments in continuing to gain relative market share make sense if the category becomes obsolete?

=

Research Question

But keep in mind…

Concern

So what? If we got the answer to this question, would it change how we think, act, provide recommendations, etc?

What are our desiderata for "good" research questions?

Let's go back through our last three classes!

- Principles:
  - Knowledge-accruing: Falsifiable / has falsifiable implications
  - Useful: Applicable / advances theoretical understanding
  - Generalizable: Replicable / not an ad hoc, one off, "just so" story
  - Answerable: Conclusion reachable through defensible logical pathways

What are our desiderata for "good" research questions?

Let's go back through our last three classes!

- Positions:
  - To what end? Theoretical v. practical knowledge
  - By doing what? How much work required to obtain precision / realism / generality?
  - With whom? Who cares about the answer?
  - Means of advance? Does the answer give rise to a novel knowledge claim?

What makes a good research question **for today's purposes**?

1. Feasibility: Can it be answered with a series of 1-3 papers?
2. Personal interest: Is it a question that you want to know the answer to?

Next class

I will have the first concept check posted to Brightspace before next class.

It is super simple, about 10 questions based on our discussions so far.

You will have one hour to complete the assessment once started (plenty of time)!

Next class

Elements I: Theory and phenomena

1. Bacharach, S. B. (1989). Organizational Theories: Some Criteria for Evaluation. The Academy of Management Review, 14(4), 496-515. https://doi.org/10.2307/258555
2. Makadok, R., Burton, R., & Barney, J. (2018). A practical guide for making theory contributions in strategic management. Strategic Management Journal, 39(6), 1530-1545. https://doi.org/10.1002/smj.2789
3. Johns, G. 2006. The Essential Impact of Context on Organizational Behavior. The Academy of Management Review, 31, No. 2, 386-408.

Next class

Elements I: Theory and phenomena

4. Compare / Contrast

- Sutton, R. I., & Staw, B. M. (1995). What Theory is Not. Administrative Science Quarterly, 40(3), 371. https://doi.org/10.2307/2393788
- Hambrick, D. C. 2007. The field of management's devotion to theory: Too much of a good thing? Academy of Management Journal, 50, 1346-1352.

Workshop Agenda

- A roadmap for the class (11 - 12p)
- Research Question Presentations (1 - 3p)
- Self-organized group discussions (3 - 3:45p)
- Reflections

Class Pulse Check

Pollev.com/drfox

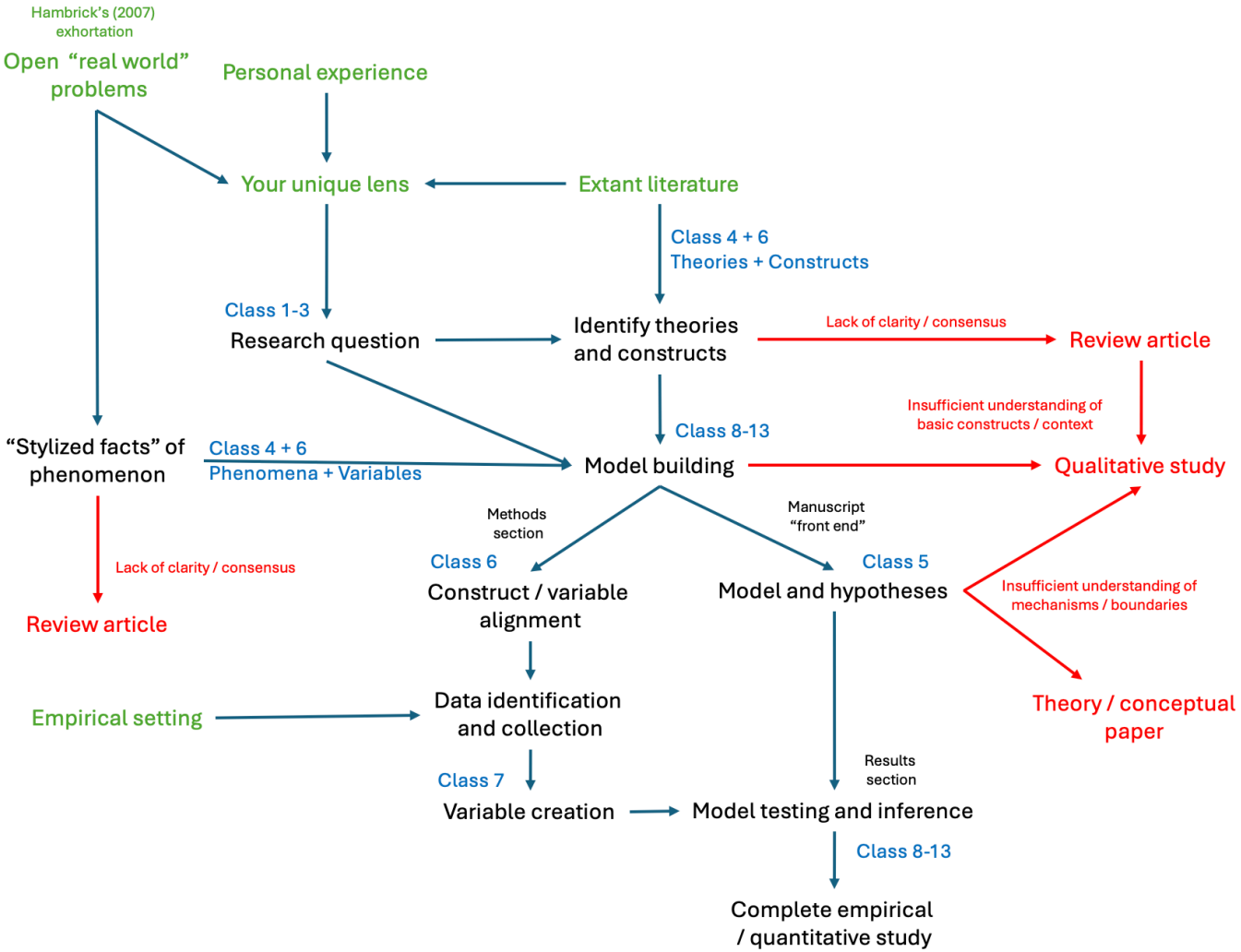
Roadmap

Where are we going?

On the following slide, I illustrate how the class fits together

- Note that it assumes that the intent is to complete a quantitative, empirical project, but I have indicated "offramps" to other types of contributions in red
- Class content is indicated in blue
- Information relied upon from 'outside the system' is shown in green

A pictoral representation of the research process



The paradigm of our class

This class is rooted in a paradigm

- We have a well-articulated research question (Classes 1-3)
- We will build a model with hypotheses to answer this question (Classes 4-7)
- That model is nested within a causal system and reality
- Our hope is to recover a causal effect through an estimation process (Classes 8-12)

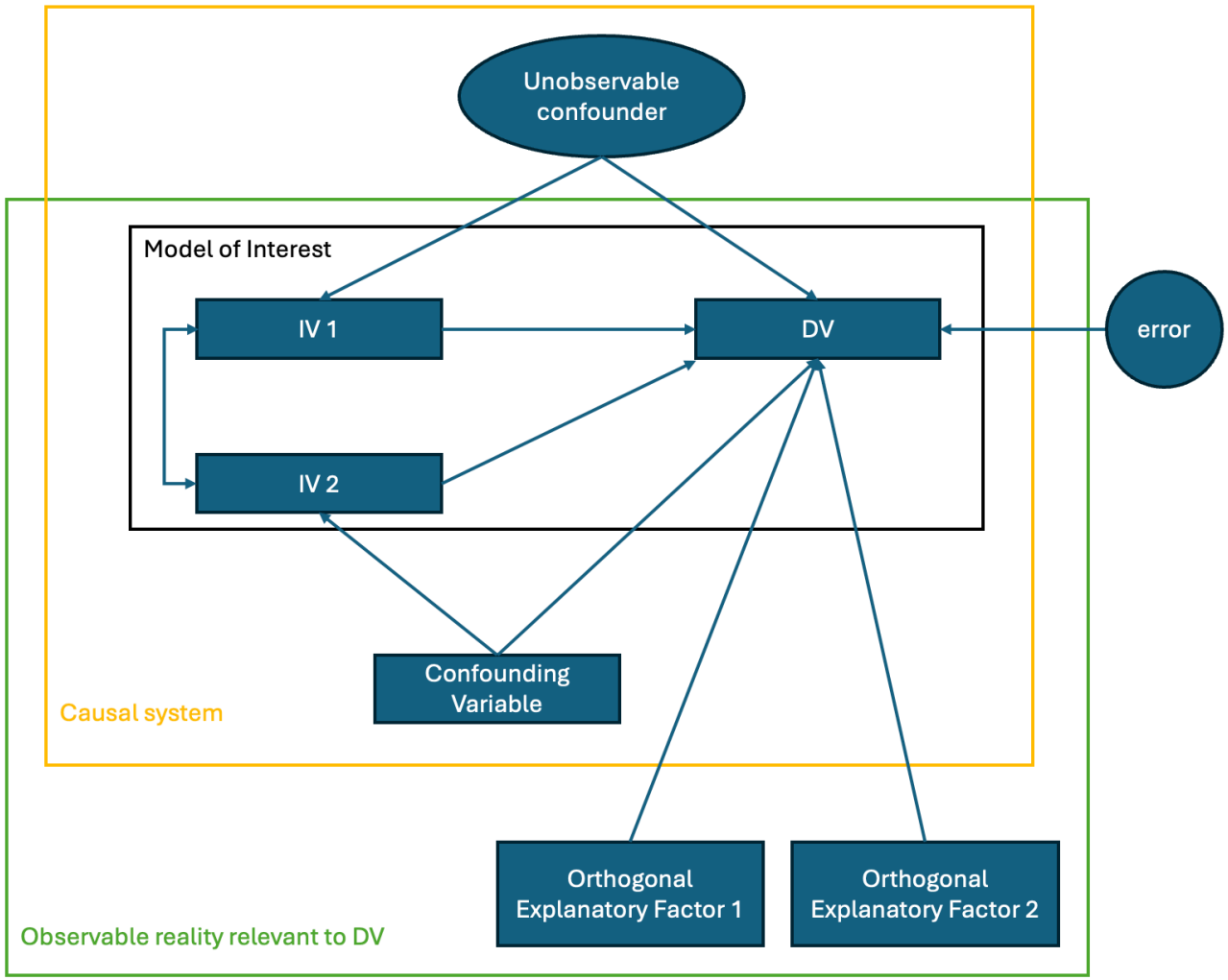
For this to be effective, we want this estimate to be:

- Accurate: hopefully unbiased, but at least consistent
- Precise: "efficient", using sample information well

How your model fits within this paradigm

On the following slide, I illustrate how your focal model compares to the wider system of relationships

- Note that you may need to include elements outside of your model of interest to specify the causal system (as we will discuss in Class 5: Models + Hypotheses)
- Also note that our model may be influenced by observable and unobservable factors (as we will discuss in Class 6: Constructs + Variables)
- This presumes you have a story you want to understand rather than trying to maximize the predictability of the DV (a different question to answer)


Unobservable confounder
Model of Interest
IV 1
IV 2
DV
error
Confounding Variable
Causal system
Orthogonal Explanatory Factor 1
Orthogonal Explanatory Factor 2
Observable reality relevant to DV

How does this process help us build knowledge?

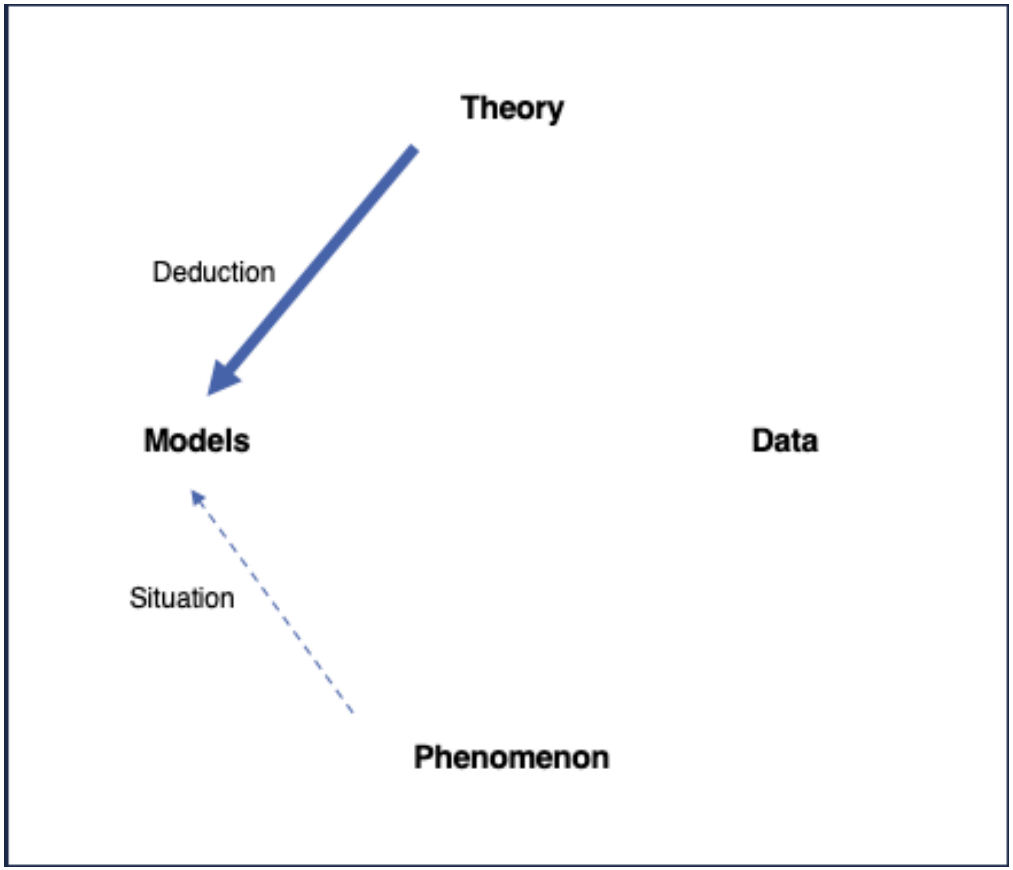


Figure 1: Building a model

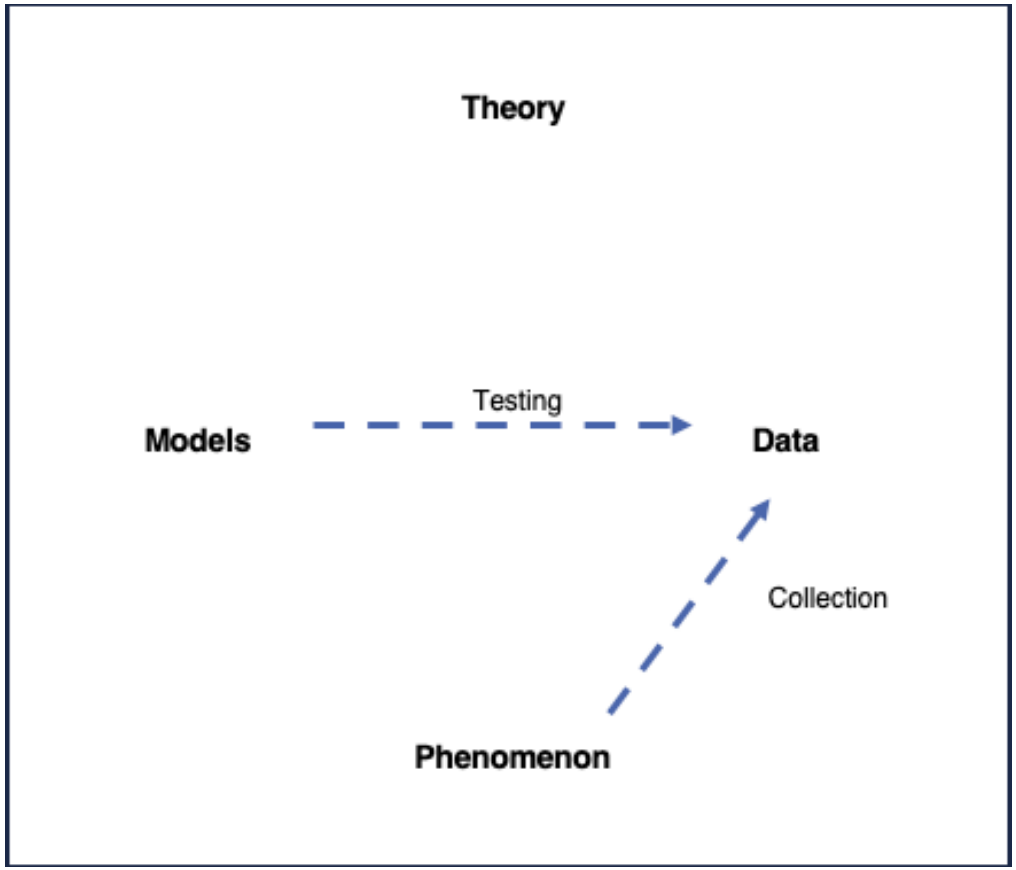


Figure 2: Testing a model

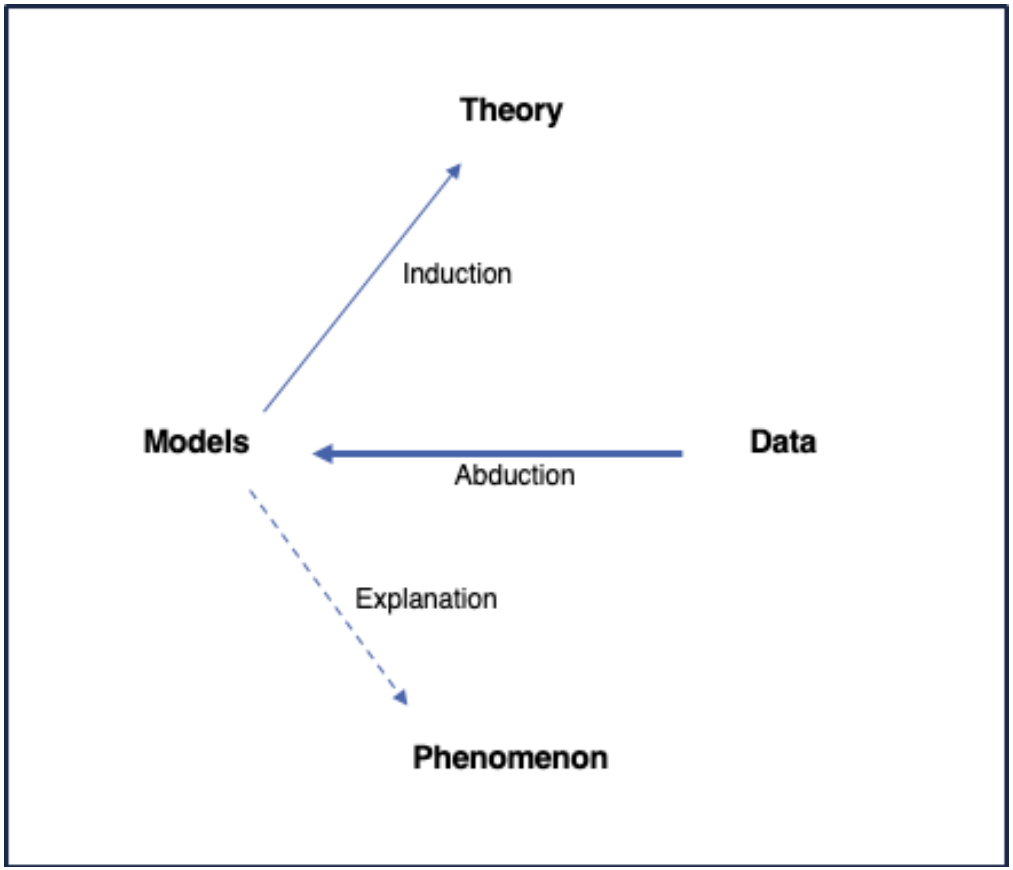


Figure 3: Making a contribution

How does this process help us build knowledge?

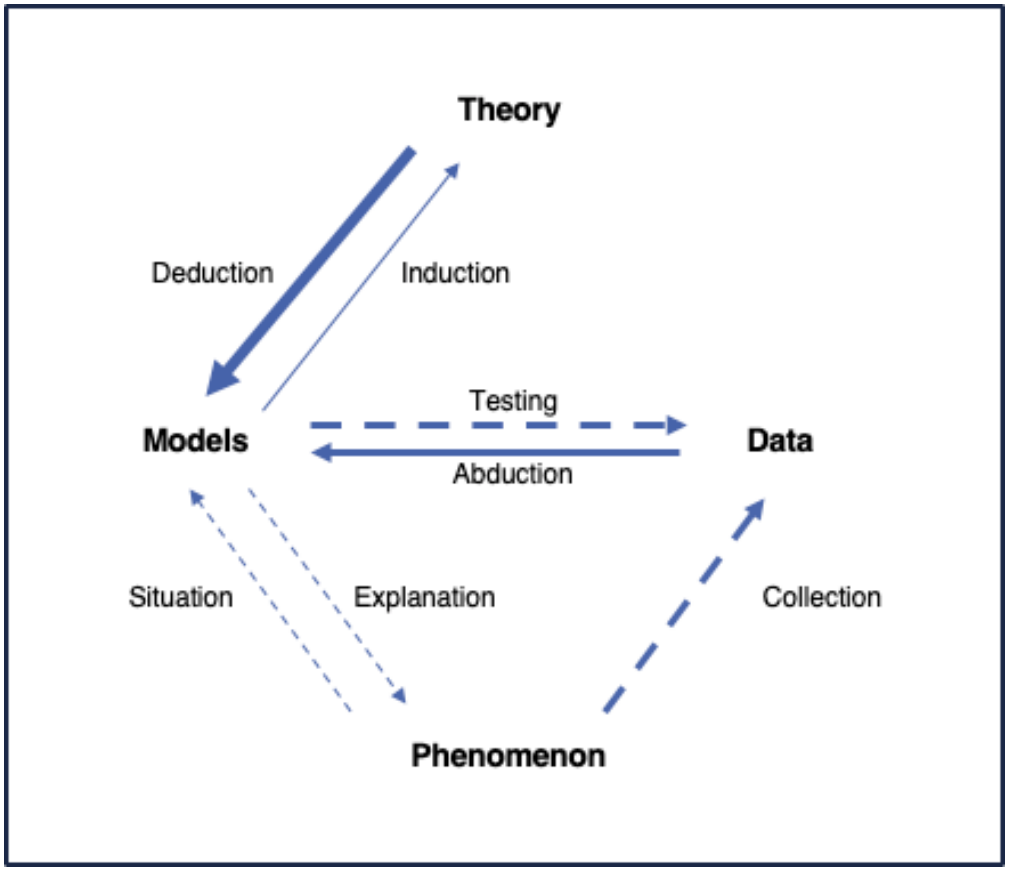


Figure 4: The Knowledge Generation Process

Workshop

Research Presentations

Self-organized group discussions

Reflections

References