Class 2 - Research II: Positions

Agenda

- Conceptual grounding (10 minutes)
- Core paper discussion I (40 minutes)
- *Break*
- Core paper discussion II (40 minutes)
- Summative lecture on concepts (15 minutes)
- Some thoughts on thinking if we have time (10 minutes)

Conceptual grounding

Last class - Some key principles of research design

- Falsifiability: Can we modify our state of knowledge based on the result of our study?
- Defensibility: Do our arguments appropriately employ modes of inference?
- Applicability: Does our study actually impact the state of practice?
- Replicability: Will our work bear re-examination in a similar or new context?

Today - Research design "positions"

We must ask ourselves for a given project where we stand regarding the following:

- The trilemma: generalizability, precision, and realism
- A related tension: rigor vs. relevance
- Conversation topic: what you want to say vs. what the audience wants to know
- What claim(s) to assert: stylized facts, assumptions, critiques, and omissions

Readings for Today

Readings

1. Huff, A. S. (1999). Writing for Scholarly Publication. SAGE. [Chs. 1, 3]
2. McGrath, Joseph E. (1981) Dilemmatics: The Study of Research Choices and Dilemmas, American Behavioral Scientist, 25, 2, 179-210
3. Simsek, Z., Heavey, C., Fox, B. C., & Yu, T. 2022. Compelling Questions in Research. Journal of Management, 48(6), 1347-1365.
4. Tushman, M., & O'Reilly, C. (2007). Research and Relevance: Implications of Pasteur's Quadrant for Doctoral Programs and Faculty Development. The Academy of Management Journal, 50, No. 4, 769-774.

Huff (1999)

Writing for Scholarly Publication. SAGE. [Chs. 1, 3]

The critical questions ot answer are these:

- *Which conversations should I participate in?*
- *Who are the important "conversants"?*
- *What are these scholars talking about now?*
- *What are the most interesting things I can add to the conversation? (p. 9)*

Huff (1999)

Discussion Questions

- Does the perspective of "conversation" resonate? How does this relate to academic work progressing iteratively rather than linearly?
- How might you use this research diamond to inform your research question for this class?

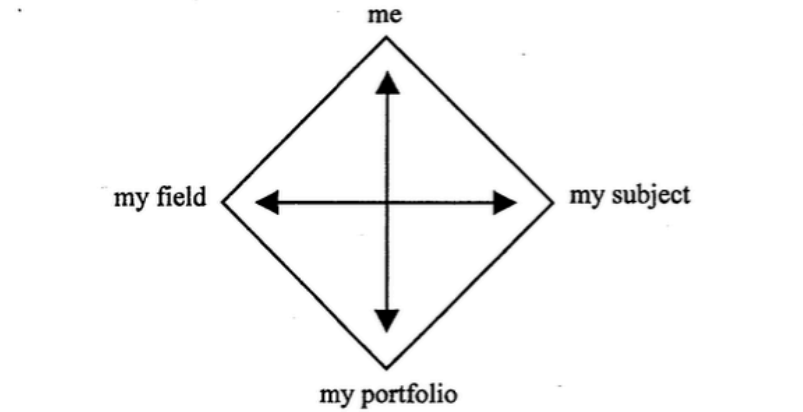


Figure 3.4. A "Critical Diamond" for Evaluating Writing (or Research) Alternatives

McGrath (1981)

Dilemmatics: The Study of Research Choices and Dilemmas, American Behavioral Scientist, 25, 2, 179-210.

The upshot of such a view of research is, of course, rather unpolyanna. Not only is there no "one true method," or set of methodological choices, that will guarantee success; there is not even a "best" strategy or set of choices for a given problem, setting and available set of resources. In fact, from the dilemmatic point of view, *all* research strategies and methods are *seriously* flawed; often with their very strengths in regard to one desideratum functioning as serious weaknesses in regard to other, equally important, goals. Indeed, *it is not possible, in principle, to do "good"* (that is, methodologically sound) *research*. And, of course, to do good

McGrath (1981)

Discussion Questions

- Which quadrant feels most comfortable to you? Why?
- What might you gain by combining multiple elements in a given study?

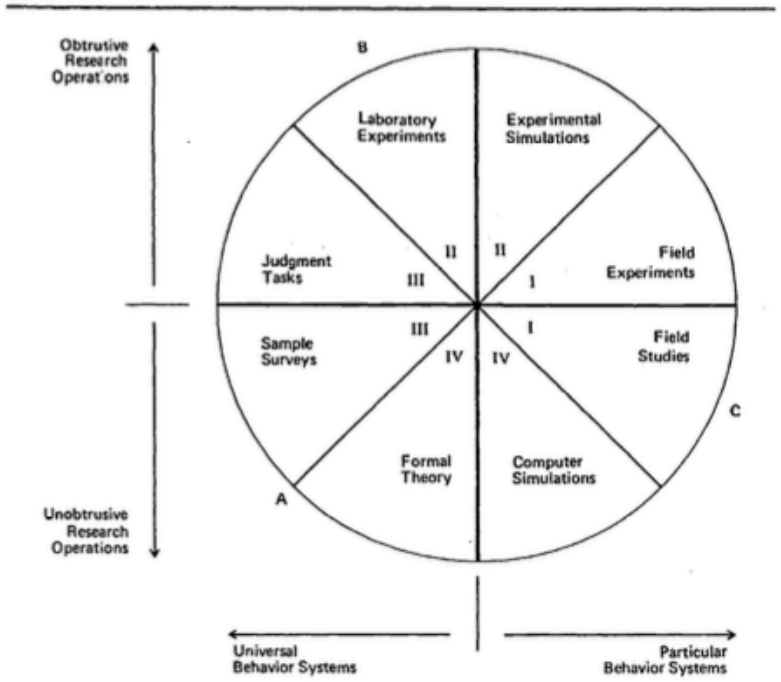


Figure 2: Research Strategies
From Runkel and McGrath, 1972.

Break

COFFEE BREAK

Simsek et al. (2022)

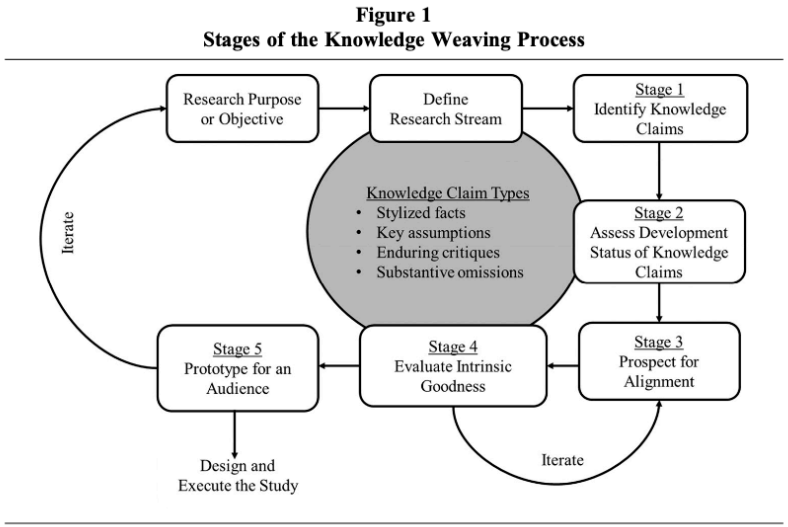
Compelling Questions in Research: Seeing What Everybody Has Seen and Thinking What Nobody Has Thought. Journal of Management, 48(6), 1347-1365.

> *We use knowledge weaving as a metaphor for achieving that alignment: combining the warp of distinct knowledge claims (i.e., what content is significant) with the weft of their developmental status (i.e., how to advance that content). Without both ingredients, the researcher risks shoehorning a question into the focal literature without substance. (p. 2)*

Simsek et al. (2022)

Discussion Questions

- Does this editorial provide a feasible pathway towards asking a compelling research question (asking for a friend)?
- How can a dual focus on knowledge claim type and developmental status help to position your study within the extant scholarly conversation?



Tushman and O'Reilly (2007)

Research and Relevance: Implications of Pasteur's Quadrant for Doctoral Programs and Faculty Development. The Academy of Management Journal, 50, No. 4, 769-774.

This defensive orientation to the phenomena on the part of this "silent majority" threatens to undermine our research, our doctoral programs, our MBA and executive education teaching, and our institutional legitimacy. Although we know much, we are collectively diffident about developing this knowledge with practitioners, as though a close interaction with the phenomenon might diminish our objectivity, blur boundaries, raise particularistic issues, and lead to conflicts of interest (e.g., Kimberly, in press; McKelvey, 2006). Our field's silent majority has the confidence (or hubris) to suggest that we can deduce important research topics and gather useful data only through disinterest. In contrast, we believe that this self-imposed distance from the phenomena we study reduces the quality of our field's research, undermines the external validity of our theories, and reduces the overall relevance of the data used to test ideas.

Tushman and O'Reilly (2007)

Discussion Questions

- Based on what you have seen so far, how is your field doing in terms of operating in Pasteur's quadrant?
- What are the impediments to operating here and how might you overcome them?

FIGURE 1
Three Quadrants[a]

Rigor: Quest for Fundamental Understanding	Relevance: Considerations of Use: No	Relevance: Considerations of Use: Yes
Yes	*Bohr's Quadrant* Basic disciplinary research	*Pasteur's Quadrant* Professional schools Business schools
No		*Edison's Quadrant* Consulting firms

Summative lecture

Defining a landscape for research questions

Dimensions we have discussed today:

- Rigor and relevance
- Precision, generalizability, and realism
- What matters to you v. what matters to others
- Types of knowledge claims and their level of development

Defining a landscape for research questions

How might they be correlated with each other?

- Rigor and relevance:
  - Orthogonal (r = 0?)
  - In opposition (r = -1?)
- Precision, generalizability, and realism:
  - How do each map onto rigor and relevance?

Defining your place on that landscape

- What matters to you v. what matters to others
  - What dimensions does your audience care about?
  - Which do you care about and why?
  - What implications does this have for topic selection? Outlet selection?
- A potential missing piece: Novelty?

Defining your place on that landscape

- Types of knowledge claims and their level of development
  - How do different combinations of knowledge claims and development status fit on the research landscape?
    - Stable stylized facts: High in relevance, perhaps "old news" to scholars (Edison's quadrant?)
    - Unstable key assumptions: An opportunity to conduct basic research to build a new basis of understanding?
- How might your choice of knowledge claims define you as a scholar?

Other thoughts

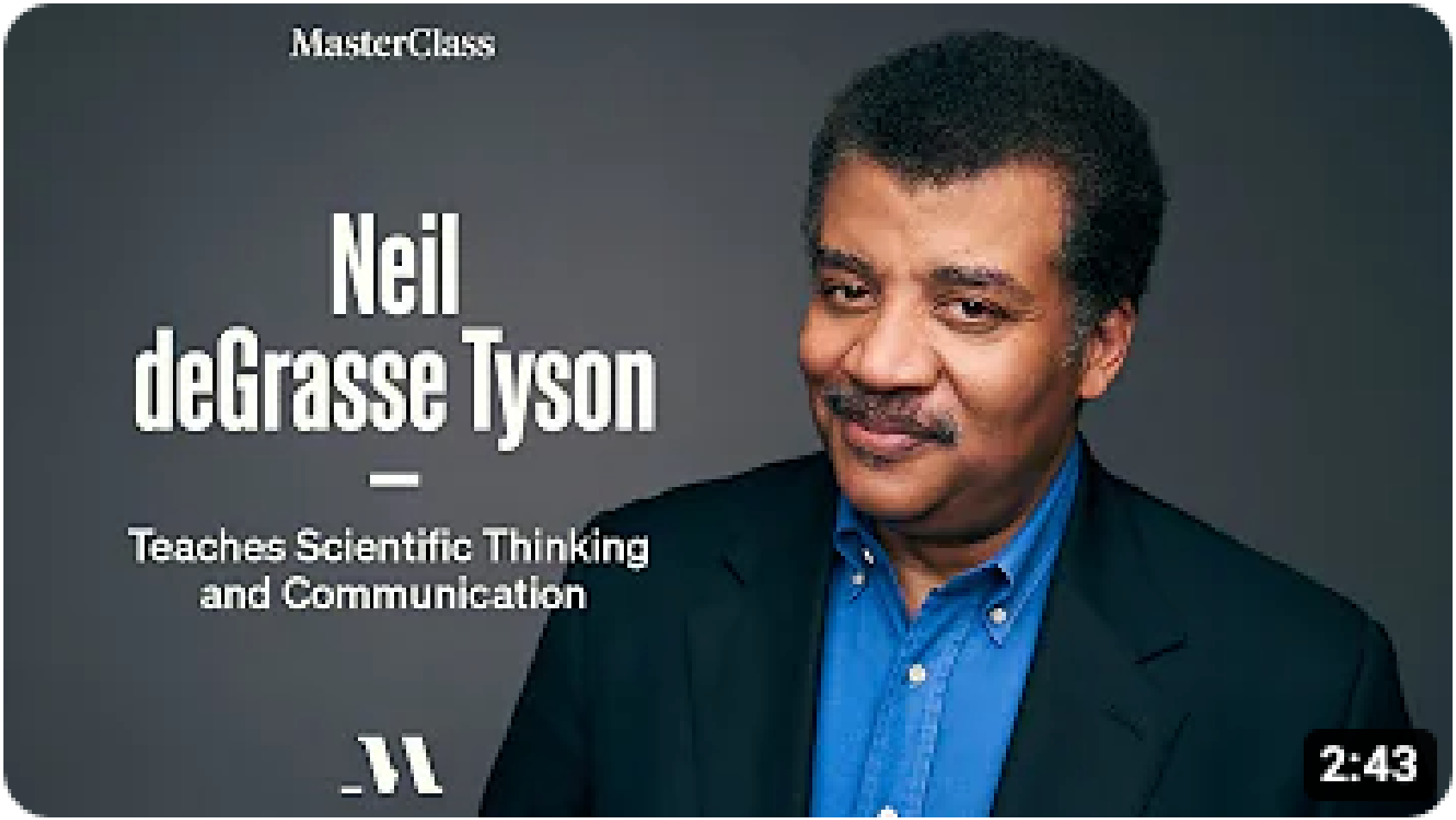
Useful types of thinking when engaging in the research process

- Skeptical thinking
- Bayesian thinking
- Strategic thinking
- First principles thinking

Skeptical thinking

"Science depends on organized skepticism, that is, on continual, methodical doubting. Few of us doubt our own conclusions, so science embraces its skeptical approach by rewarding those who doubt someone else's." Neil deGrasse Tyson, Origins: Fourteen Billion Years of Cosmic Evolution

Skeptical thinking



Bayesian thinking

Implicit in the earlier discussions is our degree of belief.

- Nosek and Errington talk about how replication increases or decreases our degree of belief.
- Popper uses the asymmetry of verification to achieve binary outcome of disconfirmed evidence.
- But couldn't we be more subtle in our treatment of beliefs?
  - Indeed, we can through the application of Bayesian logic and Bayes' Rule.
  - I will not be teaching you the statistical methods that follow from this, but you can find them.

Bayesian thinking

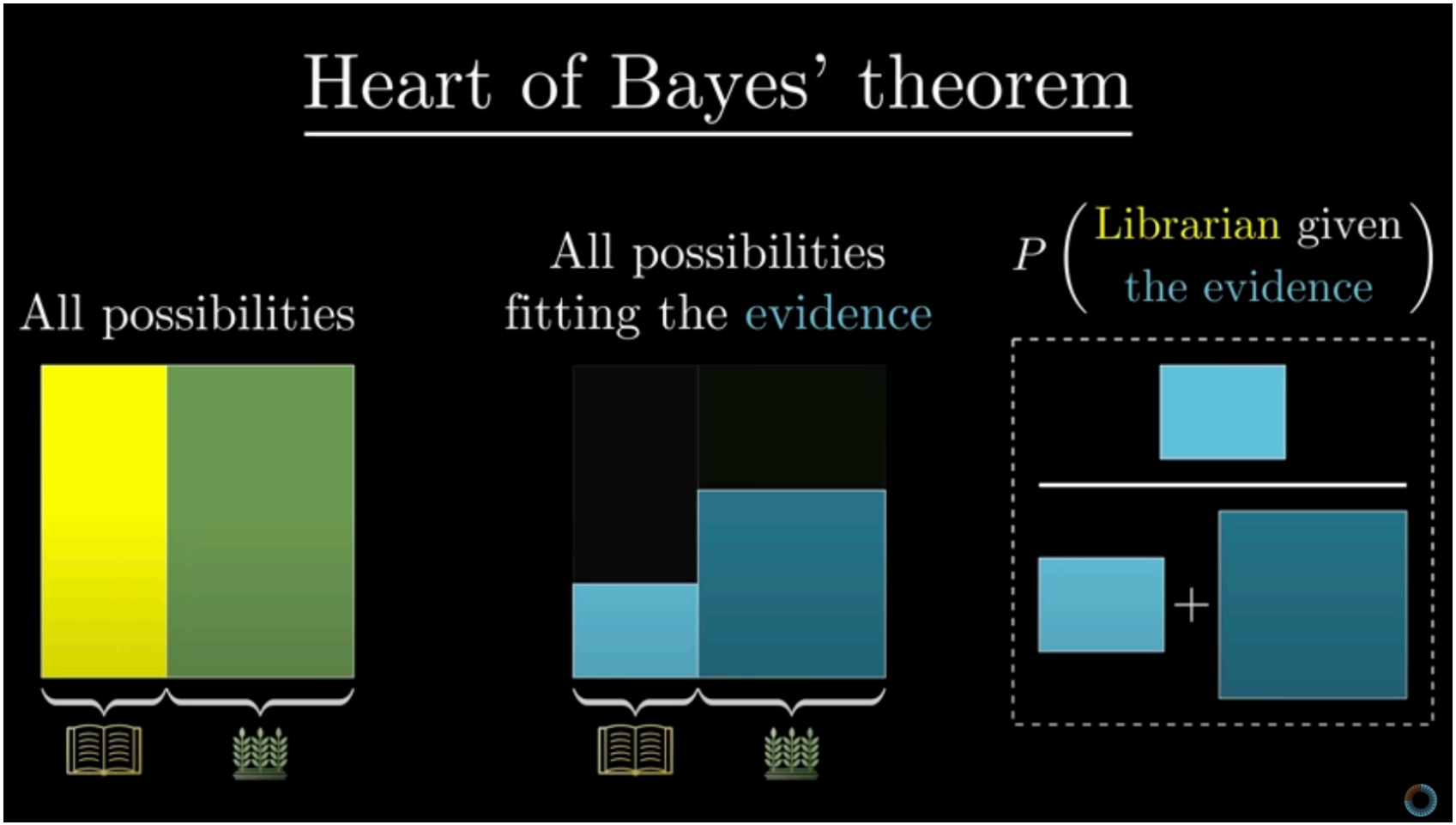


Figure 2: A Primer on Bayesian Thinking

Strategic thinking

Finally, it helps to be strategic when thinking about designing and evaluating research. By this I mean thinking that embraces three characteristics:

- Rigor
- Complexity
- Ambiguity

Strategic thinking

- Rigor
  - Comprehensive – focusing attention on both the forest (a research program) and the trees (discrete methods or studies)
  - Adaptive – balancing multiple goals and knowing what progress can be made against one or more of them simultaneously (McGrath's Trilemma)
  - Inferential – moving from what is known to what can be reasonably inferred (judicious use of multiple reasoning modes)

Strategic thinking

- Complexity
  - Dynamics – accounting for first and second order effects that are material across actors, choices, and time (rigor)
  - Allocentricity – outcomes often jointly determined by internal and external factors, often other parties or agents

Strategic thinking

- Ambiguity
  - Unstable – non-linear shifts across time and situations may limit generalizability and heighten the role of context (thinking about whether findings will maintain relevance)
  - Unforeseeable – many research projects are a full reinforcement learning problem, learning while doing is necessary to reveal the evolving state of the world

Strategic thinking

First principles thinking

A first principle is a basic assumption that cannot be deduced any further. Over two thousand years ago, Aristotle defined a first principle as "the first basis from which a thing is known." First principles thinking is a fancy way of saying "think like a scientist." Scientists don't assume anything. They start with questions like, What are we absolutely sure is true? What has been proven? - James Clear

Preparation for Next Class

Next class

Research III: Practices

Our first compare and contrast discussion will take place. Presenters, please reach out if you have questions or concerns!

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.
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.

Next class

Research III: Practices

4. Compare / Contrast

- 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