Research Questions and Projects

Systematic and Communicable Research
Veronica Renee Boehmer: Source of Fatigue and Love
Research Process

1. Identify Research Question.
2. Review literature on that topic.
3. Form theory and hypotheses if explanatory study.
5. Test.
Origin of Research Questions

• Real-World stimuli
• Curiosity
• Imagination
• Reformulation of research questions in a literature.
Beginning Empirical Research: Reasoning

It is important to start with various puzzles or research questions based on whether idea for a project is stimulated by theory or observation:

1. **Inductive**: Observation of phenomena lead to theory, and then testing.

2. **Deductive**: Theory leads to propositions that are then tested.
Deductive and Inductive Logic

• Research that comes from observation with little prior theory is inductive, whereas logical theory tends to be more deductive.

• However, the formulation of new research questions usually contains elements of both since the real world must motivate our curiosity, although reformulations of questions may be more deductively motivated based on work of others.
Subjectivity and Ideas

The inspiration and motivation to study some phenomenon is varied but to some degree a subjective and a personal experience.
• Since the formulation of research questions is likely the most inherently subjective part of the research process, this is one reason to be systematic in the rest of the process.

• We likely begin with some preconception about how things work (theory) or how they should work (normative theory/prescription).

• Hence, science can tone done ideology, etc., if properly followed so we do not just see what we want to see.
• It is the earlier stages of problem formation that we first confront basic concepts such as good government, justice, war, freedom, wealth, equity, etc.

• When we begin to think about concepts we also start to relate them to each other in a loose and informal manner. We are thinking theoretically but not explicitly or formally regarding logic.

– How do we move to this more explicit logic and theory?
• Even though we may be thinking theoretically by beginning to relate concepts to each other, we still need to make a professional jump to a scientific research program.

• This is a necessary step before we begin to more formally think about a problem and know we can make a contribution.

How do we know we can make a contribution and how?

Answer: Undertake a review of the literature.
Purpose of Literature Reviews

• Lit reviews reveal the scientific community researching a given topic. In doing so establishes certain research questions as important (albeit sometimes subject to fads).

• Research questions should also be compelling to real world, naturally.

• To devise a research project without reviewing lit may result in redundant and insignificant research of interest to no one.
Goals of A Lit Review

1. Again, identify a community of scholars.
2. Establishes your work in this community.
3. In doing so, survey variety of theories, methods, etc. in other work.
4. Reformulate your question relative to other work.
5. Form your work to be commensurate with others in regard to paradigms, conventions, theory, and data.
Sources of Data/Info

• **Descriptive Info/data**
  – Encyclopedias, almanacs, yearbooks
  – World Wide Web
  – Government documents
  – Books: history, political science, etc.

• **Theoretical works/studies**
  – Journal Articles
  – Books
  – Unpublished manuscripts (on-line usually)
Tips for Research/lit reviews

- Avoid using websites for most of sources; younger students rely too heavily on this.

- Some websites are propaganda.

- Most scholarly work is in journals or books, which is where you should look for theory and empirical studies.

- Research and lit review papers should feature your thoughts and organization, not that of other authors!