Today we are addressing the question of how to design a good research plan.

Q: what experience do we have in this room relating to research design?

Your reading identifies the careful selection and identification of the problem as the key to starting the research design process well.

- Good problem statement = efficient use of time and resources
- Poor problem statement = project that lacks focus, takes too long to do, and doesn’t answer key questions

Q: where do research problems come from?

- Result of a “feeling of concern”: a problem in society that needs to be fixed (Q: what might be an example?)
- Can also result from a “need for more precise knowledge”: more information is needed to understand a situation or phenomenon (Q: can you think of an example?)

Q: do you have an idea of where your research problems are coming from?

- Are you well-acquainted with a body of existing theory? (deductive logic)
- Do you have experience observing what you want to study? (the basis for making inductive statements)

Q: do you have an idea of where your research problems are coming from?

- It is best if you play an important role in formulating your research problems (as opposed to your major professor giving them to you)
- Recall the “Professor Good” story from your reading
Research Design

Let’s listen to one of the world’s most prominent economic geographers talk about how he got going with one of his key research streams.

Richard Florida: Who’s Your City?

Research Design

A problem statement will include some context to explain the problem to be investigated.

However, the focus of the problem statement is a concisely-worded sentence (or two or three) that precisely defines the specific research question you are investigating.

It is this sentence (or a very few sentences) that we will mainly focus on here.

Research Design

Problem statements can be formulated well no matter what theoretical perspective you investigate from.

The “scientific method” is most closely associated with the quantitative (empiricist) tradition.

Other perspectives have developed that emphasize aspects of what is “real” that cannot be so easily quantified.

Example: humanist research

Humanism is concerned with the role of human experience and meaning.

In geography, humanism connects experience and meaning with people/environment relations.

Humanist geographers “enter into” their research to understand attitudes (not neutral/outside).

Humanist writing is subjective where writing in the physical sciences attempts to be thoroughly objective.

Research Design

Q: When might a humanist approach be appropriate?

Even within human geography, might there be times when humanism could be more successfully argued than others?

Research Design

Even with such extremes (qualitative vs. quantitative, objective vs. subjective), clear problem statements can be written in most situations.

Quantitative: problem statement will lead into a hypothesis (prediction of expected outcomes).

Example: “There is no relationship between ground slope angle and vegetation cover type.”
Research Design

- Even with such extremes (qualitative vs. quantitative, objective vs. subjective), clear problem statements can be written in most situations
  - Qualitative: purpose statement will lead to a question to be answered by research
  - Example: “Did government actions contribute to spousal abuse in Willowgrove in the 1980s?”

Research Design

- Another important consideration relating to problem statement definition is the “matrix” or study area
  - Part of every geographical research project
  - No “right answers” here: geographers do good research in big areas and in small areas
  - Different study area definitions will lead to different research questions, however
    - Q: why would this be?

Research Design

- Another important consideration relating to problem statement definition is the “matrix” or study area
  - You need to consider the nature of the issue you want to investigate when you define your study area
  - Defining your study area is part of defining your research question(s)

Research Design

- Some guidelines for problem statements
  - Whether you start with a question or a hypothesis, you must return to it at the end of your work
  - If you start with a question, you must return to answer it
  - If you start with a hypothesis, you must state whether your findings did or did not support it

Problem Statement Guidelines

- 1. Make it Limited
  - A limited problem statement is one narrow enough to be workable
  - Make sure your problem is restricted enough so you can explore issues in the depth required to draw supportable conclusions
Problem Statement Guidelines

1. Make it Limited
   - Example: studying land-use planning
     - In the form of a question: “What role did government play in the development of land-use planning in the 1950s?”
     - As a hypothesis: “The government’s municipal act led to land-use planning in the 1950s”
     - Not: “Government played a role in the development of land-use planning”

2. Make it Unified
   - Your research must have one controlling idea from beginning to end
   - Beware of double-headed hypotheses:
     - “In its term in office the government introduced many social programs, but its downfall was its nuclear energy policy”
     - What is the controlling idea here, social programs or the government’s downfall?

3. Make it Exact
   - Avoid vague or easily misinterpreted terms such as “interesting” or “significant”
   - Example: “Cemeteries are interesting sources of data for reconstructing settlement histories”
     - Does “interesting” mean curious, good, exciting, important, worthwhile, or …what exactly?

Beyond the Problem Statement

- Defining your problem is important, but this is only a first step
- Q: what ideas do you have now about how you want to plan your research?

Key idea: develop an action plan
- To avoid becoming a “career graduate student”, you need to formulate and follow a research action plan
- See the research action plan handout