**Notes from June 10 2013 Discussion**

Social scientists seek to explain (we need to give a compelling definition of explanation, defined loosely as a story about the logic by which events or phenomena occur)

Hypotheses arise from (or are part of?) explanations

The purpose of empirical observation is to try to confirm or disconfirm an existing explanation via its hypotheses

This task, in turn, raises the question, what kinds of observation are best suited to confirm or disconfirm

The kinds of observation that are best suited to confirm or disconfirm will simultaneously go beyond what the researcher immediately observes and will be very precise in the phenomenon (phenomena) of interest

Possible outline: identify the characteristics of a good explanation and derive implications from these characteristics; offer a couple examples of good explanation, and justify why they are good examples; identify widely used research designs; list criteria that makes a design a good design for purposes of testing hypotheses derived from explanations; discuss the various designs in terms of the criteria (want to show that all designs have strengths and weaknesses—ultimately want to argue that there is nothing inherent in the types of design used over the past 70 years that make some better than others; thus there is no reason to give certain designs, especially those that have dominated the research endeavor, a priority over others)

Some of the designs to be considered: random samples; random assignment experiments using random samples; random assignment using convenient collectives (very common in recent work); cross-national surveys (I think we need to be more precise about this one); case study (what about small n studies?)

Possible criteria to judge a design: What types of comparison are possible (for example, random assignment makes the comparison clear)? Can the researcher control the units? Can s/he control the values? Can s/he infer about a population (in reality, this is always a fantasy)

More generally: Given a particular way of observing the world, how does each design help us to gain support for or raise doubts about existing theories (probably want to use explanations)

Statistics helps in the first two designs, although statistics do not provide explanations

The researcher has control in the first two designs—advantages?

Note that we have not mentioned generalization thus far; we have focused exclusively on explanation, presumably the key objective of science

Relationships among three factors: explanation, observation, generalization (needs development)

Is it the job of explanation to help us generalize; if so, how (by creating expectations about as-yet unexplored observations?)

When thinking about generalization, is it reasonable to think of trying to identify a particular equation (functional form, etc.) while recognizing that the specific parameters can vary across studies—in other words, is explanation about getting the functional form, etc. right

Is generalization the same as prediction? We seem to have concluded that it is not, although the logical positivists argued that once general laws are identified, prediction logically follows

A Few Thoughts

We will need to choose a compelling and not-controversial definition of explanation

We’ve got some more work to do to nail down generalization

The general outline that began to come into view yesterday seems pretty good

We might end up formulating a general framework for evaluating the strengths and weaknesses of alternative designs—if so, we need to go beyond the obvious