Designing Social Inquiry: An Excellent Guide, But Not Quite the Bible

Not many political scientists would disagree that bridging the gap between quantitative and qualitative research so as to generate a more uniform approach to research on political phenomena is desirable. This is exactly what Gary King, Robert O. Keohane, and Sidney Verba (KKV) attempt to accomplish in their book, Designing Social Inquiry: Scientific Inference in Qualitative Research. These authors assert that neither qualitative nor quantitative research in and of itself is superior and that a “unified logic of inference” underlies sound research and good political science in both instances.

Critics taking part in a review symposium (published in American Political Science Review, June 1995) generally agree that KKV go a long ways towards accomplishing their goal, providing the best attempt to date at bringing “discipline” to research in the field of Political Science. These writers do criticize KKV, Ronald Rogowski most stridently for their focus on research design to the detriment of theory, but they generally acknowledge the merits of Designing Social Inquiry outweigh its faults. To say that all research in political science should follow the KKV recipe, however, is overly ambitious and hyperbole. Regardless, KKV do provide an excellent guide for how one may conduct effective research in the field of Political Science. Interestingly, it is implicit in the authors’ concept of “social enterprise” that their work will not prove to be the “ultimate authority” for research methodology; they maintain that one aspect of good theory and research is that it builds on previous work and, in turn,
paves the way for further discovery by other scholars. This concept is also applicable to
the dialectic on how a researcher ought to conduct research.

KKV divide research design into four principle components: the research
question, the theory, the data, and the use of data. Though the authors recognize that
these components need not be addressed in any specific order, for the purpose of
structure they will be dealt with here in turn. There is no way to direct a researcher in his
or her choice of a research question, but KKV do offer some guidelines on topics to
avoid. First, KKV maintain that the personal should be absent from scholarly endeavors,
“no one cares what we think—the scholarly community only cares about what we can
demonstrate,” (p.15). Next, KKV assert that a research question should be relevant to
political, social, or economic life, helping to predict events that may beneficially or
malignantly affect several people. Finally, KKV hold that a research project should make
a contribution to an existing scholarly literature, furthering the understanding of a given
topic or ruling out a previously held explanation for a given phenomenon.

The next aspect of a research design is the theory, which a researcher may attempt
to prove or disprove. KKV define theory as follows: “a reasoned and precise speculation
about the answer to a research question, including a statement about why the proposed
answer is correct,” (p.19). A theory may provide a point of departure for a research
project or may develop as data are observed and collected. The point at which a theory
develops is not critical, indeed, a theory may be modified as research proceeds. The most
important guideline for generating theory is that it be falsifiable. This may seem ironic,
but scholars can learn a great deal from incorrect theories due to social enterprise. KKV
also advise that a theory have as many observable implications as possible. Several
observable implications allow for the collection of more data and for multiple tests of the theory being questioned. A final caution offered by KKV is the avoidance of endogeneity. This condition exists “when the explanatory variables are caused, at least in part, by the dependent variables,” (p.94). Endogeneity causes a theory to be tautological and incapable of making satisfactory predictions.

The data collection component of the research design is one on which KKV focus a great deal. In order to ensure data quality they contend that, above all, a researcher must record the manner in which he or she collected data. Ideally, data collection will be standardized, or “reliable,” but by recording the method by which it is gathered, the researcher allows others to evaluate his or her inferences and methodology. Next, KKV advise that a researcher collect as much data as possible on the observable implications of the theory being examined. Though limitations on time and resources may prove preventative, too little data will not allow for adequate testing of the theory. On the other hand, collecting too much data is also a problem because the researcher may never get around to explaining and drawing conclusions. For this reason, KKV prescribe a middle road in data collection: not too little, but not too much.

The data collected must meet “validity” of measurement by “not allowing unobserved or unmeasureable concepts to get in the way,” (p. 25). That which the researcher desires to measure (economic performance, for example) must indeed be measured. This can be problematic because of the subjective nature of many variables (such as economic performance), but again, as long as the criteria for measurement are disclosed, data quality can be ensured. With validity established, a researcher must avoid “selection bias.” This occurs when a researcher chooses observations on the basis of
combinations of independent and dependent variables that support the desired conclusion. In order to avoid selection bias the researcher must select independent variables that allow for some variation in the dependent variable. If selection on the dependent variable cannot be avoided then the researcher should report the problem. A final guideline that KKV suggest for data collection is “replicability;” another researcher should be able to duplicate the data collection and follow the logic by which a project’s conclusions are reached.

After data has been collected, the researcher must use it to draw inferences, which KKV claim is “the ultimate goal of all good social science,” (p. 34). Inference is the process of using known facts to learn about unknown facts. KKV classify two types of inference: descriptive and causal. Descriptive inference leads a researcher to understand an unobserved phenomenon based on a set of observations. This process will help a researcher determine whether a given phenomenon is systematic or nonsystematic (whether it is typical or an outlier). Causal inference is a process that follows descriptive inference and allows the researcher to explain the cause of a phenomenon. The “causal effect” is the difference between the systematic component of observations made when the explanatory variable takes one value and the systematic component of comparable observations when the explanatory variable takes on another value (p.81-82).

Because of the infinite amount of variables influencing the outcome of any phenomenon, causal effect of a single variable (or even group of variables) will never be completely certain. KKV call this “the fundamental problem of causal inference,” acknowledging that even the most perfect research design will not allow a scholar to avoid this dilemma. According to KKV, the best way to mitigate this problem is by reporting as honestly as
possible the existence of uncertainty in the research. Inference is the purpose of doing
research in the first place and is the most important way in which the data collected by a
researcher will be used.

Despite claiming that *Designing Social Inquiry* “deserves praise for many
reasons,” Rogowski harshly criticizes KKV for their treatment of research based on
single cases (or observations). They maintain that it is not good science to attempt to
refute a theory with a single case, “the single observation is not a useful technique for
testing hypotheses or theories,” (p. 211). Rogowski, nevertheless, cites 3 studies based
on a single observation/case that undermine prevailing theories as evidence that KKV are
incorrect. He argues that if the theory is good, then a single case may suffice for testing.
Rogowski’s criticism is fair; however, KKV do not claim that single case studies are
worthless and they seem aware that there will always be exceptions to their prescriptions.
KKV would likely say that it is permissible to use a single case to test a theory as long as
the researcher can persuasively justify his or her use of just one observation.

David Laitin also praises the efforts of KKV. He claims that their attempt to
bring “discipline” to political science research is a worthy endeavor and that their
prescriptions are useful because they can be applied to numerous types of research.
Regardless, Laitin, like Rogowski, does have some reservations about the book. He
disagrees with KKV that the ultimate goal of political science is to make causal
inferences and claims that the “creation of clear concepts” and the identification of
“social facts” are more important. Laitin claims that KKV focus too much on selection
criteria within a single study and not enough on theory. He also criticizes KKV for
assuming that the individual scientist is the “unit of evaluation” rather than the
“community of scientists;” however, this criticism is confusing because of KKV’s assertion that science is a social enterprise. Is it not implicit in this concept that the community of scientists is the unit of evaluation? Laitin’s criticism that the goal of science is to create clear concepts is more applicable, but KKV propose first and foremost to set guidelines for research design. They acknowledge that theory is an important part of design, but it is not their focus and perhaps Laitin’s criticism is somewhat unfair. At any rate, Laitin does maintain that, overall, *Designing Social Inquiry* is a valuable work and a good point at which to begin the debate on how to bring uniform standards to political science research.

That KKV do not devote enough time to discussing what constitutes “good” theory may be true, but the purported goals of their work are to address the problems that occur in research design, of which theory is a part, but by no means the only product. The multiple guidelines given by KKV are necessarily imprecise because, as they admit, political science research is imprecise. Despite this underlying limitation, KKV urge to researcher to make his or her research design as perfect and precise as possible. In this way the researcher can make a significant contribution to the field. Possibly the most important words of advice that KKV proffer is that the researcher admit the uncertainty present in his or her work and make his or her methodology public and available so that other scholars may evaluate it effectively. The concept of social enterprise is critical, allowing the community of scientists to more effectively explain political phenomena. *Designing Social Inquiry* will not be the final word on research methodology, but it is an excellent beginning and offers hope that a more uniform approach to research is possible.