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# Contributions of Survey Research to Political Science\*

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Accurate portraits of the political world are not easy to come by. Occasionally an Alexis de Tocqueville captures the spirit of an age, but the anecdotes and personal experience of even the most perspicacious observers are usually unequal to the task of describing the political activities of millions of citizens,

thousands of groups, and hundreds of institutions. It is even harder for observers to capture the ebb and flow of public opinion in twentieth-century nation-states, the upsurges of political protest, the tides of voting, and the waves of authoritarianism that have been followed by those of democratization. To comprehend these phenomena, political scientists need observational tools as powerful as those in the physical and biological sciences. Scientific surveys are one of these tools, and they have been widely used in the social sciences since the 1940s. Surveys were used in about 10% of the articles published between 1991 and 1995 in the *American Political Science Review* and in about 15% of those published in the *American Journal of Political Science*.<sup>1</sup> No other method for understanding politics is used more,<sup>2</sup> and no other method has so consistently illuminated political science theories with political facts.

Like telescopes in astronomy, microscopes in biology, and seismic, weather, and environmental sensors in the geosciences, surveys have features that make them a fundamental data collection method for the social sciences.<sup>3</sup> Surveys are powerful collectors and accurate magnifiers of information. Sample surveys can gather information about almost any topic so that a few thousand randomly selected respondents can reliably represent populations with millions of members. Rather than having to rely upon anecdote or personal acquaintances to tell us about a group, we can use the survey method and

random sampling to ensure that we have a truly representative and unbiased picture of it. A few thousand respondents answering hundreds of questions, however, leave us with a lot of information to process. Modern statistical techniques and computer technology make it possible for survey researchers to apply elegant data reduction methods that summarize trends and locate important anomalies.

Surveys are not only useful for description. Just as creative uses of telescopes, microscopes, and sensors can take advantage of serendipitous naturally occurring events, new survey designs can assess the causes and impacts of events such as debates, scandals, speeches, elections, coups, or revolutions that occur during the course of a survey project. And just as the experimental method in physics, biology, or psychology can be used to introduce events or manipulations that permit causal inference based on experimental control, new survey methods involving "experiments embedded in surveys" vary question wordings to determine whether counterarguments, subtle cues, or other rhetorical, emotional, and cognitive factors can change opinions or behaviors.

With these strong capacities for data collection, accurate data magnification, data reduction, and capitalizing on events and manipulations, survey methodology is an extraordinarily powerful approach to studying the social world. Surveys, it can be argued, have revolutionized social science since their introduction in the 1940s. They also changed democratic societies in two important ways. They provided the gold standard for measuring citizen opinions that are at the heart of democratic deliberation and they provided a powerful technique for ensuring the openness and transparency of the democratic process through studies of democratic institutions. No other social science method has proven so valuable.

Nevertheless, some worry about the relatively high cost of surveys<sup>4</sup> and their seemingly agnostic stance towards alternative theoretical orientations. Are

surveys just too expensive? Are they not linked strongly enough to theories? These concerns are not novel in the sciences, and they require careful consideration. Critics, for example, have periodically wondered whether it made sense to continue to devote substantial resources to bigger telescopes or more powerful particle accelerators without having more promising theories to guide data collection.<sup>5</sup> These concerns lead to questions that can be asked about any scientific method.

*Range of Applicability:* How much core data can be gathered using this method? How much data are or could be collected in other ways?

*Linkage to Theory:* How strong is the relationship between theory and the method? Does the method complement theory, or, in the colorful words of astronomers, is it merely "butterfly collecting?"

*Conceptual Richness:* How flexible is the method for studying different theoretical concepts and can it be used to develop new ones?

*Capacity for Confirming Theories about Politics:* How powerful is the method for making causal inferences and confirming theories?

*Policy Relevance:* What important policy questions are addressed by the method?

Surveys, I will argue, score very high on all these dimensions. They are widely applicable and have been used in many countries, over a long period of time, and with many different groups and populations. They provide some of the best tests of different kinds of theories, ranging from rational choice decision making to theories about representation, tolerance, political protest, elections, agenda setting, and the impacts of political campaigns. The conceptual richness of survey work rests upon over 40 years of thinking about how to measure democratic values, tolerance, participation, attitude constraint, party identification, ideology, and many other concepts. Surveys have become even stronger methods for confirming theories with the development of sophisticated quasi-experimental designs, the incorporation of experiments within surveys, and the addition of contextual data to survey information. Finally, results from surveys are at the core of the journalistic understanding of politics and survey results have informed constitution writing and the writing of history. Surveys are not inexpensive, but they are extraordinarily cost-effective in producing some of the most exciting and important research on politics.

## Range of Applicability

There are many ways to collect data. Administrative systems provide information on money contributed to political campaigns, the career paths of bureaucrats, and the voting habits of political constituencies. Energetic researchers have coded roll-call votes from legislative journals, the content of media stories, and the characteristics of events such as protests, coups, revolutions,

and wars based upon descriptions culled from newspaper and historical accounts. These data have been enormously useful to political scientists, but they often lack the details needed for in-depth analysis, and their availability is often based upon the lucky passage of a campaign finance law, a newspaper's chance coverage of an event, or a request from a legislative member for a roll-call vote. In some cases, the data are aggregated so that they disguise individual variation. In others, little is known about the decision-making context that led to an event or a roll call. Surveys have the great virtue of allowing researchers to ask the questions they want to ask when and where they want to do so. And, by asking the same questions across places and over time, researchers can engage in comparison and in trend analysis--two of the basic activities in any science.

As a consequence, an astonishing range of research utilizes surveys. Surveys of the opinions and behaviors of general population samples of adults in cities, states, provinces, and countries fill entire archives and must now run to the tens of thousands of studies. If I just confine myself to well-known cross-national studies involving general population samples across a number of countries, I can quickly list the following influential studies:

- Five-nation Civic Culture Study (Almond and Verba 1963)
- Political Participation and Equality in Seven Nations (Verba, Nie, and Kim 1978)
- Eight-nation Political Action Study (Barnes and Kaase 1979; Jennings and van Deth 1989)
- Three-nation Political Participation Studies (Verba, Scholzman, and Brady 1995; Kaplan and Brady 1997)
- Euro-Barometers undertaken almost yearly since 1970 (Inglehart 1977), which now include about 18 countries
- Central and Eastern Euro-Barometers starting in 1990 with 5 countries and now including about 20 countries
- World Values Surveys in 43 countries (Inglehart, Basanez, and Moreno 1998)
- International Social Survey Programme starting in 1985 and now including 33 countries (Jowell, Brook, and Dowds 1993)
- Comparative Study of Electoral Systems with over 50 participating countries and data on 13 countries at this time (Thomassen et al. 1994).

Because these studies allow for comparison across societies, they have sometimes yielded surprising facts such as the substantial support for democratic values in many parts of Eastern Europe and the former Soviet Union, and they have produced theoretical insights about political participation, the role of values in economic growth and political action, and many other topics.

In addition to these cross-national studies, there are many important ongoing time-series studies in different countries. In the U.S., the two most widely used are the American National Election Studies (fielded biennially since 1952) and the General Social Survey (almost yearly since 1972). A 1995 usage review identified

over 3,000 papers in over 400 scholarly journals that had employed the GSS (Smith and Heaney 1995). The ANES bibliography lists almost 3,000 items using the election studies.<sup>6</sup> One of the great strengths of these surveys is their continuity over a long period of time, which permits the analysis of trends and the development of models of change over time. In their magisterial analysis of 40 years of election surveys, Miller and Shanks (1996) used ANES surveys from 1952 to 1992 to develop models of voter turnout and choice that provide a comprehensive picture of American voting in the last half of the twentieth century. In *Issue Evolution*, Carmines and Stimson (1989) used ANES data to show that Democrats and Republicans in the electorate have shifted their views of race dramatically in response to Republican legislators taking more conservative stances and Democratic legislators taking more liberal ones. Adams (1997) used GSS data to find the same kinds of shifts on the abortion issue. In this way, the long time series of ANES and GSS data can help researchers explain fundamental features of American politics.

In addition to these surveys of the mass public in many countries, there have been numerous studies of important subpopulations. Multiple elite studies have taught us a great deal about elite commitments and differences of opinion regarding the basic values of equality, individualism, civil liberties, and civil rights. When combined with samples of the mass public, as in McClosky and Zaller (1984) and Sniderman et al. (1996), these studies have been used to understand how elites shape values and opinions. Studies of political and social activists (Brady and Kaplan 1995; Rosenstone and Hansen 1993; Verba, Schlozman, and Brady 1995) have led to the development of a resource model of participation that addresses fundamental questions posed by rational choice theorists (Verba, Schlozman, and Brady 1997). Studies of political party activists in Britain (Seyd 1996; Seyd and Whiteley 1992) demonstrate how the mix of ideological, policy, and pragmatic goals can affect the success of a political party. Interest group studies (Heinz et al. 1993; Schlozman and Tierney 1986; Walker 1991) track the changing interest group universe and the ways that these groups interact with public officials to affect public policy. Interviews with candidates for elected office in the United States and France (Converse and Pierce 1986; Miller and Stokes 1963) have been combined with data on their constituencies to provide an in-depth picture of how much and how well elected officials represent those who elect them. Studies of government officials (Etheredge 1978) show how personality factors measured with psychological tests can affect perspectives on foreign policy. Studies of legislators provide a detailed look at their backgrounds and roles, and a better understanding of their voting behavior (Sullivan et al. 1993).

There can be no question about the broad applicability of survey research within both politics and political science. Surveys are now a fundamental part of the operation of campaigns and government, and surveys are used throughout political science to provide data for drawing comparisons across countries, analyzing trends over time, and studying many different groups and institutions.

## Linkage to Theory

Collecting a lot of data, of course, does not make a science. Amateur astronomers, naturalists, and weather observers make lots of observations but, except for the rare discovery of a comet or a new species of plant or animal, these endeavors do little to advance science. Indeed, some critics of survey research have argued that survey research does not have a strong enough connection with theory or with politics and that there is too much mindless data collection. Sometimes, these criticisms seem to follow mostly from the critic's belief that his or her favorite theory is getting short shrift, and it is probably best to put aside the dyspeptic response that the reason survey research does not have much to do with some of these theories is that the theories do not have much to do with reality.

In fact, there is a kernel of truth in the critics' observations, but it must be put in historical perspective. Using cross-sectional surveys and psychological theories about attitudes and behavior, the core work in political behavior during the 1950s to the 1970s asked whether the mass public was attentive to politics, ideologically sophisticated, and capable of being moved by issues and ideological appeals. This effort was an

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exercise in clearing away the thickets of speculation about citizens that had grown up over the centuries from the writings

of political philosophers (Converse 1964). The clear-cut and surprising result was the development of a picture of the minimalist capabilities of the mass public (Kinder 1983; Sniderman 1993). This picture was useful for debunking those who thought that ideology was easily acquired and powerfully coherent, who thought that rhetoric and propaganda could easily move the public, who believed that the mass public was committed to democratic rights, and who thought that people were attentive to and concerned about the myriad details of politics.

It turned out, in fact, that most citizens did not even know the name of their member of Congress. Early cross-sectional surveys of the mass public revealed that most people pay scant attention to and show little concern for politics and political principles and that predispositions such as party identification powerfully affect voting behavior. Critics may be partly right in arguing that this perspective developed because of the peculiar conditions of America and American political science in the 1950s. The 1950s were a quiescent period in American politics, and American political scientists relied upon cross-sectional surveys to collect data and psychological theories to interpret the results. A cross-sectional survey, a snapshot of a moment in time, is a poor instrument for detecting change and psychological theories neglect political context and institutions that often underlie change. This minimalist view of politics nevertheless still serves as a useful dose of realism for those who have inflated notions about the place of politics in the lives of ordinary people, even if it does present a rather dull, static, and disheartening picture of politics.

In truth, probably no survey researchers were completely on the side of minimalism.<sup>7</sup> Those who were studying political participation knew that some people got deeply involved in politics and engaged in significant political activity (Barnes and Kaase 1979; Muller 1979; Verba, Nie, and Kim 1978), and those who studied race or foreign policy attitudes knew that desegregation, busing, or wars could energize the public (Carmines and Stimson 1980). The authors of the Michigan election studies (Campbell et al. 1966) knew that short-term forces could be powerful and that intense groups could use institutions to advance the candidacy of someone who was out of step with the rank and file of the party as well as the American public, as did the Goldwater conservatives within the Republican Party in 1964 (Converse, Clausen, and Miller 1965). Those who conducted time-series studies of presidential popularity polls recognized that people reacted strongly to economic conditions and foreign policy imbroglios (Hibbs, Rivers, and Vasilatos 1982; Mueller 1973, 1994). Those few who had surveyed elites knew that political activists and leaders were strongly supportive of democratic values (McClosky 1964), which presumably provided some protection for these values even though the mass public was sometimes indifferent or hostile to them.

Survey researchers realized that minimalism was not the whole story. By 1982 the title of Donald Kinder's review of the field of political behavior presented at the APSA's Annual Meeting made the point clearly: "Enough Already about Ideology: The Many Bases of American Public Opinion." Kinder concluded that just because "the original claim of ideological innocence is largely sustained does not mean that the American mind is empty of politics; innocent as typical Americans may be of ideological principles, they are hardly innocent of political ideas. Such ideas, however, defy parsimonious description" (1983, 401). Kinder was on the right track, but the discipline was still committed to a

relatively static, psychological, cross-sectional, and noncontextual perspective on mass opinion.

A decade later, however, and Paul Sniderman (1993) could talk about "The New Look in Public Opinion Research," which was much more dynamic, contextual, and political and which had come to grips in a serious fashion with rational choice arguments about self-interest and rational behavior. The narrow self-interest explanations of opinions, voting, and political participation generally fared badly at the hands of survey researchers (Citrin and Green 1990; Schlozman and Verba 1979; Sears, Hensler, and Speer 1979; cf. Campbell 1999) and even the relatively weak requirements for the existence of utility functions among mass publics were shown to be less than what an economist would want (Brady and Ansolabehere 1989). At the same time, the evidence began to mount for reasoning citizens (Brady and Sniderman 1985; Carmines and Stimson 1989; Sniderman, Glaser, and Griffin 1991; Zaller 1992), rational voters (Popkin 1991), and people who constantly updated their beliefs based upon new information (Bartels 1993; Fiorina 1977, 1981; Johnston et al. 1992).

The evidence began to mount partly because survey researchers began to look for it in the right places and in the right ways. They could do so because new psychological and rational choice theories suggested new places to look. New survey designs increased the chances that change would be detected. And, new statistical methods increased researchers' ability to separate noise from real effects. Many examples of theoretically informed work can be cited. Bartels' pioneering 1988 study of primaries demonstrates how expectations about the success of a primary candidate could build from one primary success to another and create the kind of momentum that propelled Jimmy Carter to the 1976 Democratic nomination. Zaller's creative and path-breaking 1992 treatise on the nature and origins of public opinion shows how those citizens who are moderately attentive to politics are most available for opinion change because they pay enough attention to politics to hear a message but they are not so fixed in their views that almost nothing can change their mind about an issue. Sniderman and his colleagues' novel and far-reaching explorations of reasoning and choice reveal some of the mechanisms whereby citizens use bits and pieces of information to make informed political judgments (Sniderman et al. 1996; Sniderman, Brody, and Tetlock 1991; Sniderman and Piazza 1993). Here, I briefly consider two other theoretically informed enterprises: the Canadian Election Studies' examination of issue evolution during the 1988 parliamentary election and the American National Election Studies' House and Senate surveys.

Political consultants will gladly tell anyone who will listen that campaigns, and especially their ideas about campaigns, matter. Yet, there is very little hard evidence on whether campaigns make a difference in the final outcomes of elections. The 1988 Canadian Election Study (CES) was designed to see how a Canadian campaign for Parliament affected the election

results. CES researchers collected data from a representative sample of about 75 Canadians every day during the 1988 parliamentary election so that the impact of events, on a day-to-day basis, could be tracked. The campaign opened with two issues on the table as a result of recently negotiated agreements: the place of French-speaking Quebec in Canada (the Meech Lake Agreement) and commercial relations between Canada and the United States (the Free Trade Agreement). Johnston et al. (1992) argued that the two major parties, and perhaps the smaller New Democratic Party as well, had incentives to downplay the issue of Quebec because it had the potential to split their core constituencies. Consequently, in what the rational choice theorist William Riker (1993) called a “heresthetic” (or agenda-manipulating) move and what media experts call “priming” (Iyengar and Kinder 1987), the parties emphasized their differences on free trade and took common positions on the place of Quebec in Canada. The net result was a dramatic shift in the determinants of people’s voting preferences during the campaign. Early in the campaign, vote intentions could be explained about equally by the two major issues but, by election day, the actual vote was completely dominated by the free trade issue. The campaign mattered because the parties chose to combat the election over one issue, free trade, and to leave unresolved another issue, the place of Quebec in Canada. The Canadian study provides the most thorough demonstration to date of campaign effects and has opened up a new way to study general elections by linking concepts from rational choice and psychology.

How do congressional and senatorial elections differ from one another and from presidential elections? The Founders had very specific theories about how the smaller constituencies of the lower house would foster greater responsiveness to policy concerns. Beginning in the late 1970s, ANES investigators developed survey designs to test these theories. In 1978, ANES researchers obtained representative samples of around 20 people in each of 108 congressional districts, making it possible to study the linkages between public opinion, congressional elections, and the roll-call votes of members of Congress (Bartels 1991); the impact of case work and personal contact on voting (Cain, Ferejohn, and Fiorina 1987); and the impact of specific events, such as the House bank scandal, on congressional voting in 1992 (Dimock and Jacobson 1995). The 1988, 1990, and 1992 Senate election studies produced even larger samples of about 75 respondents in each of the 50 states (of which about one-third did not have Senate elections), providing rich opportunities to study temporal, geographical, and candidate- and election-specific variations, often with the “campaign” as the relevant unit of analysis (Highton 1998; Franklin 1991). Many theoretical perspectives show up in these studies, but the recurring theme is the relationship between information and uncertainty on the part of the voter and the intensity of the election or issue as measured by media coverage and candidate expenditures. Receiving less money and less media attention than Senators, members

of Congress typically have much lower intensity races and, contrary to the theories of the Founders,<sup>8</sup> voters in congressional races are less informed about policy concerns and members of Congress seem less constrained by these concerns.

These examples show that, far from being unconstrained by and adrift from theory, survey research has been a powerful vehicle for developing and testing theories. The next two sections elaborate upon this point by showing that survey researchers take concepts seriously and they are finding increasingly imaginative ways to test theories.

## Conceptual Richness

One of the great virtues of surveys is that they force researchers to clarify their concepts—clearly a central task for all political scientists (Collier and Levitsky 1997; Collier and Mahon 1993). Those who use campaign finance data or roll calls must take what is given, and this often leads to too little reflection about what these measures mean. But those researchers who must either code data or construct questions have incentives to think hard while they devise their coding or interviewing instruments. In addition, as survey researchers test theories, they often have to modify basic concepts as they wrestle with the data.

Survey researchers have spent, and continue to spend, extraordinary amounts of energy thinking about how to devise measures of concepts by asking questions. Much of this effort is summarized in the recent volume of *Measures of Political Attitudes* (Robinson, Shaver, and Wrightsman 1999), which includes eleven chapters by experts on measuring liberalism and conservatism, economic values and inequality, democratic values and political tolerance, racial attitudes, political alienation and efficacy, trust in government, international attitudes, political information, political agendas, political partisanship, and political participation. Each chapter recounts up to 50 years of struggle with these concepts.

The measurement of political tolerance and democratic values, for example, has been constantly refined since the mid-1950s. In the classic Stouffer study of *Communism, Conformity, and Civil Liberties* (1955), intolerance is measured by the degree to which respondents would deny civil liberties to socialists, atheists, or communists. Critics noted that this measure might very well make a leftist seem tolerant even if he or she would deny civil rights to right-wing groups. In 1982, Sullivan, Piereson, and Marcus attempted to control for this by asking people about their tolerance for their least-liked group. Sniderman et al. (1989) and Gibson (1989), in turn, asked whether tolerance should be of those groups “least liked.” The answer to this question turns on a number of considerations including whether least liked is necessarily least tolerated, whether least-liked groups (e.g., the Mafia) may tap concerns other than protection of civil liberties, and whether least-liked measures of tolerance for least-liked groups produce markedly different results from measures of tolerance for right- and left-wing groups. The answer

appears to be that alternative measures produce roughly the same results (Gibson 1992). Over the last decade, debates about the measurement of tolerance have broadened into debates about measuring support for a wide range of democratic values in the newly emerging democracies (Finkel, Sigelman, and Humphries 1999). Although many questions remain about measuring democratic values, it is heartening to know that in this age of democratic transition, we clearly know much more about how to measure them than we did 20 years ago.

Survey researchers do not only think about concepts as they develop them, they also modify them as they test them. Consider, for example, tests of the spatial model of elections. These models suggest that people base their decision to vote for a candidate upon an estimation of how close the candidate's issue positions are to their own and that in two-candidate elections with one dominant issue, candidates will moderate their positions in order to capture the "median" voter (Downs 1957). The theory is simple and elegant. Starting in the 1970s, survey researchers worked to test the theory. These tests, however, quickly ran up against some vexing problems. Not all survey respondents could place themselves on issue scales, and even fewer could place the candidates. Even when they did place the candidates, there was substantial disagreement among respondents about where the candidates stood, and these disagreements took the form of placing candidates they liked (on grounds other than their policy positions) closer to themselves than those they disliked. For individuals, this has the happy effect of ensuring that they choose the candidates with policy positions closest to their own (since they choose those whom they put closer to themselves because they like them!); for political scientists it has the unhappy effect of suggesting that every individual has different notions of where the candidates stand. Candidates are not helped very much either because the findings suggest that their best campaign strategy is to become liked so that voters will embrace the candidate's policies at the same time that they embrace the candidate. All the findings do is beg the question, "How do candidates become liked?"

Brady and Sniderman (1985) produced a model of this process for groups instead of candidates that combined psychological "balance" models with rational choice ideas. They showed that people do not, as in the rational choice model, simply calculate their liking for a group by knowing its positions on issues. Preferences are not just a function of perceptions. Rather, people find an equilibrium between their liking for a group and their placement of it. Perceptions are also a function of preferences.

Brady and Ansolabehere (1989) suggested additional amendments to rational choice theory based upon their examination of the transitivity of people's preferences for political candidates. At the heart of rational choice theory is the assumption that people's preferences can be represented by utility functions that imply transitive preferences and transitive indifference. Brady and Ansolabehere showed that citizens who preferred Walter

Mondale to John Glenn and John Glenn to Gary Hart also preferred Mondale to Hart--thus exhibiting the transitivity of preferences required for the existence of utility functions. But they also demonstrated that citizens often have intransitive indifference: indecision between Mondale and Glenn and Glenn and Hart does not imply an inability to choose between Mondale and Hart. This result suggests that standard utility functions are not adequate for representing political preferences. In another study of how voters differentiate among candidates, Abramson et al. (1992) showed that respondents' assessments of a primary candidate's chances of winning primary elections, as measured on ANES surveys, varied from person to person depending upon how much the respondent liked the candidate. In each of these cases, rational choice theories were modified after being confronted with the data. Survey researchers took the theories seriously, tested them carefully, and improved them.

### **Capacity for Confirming Theories about Politics**

Surveys might seem like a bad bet for testing theories. It is always easier to confirm cause and effect relationships if we have control of the putative cause, and the experimental method relies upon this verity by applying a "treatment," such as exposure to a political advertisement, to one randomly assigned group and denying it to another randomly assigned group. Observed differences must then be the result of the treatment. Surveys do not seem to allow for this kind of control.

Laboratory experiments, however, produce findings of limited usefulness because the treatments are often unrealistic and sometimes mundane and the subjects tend to be samples of convenience such as the proverbial "college sophomores." Clever experimenters can sometimes overcome these problems (e.g., Ansolabehere and Iyengar 1995), but laboratory experiments can seldom capture the full range of citizens' views and the variety of political stimuli found in the real world. Representative surveys are the obvious way to capture the range of citizens' perspectives, but they have traditionally not allowed researchers the kind of control provided by experiments (Kish 1975).

Traditional cross-sectional surveys have not been much use to researchers studying the impact of political events and context. They have allowed political scientists to explore how political opinions and behaviors vary with the characteristics of individuals but, because they are snapshots of a single moment in time, they have seldom captured the impact of events that develop over time. New survey methods, however, have made it possible for political scientists to obtain the increased control needed for testing theories about real-world political stimuli such as political rhetoric, political debates, campaigns, media stories, foreign policy crises, economic conditions, and even coups and revolutions. Survey researchers have been increasingly able to approximate experimental control by using one

or a combination of three strategies. Quasi-experimental designs (Campbell and Stanley 1963) require asking questions of random samples of people over time to capture their reactions to events, or asking questions across political constituencies to see how differences in candidates or their campaigns affect respondents. A complementary design calls for the incorporation of experiments into the survey instrument by varying questions and forms. This technique makes it possible to mimic political arguments or to determine the impact of different kinds of messages (Piazza and Sniderman 1998; Piazza, Sniderman, and Tetlock 1990; Sniderman and Grob 1996). A third approach combines survey responses with contextual data such as the voting records of members of Congress, information about advertising used in campaigns, or expenditures by candidates. Contextual data on the events and stimuli that shape political campaigns can be used to explain people's attitudes and their voting behavior.

There are many new and exciting survey designs that improve on our ability to test hypotheses about politics. Rolling cross-sections, such as those employed in the 1984 ANES Continuous Monitoring Study or the 1988 Canadian Election Study (Johnston et al. 1992), involve interviewing a random sample of 50 to a few hundred people every day or week during a political campaign or some other politically relevant period. Multilevel designs, such as the ANES congressional and senatorial studies, call for interviewing random samples of citizens across a sample of geographically varied political constituencies. Long-time series data, such as those collected by ANES, GSS, Gallup, and Roper, make it possible to study the evolution of issues (Carmines and Stimson 1989; Mayer 1992; Page and Shapiro 1992), changes in party identification and support (MacKuen, Erikson, and Stimson 1989), and trends in political participation over time (Rosenstone and Hansen 1993). Although they are not new, representation and elite linkage studies, which administer the same (or nearly the same) instrument to a general population sample and to samples of various elite groups, have been rejuvenated in studies of the relationship between mass and elite support for civil rights (Sniderman et al. 1996). Although these designs sometimes tax the statistical and data manipulation skills of researchers, they make it possible to make much more powerful inferences than those that could be drawn from the cross-sectional studies of the past.

Consider, for example, the impact of a debate between the party leaders that occurred in the middle of the 1988 Canadian election campaign. The rolling cross-section design of the Canadian Election Study (CES) made it easy for investigators to identify a substantial rise after the debate in the public's competence rating of John Turner, the Liberal Party candidate who was widely thought to have scored impressively in the debate (Johnston et al. 1992). Yet, some other event might explain this result. How could Johnston and his colleagues be sure that Turner's debate performance affected the voters' opinions of him? As a first step, they asked those they interviewed immediately

after the debate if they saw it. Then they separated out those respondents who said they saw the debate from those who said they did not, and they showed that, after the debate, those who saw it rated Turner much more highly than those who did not. But it is possible that those who saw the debate were predisposed towards Turner, and the trick was to find out if the viewers and the nonviewers held the same opinion of Turner before the debates so that the subsequent differences between the two groups were due to Turner's performance and not to the groups' preexisting differences. Those interviewed before the debate, however, could not be asked if they had seen a debate that had not yet occurred. At this point, the design became crucial. Because there was a postelection survey of all those who had been interviewed in the daily cross-sections, Johnston and his collaborators could, and did, ask again whether each person saw the debate. Using this information, they could determine that those interviewed before the debate who later reported watching it had the same initial attitudes towards Turner as those interviewed before the debate who later reported that they did not watch it. Yet, after the debate, those who had seen it rated Turner more highly than those who had not seen it. Clearly, Turner's performance in the debate made a substantial impact. In this case, simple logic and a clever design ruled out alternative explanations.

Experiments embedded in surveys provide another way to learn about politics. Consider, for example, the "competing frames" experiment recently described by Sniderman and Theriault (1999). The "framing" perspective suggests that people adjust their opinions in the direction of cues provided by a frame: If the media emphasize inequality in a story on welfare, then people judge welfare in terms of equality, but if the media emphasize individual responsibility, then that will guide people's opinions. Sniderman and Theriault agreed that framing has these effects, but they argued that previous researchers have only told half the story of framing. In a real political contest, each political party will try to frame an issue so that citizens, regardless of their underlying value commitments, will be pulled towards the party's preferred conclusion. Most studies of framing only provide one side of the issue. By examining both sides using a series of experiments, Sniderman and Theriault found that people return to their basic values; they concluded that political argument helps people find their true opinions. Sniderman, his collaborators, and others have pioneered the use of telling experiments like these in political surveys, and the results are reported in a series of studies in which experiments have been used to understand civil rights in Canada (Sniderman et al. 1996), attitudes towards race (Sniderman and Piazza 1993), attitudes towards affirmative action and other policies for minorities (Sniderman and Carmines 1997), and elections in Canada (Johnston et al. 1992; Johnston et al. 1996). In addition, as principal investigators for two "Multi-Investigator" studies, Sniderman, Brady, and Tetlock have shown that up to a dozen investigators can conduct

custom-designed experiments on a single survey instrument, thus radically reducing the costs of each.

These experimental studies have all employed Computer-Assisted Telephone Interviewing (CATI) systems that permit researchers to vary questions systematically from

interview to interview. Such systems also allow survey researchers to contemplate having a much larger number of policy questions than could be asked on a standard survey by using the capabilities of CATI to randomly choose a subset of these questions for each respondent. The Surveys of Governmental Objectives pioneered by Shanks (1999) take advantage of this capability to allow political scientists to develop a much better understanding of policy questions than they could in the past.

Finally, new kinds of theoretical relationships can be tested by gathering contextual data in the form of Congressional roll-call votes, content analysis of media stories, census tract information, characteristics of congressional districts, and many other kinds of information. In sum, developing new designs, conducting embedded experiments, and adding contextual data to survey findings make it possible for survey researchers to make politics the center of their analysis.

## Policy Relevance

Policy relevance may be in the eye of the beholder and, in a society that much prefers a "magic bullet" cure for cancer to the rigors of changes in diet and exercise habits, the nostrums offered by political scientists based upon survey research may seem like cold comfort. Nevertheless, a great deal has been learned from political surveys. Even the minimalist argument for the marginal importance of politics in most people's lives is an important one that must be repeated with each new generation, and surveys continue to reveal basic facts about turnout, voting, tolerance, policy positions, and participation. Beyond providing facts, survey researchers have made substantial contributions in many areas. Proponents of the Motor Voter Act drew upon research findings generated by political scientists that indicated how registration requirements often led people to be dropped from the voting roles, even when they moved a short distance (Wolfinger and Rosentone 1980). Campaign finance

## **New survey designs, the inclusion of experiments in surveys, the addition of contextual data to survey findings, and improvements in our statistical skills have greatly increased the power of surveys for studying politics.**

reform, as quixotic a quest as any for populist legislators, continues to draw information from political scientists whose work usually punctures the conventional wisdom. Journalists and politicians understand the dynamics of primaries much better as a result of political science research that has clarified the role of momentum and media coverage. James Carville may have coined a political truism with his 1992 proclamation that "It's the economy, stupid!" but political scientists had already compiled an impressive body of research indicating the primacy of economic considerations for voters. Voting in initiatives and referendums (Gerber 1998; Lupia 1994) is now much better understood because of the fundamental work undertaken by political scientists. Trends in social trust and in political and voluntary participation have become a major policy issue because of research by political scientists (Putnam 1995). More globally, this decade's work on democratization in Eastern Europe and the former Soviet Union is providing detailed empirical evidence about the growth of democratic values in soil thought to be too poor for democracy (Gibson 1998; Gibson, Duch, and Tedin 1992; Wyman 1994).

Survey research has also provided insights for those writing or amending state-level or national constitutions. Political scientists now know a great deal about public support for civil liberties and civil rights, the impact constituency size has on policy responsiveness, the way electoral laws affect voting patterns and the number of parties that contest elections, and the pros and cons of referendums. Finally, at the level of historical understanding, surveys have helped researchers explain political realignments, the evolution of issues such as race and abortion, the importance of religion in American political life, and many other features of American and comparative politics.

## The Future

Survey research is thriving, and it is the leading source of data for testing political science theories. New survey designs, the inclusion of experiments in surveys, the addition of contextual data to survey findings, and improvements in our statistical skills have greatly increased the power of surveys for studying politics.

There are problems, however. Survey research is costly and difficult. It has become more difficult precisely because intellectual progress has led researchers to multiple country studies, new research designs, embedded experiments, the addition of contextual data, and new statistical methods. Political scientists have met these challenges by increasing their methodological and theoretical training, but careful attention must be paid to making sure that three professional gaps do not widen. The "area studies-scientific methods" gap opens in graduate school when students must accommodate the need to learn enough about countries to do sensible empirical research on them and the need to learn the theories and methods that make it possible to do scientifically valid research. The "theory-methods" gap

also opens early and can widen quickly for junior faculty who cannot meet the time and monetary costs of simultaneously learning enough about theories such as formal models of politics and learning enough about methods such as survey research and statistics for testing formal theories. It is very hard for one person to be able to do both, and perhaps part (although certainly not all) of the tension between rational choice theorists and survey researchers (Green and Shapiro 1994) arises from misunderstandings of each other's worlds. The "cost-power" gap confronts all political scientists trying to deploy the most powerful survey designs. The cost of designing and undertaking modern surveys makes it hard for lone investigators, certainly young investigators, to develop and implement optimal designs. The result is a proliferation of inexpensive cross-sectional studies that are unequal to the inferential burden they must bear.

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## Notes

\* David Collier, Jim Gibson, Richard Johnston, Cynthia S. Kaplan, Samantha Luks, Nelson Polsby, Virginia Sapiro, Kay Schlozman, Merrill Shanks, Paul Sniderman, Sidney Verba, and John Zaller made valuable suggestions on this paper. It is worth emphasizing that this paper draws heavily upon my own research experience and it expresses my personal reflections on the contributions of survey research. It is not meant as a comprehensive review of the field.

1. I searched from 1991 to 1995, using JSTOR, among articles for text with the words "survey research" or "survey interview." I also searched articles in *AJPS* for other phrases and found 15% that include the phrase "rational choice," 6% with "content analysis," 5% with "roll-call votes," and 5% with "election returns" or "voting statistics."

2. There are other important methods used to understand politics such as case studies (Campbell 1975; Eckstein 1975; George 1979), the comparative method (Collier 1993; Skocpol and Somers 1980), experiments (Kinder and Palfrey 1993), aggregate data (Achen and Shively 1995; Jackman 1985; King 1997), and in-depth observation (Fenno 1990). It would be useful to evaluate them utilizing the same criteria as those developed in this article.

3. Surveys are very important in political science, sociology, demography, and economics. Only the first two disciplines, however, must collect a lot of their data themselves because demographers and economists benefit enormously from the billions of dollars spent on collecting demographic and economic data through the Census Bureau, Bureau of Labor Statistics, Department of Agriculture, and many other sources.

4. These costs, however, should be put in perspective. The two major NSF-funded surveys in political science and sociology, respectively, are the American National Election Studies (ANES) and the General Social Survey (GSS). These surveys are widely used within the political science and sociology communities, and there are no other government-sponsored surveys, except the Census, that even

To close these gaps we need more people with in-depth area studies knowledge and training in scientific methods. We need more people who bridge the theory-method divide. We need more, not fewer, comparative, time-series, multilevel, and mass-elite studies. We need more, not less, testing of instrumentation. The American National Election Studies' Board has tried to solve some of these problems by opening up their pilot studies to any competent proposal. Paul Sniderman and his colleagues have tried to do the same with the Multi-Investigator Studies that recruit about 10 (mostly) young scholars for each study. At the moment, unfortunately, we have neither the resources to fund all of the worthy research nor the mechanisms for deciding what kinds of studies have the greatest priority or for allocating space on surveys to those studies. This is a shame. Just when survey research has become most theoretically aware, methodologically sound, and relevant for understanding politics, it is facing its biggest challenges for support.

approach them in scope and usage. Together, these surveys cost roughly two million dollars each year. The National Science Foundation budget for astronomical facilities in FY1998 was \$72 million. NASA spent much more on astronomical instrumentation. The Department of Energy spends hundreds of millions of dollars on particle accelerators (Board on Physics and Astronomy 1998). Economists benefit from many governmental surveys. For example, the Current Population Survey, from which unemployment statistics are calculated, is widely used by economists, and its annual cost is easily in the hundreds of millions of dollars. The total government budget for political science surveys is minuscule compared to these budgets.

5. These concerns seem to be behind the decision to discontinue construction of the Superconducting Super Collider (Board on Physics and Astronomy 1998), and they have arisen periodically in astronomy when observers felt, as many did at the turn of the century, that astronomy had reached the limits of the observable universe (Motz and Hane 1995; Panek 1998).

6. For a very useful summary of NES' contributions to social science research, see "NES Contributions to Scholarship: A Review" ([www.umich.edu/~nes/resources/papers/sapintro.htm](http://www.umich.edu/~nes/resources/papers/sapintro.htm)).

7. It is important to remember that survey research is still very young and that other sciences have missed important distinctions and generated odd theories in the past. Astronomers who were not ready to see galaxies other than our own classified nearby gas clouds, star-clusters, and galaxies as similar objects throughout the eighteenth and nineteenth centuries (Panek 1998), and, in 1906, the famous astronomer Percival Lowell argued that he saw watery canals on Mars. No doubt survey researchers have missed much in the past and perhaps they have constructed their own Martian canals but, as this review makes clear, a great deal has been learned.

8. Of course, the Founders gave us Senators chosen by state legislatures. This makes the full story a bit more complicated.

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