Issue Voting and Rational Man

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The major premise of this paper is that voter behavior is based on what the voter knows, and how he or she uses this knowledge. The content of a voter's relevant knowledge probably includes information about issues, candidates, and the voter's own values. The processes by which the voter uses this knowledge are cognitive, but not necessarily rational. We propose an examination of this knowledge and the processes by which the individual voter determines how to cast a vote.

Voter behavior is currently investigated under two major classes of theories (Niemi & Weisberg, 1976): party identification models (Campbell, Converse, Miller, & Stokes, 1960) and rational voter models (Buchanan & Tullock, 1962). The party identification model proposes that most of the variance in voter behavior is due to the voter's attachment to a certain political party; issues are perceived and analyzed in terms of this attachment. The rational voter models propose that voter behavior is based on the outcomes of rational decision processes which use knowledge of the candidate's positions on issues to select the candidate who will optimally advance the voter's own values. Researchers investigating both types of models use survey data combined with sophisticated statistical techniques to test hypotheses.

The psychological approach to voter behavior taken in this paper offers a new viewpoint on voter thought processes (i.e., the nature of rationality) and a methodology able to provide a new level of data relevant to the investigation of voter behavior. After reviewing these aspects of the approach, research will be proposed which addresses how components of the party identification and rational voter models could be incorporated into a description of the psychological processes in voter decisions.

Optimizing or Satisficing: The Case for Rational Man

The rational man model views people as choosing among alternative actions by using available information to identify that alternative yielding optimal outcomes. This view lacks both sound theoretical foundations and empirical support. Rational man has no prima facie reason for existing: during most of our evolutionary history survival was best served by quick decisions which yielded non-optimal but low risk outcomes. It is more likely that man developed strategies for quickly providing a good guess than procedures for reaching optimal decisions.

Considerable research has been motivated by the idea that people use, or at least try to use, rational (or even optimal) decision strategies. Human performance on decision-making tasks has traditionally been compared to mathematical models of optimal behavior, most typically Bayesian or additive-factor models. Human performance has rarely been found to be as good as this ideal (Slovic & Lichtenstein, 1971). Many attempts have been made to characterize decision making as biased or conservative versions of these models. However, substantial evidence exists that the rational model is simply incorrect. People are unreasonably influenced by concrete, personalized information (Nisbett, Borgida, Crandall & Reed, 1976); they judge probability by envisioning concrete instances (Tversky & Kahneman, 1974); multiattribute judgments are based on only part of the available information (Payne, 1976). Even expert decision makers use the same simplifying strategies producing the same errors as do laypeople (Dawes, 1976; Slovic, Fischhoff, & Lichtenstein, 1976).

In order to choose optimally, man would be expected to take into account all available relevant information. In fact, people are severely limited in the amount of information they can process (Miller, 1956; Newell & Simon, 1972). Large amounts of information are not only difficult to process but can actually reduce the effectiveness of a decision while increasing the decision maker's

confidence (Payne, 1976).

The alternative characterization of decision-making processes begins by recognizing that man's rationality is bounded (Simon, 1957). Simon argues that because of cognitive limitations, decision makers build simplified models of complex tasks to reduce the necessary amount of calculation. Such simplificatio may take the form of satisficing in decision making situations. The satisficing model (Simon, 1955) portrays the decision maker as searching not for the optimal outcome but for an outcome which meets some criteria. Thus, the decision maker need not consider all available alternatives at once. Instead, he may simply evaluate alternatives serially until an adequate one is discovered. Such a procedure greatly simplifies many decision making situations, at the expense of sometimes producing less effective behavior than the "rational man" might have accomplished.

Granting the assumptions of limited information processing and satisficing, it is reasonable to assume that fairly simple decision rules are used in choosi a candidate. The kinds of processes a voter undertakes can be generally described this point, without postulating a specific process model of the voter decision. Any decision process must necessarily begin with the acquisition of information. Information is either sought or incidently acquired, and then is represented in long-term memory. For the voter this information may include each candidate's position on important issues, the candidate's past performance, the candidate's party, the physical appearance of the candidate, and so forth. When called upon to make a choice the voter must access part or all of this information from memory and process it. This processing may be as simple as comparing the two candidates along a single available dimension or as complicated as a non-linear integration rule which uses all available information in memory. On the basis of previous decision making research, we could guess that the actual

information has been processed and a decision has been made the response must be executed. This is the final stage, casting a ballot.

A New Approach to Data About Voter Behavior

Political scientists tend to rely on masses of survey data and complex statistical analysis in order to test their hypotheses about how people vote. A more direct methodology involves examination of the ongoing cognitive processes during voting decisions by individual subjects.

Cognitive processes have traditionally been studied using chronometric techniques (Pachella, 1974) and more recently process tracing techniques. Chronometric techniques refer simply to the measurement of time between a stimulus presentation and a response. This reaction time is equated with the amount of intervening processing between the stimulus and response and has been used in studying everything from memory retrieval (Collins & Quillian, 1969) to conflict in choice (Berlyne, 1957). Process tracing has shown itself to be particularly helpful in the study of decision making (Payne, Braunstein, & Carroll, 1977). These techniques feature the collection of data during the behavior of interest and provide a large number of observations to reflect the large number of mental operations involved in any decision task, i.e., acquisition, storage, retrieval, and integration of information. Several techniques are available: (a) information search monitoring, which allows the experimenter to observe the information input as the decision is being made. Information search can be monitored using eye movement measurement (Russo & Rosen, 1975) or techniques such as the information board (Payne, 1976) where subjects physical search is recorded; (b) verbal protocols, the statements of subjects asked to "think aloud" during the task, which provide information about ongoing processes other metho cannot, i.e., what kind of information is recalled from long-term memory and what operations are currently being executed (Payne et al. 1977). Protocols differ from retrospective accounts which have been shown to be suspect (Nisbett & Wilson, 1977), because they deal with processes which are currently active,

not memories or reconstructions of processes.

A Proposal for Research

A reasonable place to begin examination of the voter decision process is the information acquisition stage. An ideal procedure would be information presentation via a computer, because no experimenter need be present for observational purposes. With an experimenter present a subject may feel a demand to appear rational in his search behavior, especially in a task like voting which has real-world implications. Computer-controlled presentation of the information will remove the experimenter from the room and thereby approach the privacy experienced in the voting booth.

Subjects will be seated in front of a video terminal. The terminal will display the rows and columns of an information matrix. This matrix will include labels for two or more candidates and a variety of information categories. These categories will include issue stances, party affiliation, history in office (past performance), social and economic background, personality traits, and physical appearance. Subjects will be asked to decide which candidate they would vote for if there were an election and told that they may request only a limited amount of information. In order to request information, subjects will simply type in the number of the row and column of the desired matrix entry and the specified information will be displayed until the subject types a stop command. The order in which each subject requests information will be recorded as well as how long each piece of information is examined, who the subject votes for, and how much information the subject can recall accurately about each candidate. If issue information is important to voter decisions, subjects should request that type of information early and frequently. The data on examination time and recall will also be useful in determining how important issues are in this type of voting situation. Finally, subject search patterns, along with verbal protocols, can be used to determine the decision rules used (Payne, 1976).

A problem with any laboratory study is the lack of external validity. For this reason the study described above should be thought of as a weak test of the hypothesis that issue information is important in making a voting decision. If subjects do place emphasis on issue information in the lab there is no guarantee they do likewise in the real world. However, if subjects do not place any emphasis on issue information in the lab then it is unlikely they do so in the real world where they know they are not being evaluated. There are two ways to strengthen this weak test. First, the cost of information search, the time to search, the importance of the election and the importance of a single vote can all be varied in the lab to examine ways in which the lab may differ from naturalistic settings. Second, studies can be done in the field as well as the lab and the overall pattern of data can then be considered.

A recent mayoral election in Pittsburgh afforded an opportunity to gather some pilot data in the field. It is recognized that most research about issue voting concerns itself with national elections, however, cognitions involved in one election decision should embody at least some characteristics present in all such decisions. The study described below combines features of chronometric techniques and verbal protocols in order to delineate some of these characteristics.

Short interviews of 39 voters were tape-recorded at the polls: 18 voters were interviewed before they voted and 21 after they voted. Subjects were asked to tell the interviewer some important things about each candidate, any important issues of which they were aware, how they stood on those issues, and how they perceived the candidates' stands on those issues. It was predicted that subjects would know more, and therefore talk longer, about their favored candidate. This was confirmed by a sign test: 26 out of 36 (3 subjects did not decide on a candidate at the time of the interview) voters talked most about their candidate ($p < .05$). However, there is a possible confound in that most subjects knew more about and chose the same candidate.

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It was also predicted that subjects would generate more agreement with their candidate after the vote than before. This prediction derives from either self-perception or cognitive dissonance theory. This prediction was also confirmed, but voters always agreed with their candidate's stances and mentioned more issues if they were interviewed after the vote [$t(37) = 5.39$, $p < .01$]. Thus, amount of agreement and number of issues vary together in voter's statements about their candidate. There are two possible explanations for this difference in generating important issues. Perhaps during the voting process these subjects thought about the issues and therefore were primed to remember these important inputs into their decision. Alternatively, subjects might have generated more issues on which to agree with their candidate after voting because they were now inalterably committed. This second explanation is consistent with self-perception theory and cognitive dissonance and is favor by recent work on retrospective report (Nisbett & Wilson, 1977). People can easily generate reasons for past behavior which have nothing to do with the causes. Further research is needed before one of the above explanations can be accepted over the other.

In regard to the general importance of issues, 13 of 39 voters said they knew of no important issues. Of the remaining 26 voters, 12 did not know how one or more of the candidates stood on the issue they thought was important, 4 of these 12 did not know how their preferred candidate stood. Of the 22 voters who mentioned at least one issue and knew their candidate's stance, all 22 agreed with their candidate. However, 17 of these subjects either agreed with other candidates at the same time or did not know the stance of at least one other candidate. This suggests a satisficing strategy, since information under construction is very incomplete.

In conclusion, it has been shown that voters are probably not using optimal decision strategies and are probably using fairly simple decision rules. We suggest the best way to study these rules is to study the individual voter. Several techniques for examining cognitive processes have been described and a study incorporating these techniques has been proposed. Also a recent field study has been discussed which offer some suggestive results. We believe that our approach and the process data we seek to collect is needed to complement and extend the research based on aggregate survey data. Complementary approaches will make a more complete, powerful, and valid investigation of voter behavior.

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