Memorandum of Interest

Issue Voting, Cognitive Processes and Rational Choice

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A common paradigm for the study of voting postulates that a rational voter is one whose vote is based on his own issue positions and those of the competing parties or candidates. Under this paradigm the rational voter has a set of policy preferences located in some issue space, and votes for the party or candidate judged to be closest to him in that space. While this conceptualization is a common one and focuses our attention on important components of the voting decision, it does not encompass all the information that a rational man might bring to bear on his voting choice. Thus, in order to fully explore the rational voting paradigm, it is necessary to examine this additional information, and consider its implications for the specification and estimation of voting models. As a beginning, then, let us first characterize the information available to the rational voter and the mechanism by which he translates this information into a voting choice under conditions of full and costless information. After considering the implications of and the predictions about voting one would make from this model we can then consider models in which information is limited, ambiguous, and costly. Finally, we can attempt to determine what type of data is needed if the alternative models are to be estimated, tested, and compared.

Drawing on the rational expectations models of economics, the rational voter is postulated to be one who develops expectations of the future under each party or candidate, then makes the choice which gives him the highest expected utility. The information on which the voter can draw in forming his future expectations can be divided into three categories:

1) knowledge of events exogenous to the political system – wars, oil embargoes, droughts, economic disruptions, etc. – and how these events affect the political system;

2) knowledge of a complete structural model of the political system –

i.e., how politicians, interest groups, and the public interact within the institutional structure of government to form policy;

3) complete knowledge of the parties' past issue stances and performance, a knowledge of current issue positions, and a knowledge of the idiosyncratic characteristics of each candidate.

While it may not be immediately obvious how expectations of future performance based on all of this information would differ from expectations based on some subset of this information - for example, past and current issue positions and performance - the consideration of a few examples should enable the reader to grasp the importance of each type of information. A voter who based his evaluation of the current administration's expected performance in managing the economy if re-elected only on past economic performance would have had a difficult time favoring President Ford on the basis of economic issues during the 1976 campaign; the dismal economic performance of 1974 and 1975 would have guaranteed such a response. Yet a voter with a knowledge of exogenous events might reasonably have concluded that the poor Republican record in managing the economy could be attributed mainly to the huge increase in oil prices, and that the Republicans should not be blamed for events beyond their control. Or consider the case of a voter for whom tax reform is, for one reason or another, a highly salient issue, and who is confronted with a choice between a candidate supporting the status quo and one promising to reform a tax system that is "a disgrace to the human race". Under most current theories of rational voting, the salience of the issue and the differences between the candidates would provide a powerful incentive to vote for the latter. But what if the voter's knowledge of the political system leads him to believe that no serious tax reform has any chance of emerging from Congress? In this case a rational voter might well ignore this issue completely to focus on other issues for which the

expected policy outcome differs for the two candidates.

At first glance the acceptance of this description of the rational voter requires quite a suspension of disbelief. It is difficult to believe that the average voter can evaluate the vast amount of information required for this model to hold; a limited information model, based on past performance, current issue positions, or party identification seems much more plausible. Yet the two examples given show that incorporation of knowledge of exogenous events and the incorporation of some sort of knowledge of how the political system operates into voting calculations does seem to make intuitive sense. While it would be possible at this point to generate further examples in which the full information model seems to provide a plausible explanation, the validity of the full information, rational voter model must ultimately be tested completely specifying and estimating the model and comparing it to alternative explanations of voting behavior. Before discussing the difficulties involved in estimating models of this type, I will therefore briefly discuss some of the alternative models to which it should be compared.

If we relax the assumption that information is complete and costless, it can readily be seen that a rational voter will not evaluate the full range of information outlined earlier; instead, he will evaluate some subset of that information in making his voting decision. One subset of that information often included in rational voting models consists of the candidates' issue positions, which are usually readily available during campaigns. Others have argued that the rational voter's strategy of focusing on issue positions can be frustrated by a rational candidate, who may find it profitable to be ambiguous about his stands on the issues in order to focus attention on consensual rather than conflictual themes. If information about current issue positions is ambiguous the rational voter can rely on two other types of information: knowledge of the past performance of both parties and

party identification. Basing one's vote on past performance, or retrospective voting, would seem to be quite rational in the circumstances outlined above, in which the current issue positions of the candidates are quite ambiguous, especially if the voter also takes into account some information about exogenous variables that may have affected the political system and some knowledge of the structure of the political system. Party identification has also been used in rational voting models, not as a measure of an affective tie between the voter and his party, but as a piece of information which incorporates and summarizes knowledge about the past performance of the parties.

Once a set of rational voting models has been specified the models must then be estimated and tested to determine how well they explain real world phenomena. A common procedure in testing the validity of models is to rely on measures of variance explained and measures of the significance of individual coefficients. While these tests are useful, I would also suggest two other criteria by which we can test the validity of these models. If the model is valid the values of the coefficients should be stable when estimated from samples taken at different times or from different populations. If the estimated coefficients do not exhibit this stability this suggests that at least one important variable that interacts with the included variables has been excluded. Another, related, criterion, for testing the validity of a model is the ability of a model to explain changes in voting behavior. Here a comparison with macroeconomic models may be instructive. Over the last two decades a number of models of the U.S. economy have been constructed. All are spectacularly successful by one criterion – well over 90% of the variance in the data is explained by each of them. There is only one area in which all of these models fail – none can predict with any consistency turning points in the business cycle. Just as this lack of

ability to predict change is a serious deficiency of economic models, so
is it a serious shortcoming of political models.

While estimation of each model of voting behavior is important, it is
not enough; the result is likely to be a large number of plausible models,
all of which are more or less consistent with the data. It is necessary to
go further and develop criteria by which the models can be tested against
each other, rather than against the null hypothesis that the data cannot be
explained by a given model. In order for such tests to be made we must be
able to generate predictions about the political system from each model.
In some cases the predictions generated from different models may be quite
similar; in these cases, we cannot decide among the models on the basis of
empirical data. But if the predictions do differ data must be gathered
against which the alternative predictions can be tested.

Unfortunately, it appears that not all the data necessary for estimating
and comparing full and limited information models is currently available.
As an example, let us consider data on the respondent's knowledge of the
structure of the political system. There are questions in the 1976 SRC
election survey which elicit information on the patterns of influence within
the political system – the questions on which groups have influence in the
political process – but more questions, especially more issue specific
questions, are needed. There are a few questions in which the respondent
is asked to evaluate the chances that the two candidates will achieve cer-
tain policy goals if elected, and it can be argued that an entire battery of
these, combined with information on the values placed on these goals by the
respondent, would allow us to estimate a full information model. But, in
one sense, estimation of a model of this type evades the question. While
we may find that votes are indeed based on evaluations of expected outcomes

under different regimes, in order to truly understand how the voting decision
is made we must understand how the evaluations are formed, whether on the
basis of full or of limited information. As yet, only a small part of the
wide range of information needed to test alternative specifications of the
mechanism by which future expectations are formed; until such information
becomes available work is stymied.

The inadequacy of current SRC election data for estimating the models
described above is not a symptom of the failure of the SRC studies; rather,
it is a symptom of their success. As in all vigorous scientific enterprises,
the theories of political behavior developed by those associated with the
SRC paradigm have generated competing theories. In order to fully compare
these alternative explanations of political phenomena it is necessary to
organize data collection around the competing theories; questions must be
designed with the specific requirements of theory-testing in mind.

I make no great claims for the models outlined above; certainly they are
quite sketchily described, and omit certain areas of inquiry altogether
(for example, the entire class of socio-psychological models of voting
behavior). But they do direct our data-gathering efforts in certain direc-
tions which I think should be taken under any alternative specification of
rational voting models. Much more data needs to be gathered on the respon-
dent's expectations of the future under different administrations, as well
as data that indicates how these expectations are formed. Data on the
extent of knowledge of past issue stances and government performance is
needed for testing relationships implied by the models, as well as some
indication of the extent to which this knowledge is incorporated into the
voting decision. Clearly, it will be difficult to collect large amounts of
additional information within the framework of a series of ongoing studies

with other demands and constraints upon it. But if the theories outlined above or similar theories are to be given a truly comprehensive test there is no alternative.