SPATIAL MODELS VS. CONSISTENCY THEORIES

AS PREDICTORS OF VOTING DECISIONS

Richard W. Boyd
Wesleyan University

The concern of this conference with rational choice and consistency theories reflects the dominance of these models in the literature on voting. The pathbreaking Columbia studies, with their emphases on the social psychology of opinion formation, focused political scientists' attention on the importance of consistency theories. (Lazarsfeld, 1944; Berelson, 1954; and McPhee, 1962). Sears (1969), in a review of the impressive research that followed in the tradition of the Columbia studies, shows how central consistency theories have become to our voting literature. More recently, social choice theories have emerged as an alternative perspective on voting and elections. Page's recent review of this literature (1977) reveals just how rapidly this literature has grown (as well as how problematic it remains).

Much of the interest in consistency and social choice theories derives from an assumption that the two stand as alternate and incompatible theories of voting decisions. Consistency theories are typically brought forth to explain the more perverse aspects of voters. Selective perception—the proclivity of voters to distort systematically the positions of parties and candidates—is the example of consistency theories best known to voting specialists. Social choice theories, which are a formalization of pure or populistic democracy (Page, 1977, p. 639), appear, in contrast, to present the voter as a rational actor. Social choice theories are therefore attractive to scholars of a majoritarian bent, who would like to have reason to believe that rational people, participating through elections, really do have an impact on policy.

This memorandum has two purposes. It will first reassess some evidence on consistency and social choice theories, using evidence from CPS surveys of 1968 and 1972. It will second suggest that the two models of man are not nearly so different as we commonly assume.

Consistency Theories

While dissonance, congruity, and balance theories have important differences, each "asserts that people prefer to agree with those whom they like and respect, and to disagree with those they dislike and do not respect" (Sears, 1969, p. 337). Figure 1, adapted from Lane and Sears (1964, p. 45), displays the eight possible relationships between three variables pertinent to a model of candidate choice. The first four are balanced models. That is, they predict that people will like candidates they perceive as sharing their attitudes on issues and dislike candidates who do not. The second four models are unbalanced. Consistency theories predict such mental states will evolve toward one of the four balanced states.

Since 1968 the CPS election studies have typically included measures for each attitudinal component of this consistency model. Since much of the empirical analysis which follows is drawn from items on urban unrest and Vietnam in the 1968 study, these items are quoted in full.

SYMBOLS

A_c Affect toward the Candidate

P_c Perception of Candidate's Position on Issue

O_r Respondent's Own Opinion on Issue

A. Four balanced models. Components should be stable.
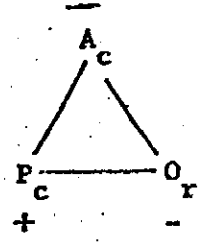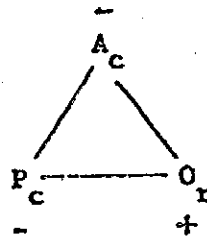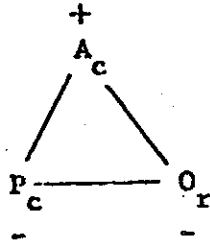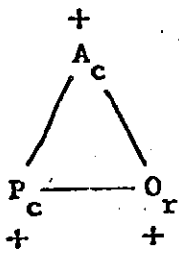
B. Four unbalanced models. Cognitive strain to change to a balanced model.

Measures of Variables

1. 7 point Urban Unrest item.

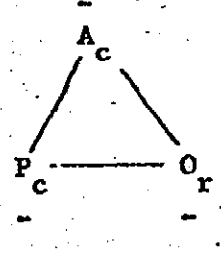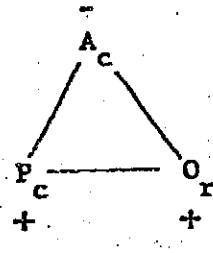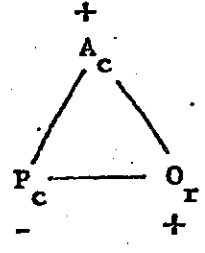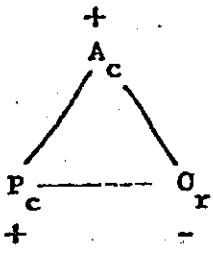| P		O	P			P
H		r	N			W

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

"There is much discussion about the best way to deal with the problem of urban unrest and rioting. Some say it is more important to use all available force to maintain law and order—no matter what results. Others say it is more important to correct the problems of poverty and unemployment that give rise to the disturbances. And, of course, other people have opinions in between. Suppose the people who stress the use of force are at one end of this scale—at point number 7 (Show card #3 to R). And suppose the people who stress doing more about the problems of poverty and unemployment are at the other end—at point number 1. Where would you place [yourself] on this scale?"

		0 low	
		.	
$\left| O_r - P_c \right|$		:	Difference between R's own opinion and his perception of a candidate's position on issue.
		.	
		6 high	
		0	
		.	
A		.	Affect toward candidate as measured by SRC "Feeling Thermometer."
c		.	
		100 high	
		1 low	
		.	
S		.	Salience of issue to the respondent.
o		.	
		4 high	

2. 7 point Vietnam item.

"There is much talk about 'hawks' and 'doves' in connection with Vietnam, and considerable disagreement as to what action the United States should take in Vietnam. Some people think we should do everything necessary to win a complete military victory, no matter what results. Some people think we should withdraw completely from Vietnam right now, no matter what results. And, of course, other people have opinions somewhere between these two extreme positions. Suppose the people who support an immediate withdrawal are at one end of this scale (Show card #4 to R) at point number 1. And suppose the people who support a complete military victory are at the other end of the scale at point number 7. Where would you place yourself [on this scale]?

Figure 2 presents the three means by which cognitive balance can be restored in the simple three variable model. The first is what is typically termed selective perception or projection. In this case a respondent projects his own attitudes onto a favored candidate or, alternately, misperceives an unfavored candidate as farther from his own position than is in fact true. In either case the direction of causation is from the respondent's opinion to his perception of the candidate's opinion. (The arrows cut by cross hatches denote a condition of statistical interaction. The character of the causal effect depends upon the level of affect toward the candidate.)

Theories of selective perception are central to most consistency theories and incompatible with most social choice theories. For example, Downs (1957) assumes that people must always make decisions in ignorance, that is, on the basis of incomplete information. However, he excludes biased information from the world of the rational voter. Rational people, he assumes, do not deceive themselves. Thus, the hypothesis of selective perception is important because it so clearly distinguishes consistency and social choice theories.
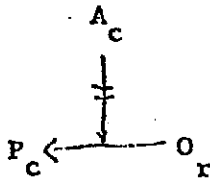
A second mode of achieving a balanced attitude set is to change one's affect toward a candidate. On this matter, consistency and social choice theories agree. Voters like candidates who share their attitudes and dislike candidates who do not.

A third type of movement toward a balanced structure is a change of opinion or persuasion. The "weakest link" hypothesis of consistency theory is that voters will most commonly change their minds only on issues they care relatively little about. When voters care deeply about an issue, they are more apt to resolve an unbalanced attitude set by misperceiving the candidate's opinion or by changing their attitude toward the candidate.
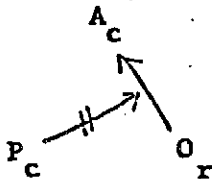
The matter of opinion change is anomolous in social choice theories. As Page (1977, p. 645) explains, most social choice theories assume that fixed preferences underlie opinions on candidates and policy options: "...if consumer (voter) sovereignty theories are to make empirical sense, preferences must be causes rather than consequences of what firms (politicians) produce." On the other hand, Page notes that (1977, p. 645) "opinion change follows rather easily from a rational theory of individual behavior under imperfect information." Thus, the existence of opinion change on policies or candidates does not conclusively serve to distinguish consistency and social choice theories.

We have come then to this: Of the three modes of achieving a balanced configuration of attitudes toward issues and candidates, only selective perception distinguishes consistency and social choice theories. Moreover, even this assertion is problematic. Not all changes in perceptions of candidate stands are selectively biased. Campaigns exist to provide opportunities for voters to gain information on candidates and party platforms. Social choice theories assume that as campaigns generate cheap,
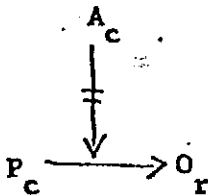
1. <u>Selective perception;</u>
   <u>salient issue</u>

   $$A_c$$
   $$\big|$$
   $$P_c \longleftarrow \quad O_r$$

   <u>Prediction:</u>

   a. If $A_c \longrightarrow 100$ and if S_o is high,
      then $|O_r - P_c| \rightarrow 0$

   b. If $A_c \longrightarrow 0$ and if S_o is high,
      then $|O_r - P_c| \rightarrow 6$

   <u>Test:</u>

   Relate $|O_r - P_c|$ to A_c for issue
   of high salience

2. <u>Change affect</u> toward
   <u>candidate; salient issue</u>

   $$A_c$$
   $$P_c \quad O_r$$

   <u>Prediction:</u>

   a. If $|O_r - P_c| \rightarrow 0$ and S_o is high,
      then $A_c \longrightarrow 100$

   b. If $|O_r - P_c| \rightarrow 6$ and S_o is high,
      then $A_c \rightarrow 0$

   <u>Test:</u>

   Relate $|O_r - P_c|$ to A_c for issue
   of high salience

3. <u>Change opinion;</u>
   <u>non-salient issue</u>

   $$A_c$$
   $$\big|$$
   $$P_c \longrightarrow O_r$$

   <u>Prediction:</u>
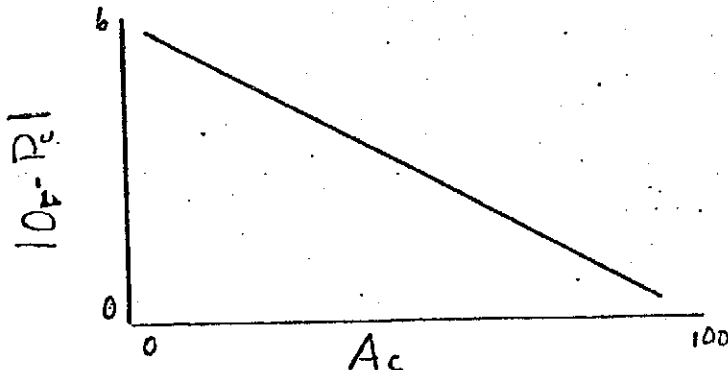
   a. If $A_c \rightarrow 100$ and S_o is low,
      then $|O_r - P_c| \rightarrow 0$

   b. If $A_c \rightarrow 0$ and S_o is low,
      then $|O_r - P_c| \rightarrow 6$

   <u>Test:</u>

   Relate A_c to $|O_r - P_c|$ for issue
   of low salience

GRAPH OF PREDICTED RELATIONSHIP

The strength of the relationship should increase as the
salience of the issue to the person increases.

extensive information, voters will come to acquire more accurate information on candidate stands. How then do we distinguish selective perception from unbiased learning. Patterson (1977, p. 11) provides the necessary clarification. Selective perception typically reinforces a vote intention—either to support a favored candidate or to oppose a candidate one already dislikes. In contrast, the motive for learning is the salience of an issue and not one's affect toward a candidate. Learning may be expected to weaken a vote intention as often as it strengthens it.

In summary, each of the three modes of resolving unbalanced attitude sets makes a similar prediction. As the graph at the bottom of Figure 2 indicates, there ought to be a negative relationship between one's affect toward a candidate and the distance between the candidate and the voter on an issue. Moreover, the salience of the issue should vary directly with the strength of the relationship: the more salient the issue, the more negative the expected relationship.

Table 1 presents a test of these predictions from the 1968 election. In general, we observe what the theory has predicted. The relationships are uniformly negative, and typically increase in strength as the salience of the issue increases. The relationship to salience is not always monotonic. In three of the six cases, there are fairly strong associations at the lowest level of salience. Perhaps this suggests that cognitive consistency is easily achieved when one cares little about an issue and obtains little objective information about it.

Although Table 1 does present evidence in support of consistency theories, the results are highly indeterminant. It is critical that we know the means by which individual voters acquired these consistent attitude sets. As we have just argued, attitude change that derives from changes of attitudes toward a candidate or from opinion change may not violate social choice theories. Only selective perception is clearly inconsistent with social choice models.

As Patterson (1977) has recently reminded us, ideally we need panel data to distinguish among the modes of acquiring consistent beliefs. Panel data allows us to distinguish whether issue preferences are influencing candidate preferences or vice versa. If the cross-lagged correlation $r_{I_1 C_2 \cdot C_1}$ in Figure 3 exceeds $r_{C_1 I_2 \cdot I_1}$, then we have strong evidence that issue rather than candidate preferences are the dominant cause of issue-candidate consistency.

Interestingly, Patterson found that neither projection nor persuasion to be the most important explanation of attitude change in the 1976 Republican primary race. Most common was learning, the acquisition of more accurate information on candidate's issue positions independent of candidate preferences. This finding gains credibility from its similarity to an earlier panel study of the 1972 campaign in which learning was also the most common form of attitude change (Patterson, McClure, and Meier, 1974).

A. **URBAN UNREST**

Salience Group	Candidate		
	Humphrey	Nixon	Wallace
Low	-.18	-.32	-.31
2	-.22	-.21	-.38
3	-.49	-.43	-.52
High	-.48	-.52	-.63
All	-.37	-.36	-.46

B. **VIETNAM**

Salience Group	Candidate		
	Humphrey	Nixon	Wallace
Low	-.31	-.33	-.19
2	-.18	-.11	-.24
3	-.42	= -.38	-.54
High	-.41	-.50	-.47
All	-.34	-.31	-.40

[*] gamma

FIGURE 3: PANEL MODEL

Issue
preferences (I_1)
Candidate
preferences (C_1)

Issue
preferences (I_2)
Candidate
preferences (C_2)

WAVE 1   WAVE 2
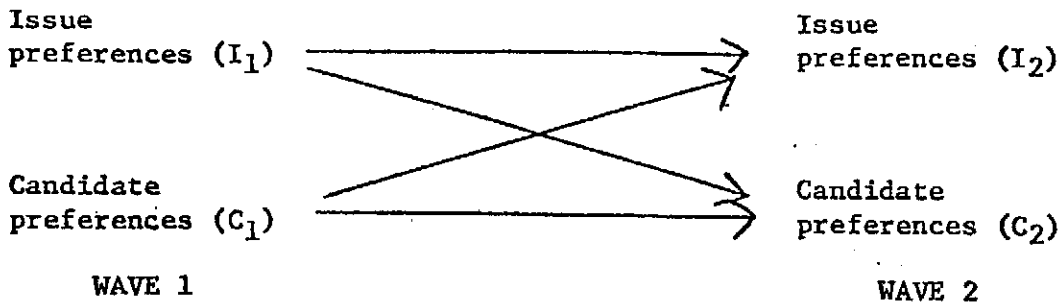
There is no doubt that panel designs are superior to cross-section designs for studies of consistency and social choice. Our only question is whether panel designs are so much better as to justify their markedly higher costs. Our judgment on this question may be informed by further exploration of social choice and consistency theories, using the CPS cross-section studies at hand. We turn then to additional tests of social choice theories in the context of the 1968 and 1972 elections.

Spatial Explanations of Turnout

Central to spatial social choice theories is the assumption that voters decide among candidates on the basis of what Downs (1957) calls a party differential. A voter compares his own position on an issue to the positions of each of the parties (or candidates) as a means of estimating the comparative proximity of each of the parties to his own preferences. Models of voting turnout based on an assumption that voters maximize utility typically predict that voters go to the polls when they calculate that the expected benefits of voting outweigh the costs. The benefits of voting are defined as the expected party differential, weighted by a person's calculation of the probability of actually affecting the outcome of the election by voting. In symbolic terms, a rational person votes when R exceeds 0, where $R = P(PD) - C$.

PD, the expected party differential
P, the probability of affecting the outcome
C, the cost of voting

Tests of the utility model of turnout that remain faithful to the self-interest axiom (Barry, 1970, p. 13-19) have not proved notably successful, particularly if one calculates the party differential directly from an issue dimension as opposed to candidate rating scales. For example, if we assume that the cost of voting is really quite low[1] and that P and C are randomly distributed with respect to PD, then the rate of turnout should

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[1] That voters consider the current costs of voting low is suggested by the fact that November, 1977 referendums in Ohio and Washington rejected by large margins proposals for election day registration and postcard registration. Of course, another interpretation is that voters who are willing to pay the costs of voting wish to keep those costs high for others.

vary directly with the magnitude of PD, the expected party differential.

In the three candidate race of 1968, PD is calculated in the following manner: Let the distance from an individual to a candidate be measured without regard to direction, i.e., $D_c = |P_c - O_r|$. The magnitude of the differential PD is the distance between the closest candidate to one's own position and the second closest candidate, e.g., PD = $|D_H - D_N|$. A small value of PD, then, implies that the candidates are nearly equidistant — from the respondent and that one's comparative preference between them is weak. A large value of PD implies a strong candidate preference. This formulation does not distinguish between weak preferences attributable to indifference (being close to each of two candidates) and to alienation (being far from all candidates) (Brody and Page, 1973). We merely predict that people with strong candidate preferences on a given issue are more likely to vote than people of weak preferences.

As Table 2 reveals, the hypothesis that turnout varies with the magnitude of voters' party differentials is not supported by this test. The issues involved with consumption and investment variants of social choice theories are quite complex and cannot be settled by so simple a test as Table 2 (Page, 1977, pp. 652-654). Nonetheless, the turnout decision remains one poorly explained by social choice theories.

Explanations of Candidate Choice

Both social choice and consistency theories assume that voting choices between competing candidates will be consistent with voters' issue preferences. Moreover, both models would predict that the strength of the relationships between voting choices and expected party differentials on issues will vary directly with 1) the increasing salience of issues to voters and 2) the magnitude of the party differentials.

Table 3 provides support for both hypotheses. Taking each issue singly, we see that 73 percent of those holding opinions on urban unrest voted for the candidate they perceived as closest to them on that issue. Similarly, 68 percent voted consistently with their issue positions on Vietnam. The accuracy of the predictions varied as expected by the salience of the issue to voters and by the magnitude of the party differentials.

Social choice and consistency theories would have different explanations for the patterns of Table 3. A proponent of consistency theories would point to selective perception as one possible cause of the parallelism between issues and votes, an explanation inconsistent with rational choice models. Typically, rational choice theories assume that "all citizens make identical estimates" of candidates' stands on issues (Davis, 1970, p. 431). One test of whether the results of Table 3 are the consequence of selective perception is to fix the positions of the candidates on issue dimensions. Spector (1975) conducts such a test

TABLE 2

PREDICTION OF VOTE TURNOUT FROM MAGNITUDE OF PARTY

DIFFERENTIAL ON TWO ISSUES, 1968

MAGNITUDE OF DIFFERENTIAL		PERCENT VOTING URBAN UNREST	N	PERCENT VOTING: VIETNAM	N
Weak	0	80%	(341)	78%	(415)
Preference	1	78	(357)	80	(387)
	2	77	(252)	77	(208)
	3	76	(157)	77	(111)
	4	78	(46)	69	(39)
Strong	5	73	(22)	71	(7)
Preference	6	81	(26)	67	(9)

TABLE 3

PERCENTAGE VOTING FOR CANDIDATE PREDICTED

BY PARTY DIFFERENTIAL, 1968

A.	SALIENCE	URBAN UNREST PCT.	N	VIETNAM PCT.	N
	Low	61%	(95)	57%	(56)
	2	63	(212)	54	(175)
	3	82	(299)	77	(305)
	High	76	(55)	75	(55)
	All	73	(663)	68	(592)

B.	MAGNITUDE OF DIFFERENTIAL				
	1	69%	(278)	62%	(310)
	2	72	(193)	73	(160)
	3	73	(119)	74	(84)
	4-6	88	(73)	87	(38)

using the 1972 CPS survey. The positions of the candidates on each of
8 issues[2] are estimated as the group mean of all respondents' perceptions
of the candidates' location on each issue. Spector then calculates a
loss function vote prediction in terms of the distance from a respondent's
issue position to the mean candidate position. In this more rigorous
test of social choice theory, 77 percent of the respondents vote as social
choice models would predict.

Learning

As we discussed earlier the character of political learning may be
a good test for choosing between social choice and consistency theories.
Social choice theories would make the following predictions regarding the
learning of candidate issue stands: 1) If information is a costly good
and if candidates do in fact adopt unambiguous positions on issues, the
degree to which groups of respondents agree in their perceptions of
candidate stands ought to vary directly with the salience of the issue to
them as individuals. 2) As the campaign progresses and the supply of
inexpensive information expands, the level of agreement on perceptions of
candidate stands should increase.

In contrast, consistency theories do not necessarily predict any given
pattern of agreement on candidates' issue positions. To the degree that
selective perception (or projection) is the method by which voters maintain
consistent attitude structures, voters widely distributed across issue
dimensions should perceive candidates as similarly distributed.

One measure of agreement is the standard deviation of perceived
candidate positions. By this test the first hypothesis receives no support
from the 1968 data. Agreement on candidate stands on Vietnam and urban
unrest does not vary systematically with the salience of these issues to
individual respondents. (Due to space limitations the data on learning
are not presented here.)

The 1972 election study provides a test of the second hypothesis.
By design the sample is divided into representative groups, half inter-
viewed early in the campaign and half interviewed late. To the degree that
campaigns and press coverage provide accurate information on candidate
stands and to the degree that those stands are stable through the campaign,
respondents interviewed late in the campaign should display more agreement
on candidate positions than those interviewed early. Again, this predic-
tion fails. In 1972 respondents did not converge during the course of the
campaign on their perceptions of the policy positions of candidates. The
1972 CPS data do not therefore support a social choice theory of learning.

[2]
The eight issues are liberal/conservative location, Vietnam withdrawal,
government guarantee of standards of living, inflation, minority group aid,
busing, rights of the accused, and women's rights.

Conclusions

The principal substantive implication of this discussion is that political scientists have been much too quick to assume that consistency and social choice theories represent fundamentally different models of man. That they are not is suggested by McGuire's survey of attitude theory. McGuire (1969, p. 157) uses as evidence for the existence of cognitive and behavioral consistency the finding of The American Voter of a high correlation "between cognitive components of political attitudes (self-ratings on political issues) and the conative [behavioral] component (actual voting preferences)." A social choice theorist would approvingly cite the same finding. The importance of selective perception in the early voting studies has perhaps persuaded political scientists that all consistency theories are grounded in misperceptions of the world.

If biases of perception (and exposure and retention) represent only one set of attitudinal dynamics by which people tend toward consistent attitudes, the concept of biases of information is important, precisely because it is one of the few points on which consistency and social choice theories clearly disagree. This suggests that the conference on issue voting should place the topic on its agenda for discussion. In particular, given that cross-sectional survey designs do not permit one to distinguish the way in which individuals move toward consistent attitude sets, we should explore the possibility of adding an election year panel design to a future CPS survey.

A final point is that the 7 point issue items added to CPS surveys since 1968 are exceedingly valuable in testing both consistency and social choice theories. We could profitably discuss how these valuable items might be improved. One suggestion is that for some subset of these items we sacrifice comparability of items over time in order to insure that the items are keyed to the particular character of party and candidate disagreements in a given campaign. Consistency and social choice theories presently represent the most fertile approaches to the analysis of party competition and voting behavior. The design of CPS surveys should reflect the centrality of these theories in contemporary research.

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This memorandum has kept references to a minimum. Good bibliographic essays on consistency theories may be found in the chapters by Zajonc, McGuire, Weis, and Sears in Gardner Lindzey and Elliot Aronson, eds., Handbook of Social Psychology (Reading, Mass." Addison-Wesley, 1969). Two recent essays by Plott (1976) and Page (1977) cited below discuss social choice theories.

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