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IN CONGRESSIONAL ELECTIONS

ABSTRACT

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Several authors have observed a decline in the number of competitive congressional districts during the past two decades. Various explanations have been proposed for this change. Among these are theories attributing major causal significance to changing methods of drawing district boundaries, and increasing control of campaign resources by incumbents. These theories are examined critically and arguments are advanced for their rejection. The principal cause of the decline of competition for congressional seats appears to rest on a change in individual voting behavior.

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In a recent article, Mayhew discovered that since the middle of the 1950s there has been a steady decline in the proportion of "competitive" congressional districts.² In related work, Erikson found that the incumbency advantage more than doubled between the late 1950s and 1966.³ For the same period Tuftre showed that a substantial drop in the "swing ratio" (the percentage increase in House seats a party obtains when it receives a one percent increase in popular vote) had taken place.⁴ Finally, Kostroski also discovered a substantial increase in the incumbency advantage in postwar Senate elections.⁵

Not surprisingly, scholars differ in their explanations of these findings. Without doing violence to anyone's position, one can enunciate three proposed explanations. Some authors argue that changes in the institutional setting of congressional elections have worked to alter the outcomes of these elections. For example, Tuftre attributes the decline in the swing ratio to the control incumbents have over redistricting:

Our data indicate that a major element in the job security of incumbents is their ability to exert significant control over

the drawings of district boundaries. . . . Ironically, reapportionment rulings have given incumbents new opportunities to construct secure districts for themselves, leading to a reduction in turnover that is in turn reflected in the sharply reduced swing ratio of the last few elections.⁶

Tuftre argues further that in Senate districts (states, to institutionalists) there has been no reapportionment and no decline in the proportion of marginal seats. Finally, he notes that if House elections are examined in states that have reapportioned "there is an immediate decline in the competitiveness of the races in the first election after the new districting."⁷

A second position attributes the changing nature of congressional elections to a shift in the behavior of the electorate. Perhaps the most explicit statement of this position is advanced by Burnham:

Tuftre's argument about the effects of bipartisan gerrymandering of districts is ingenious but not ultimately convincing. For there is a host of evidence . . . to support the view that the most important single factor has been systematic change in mass voting behavior since 1960.⁸

Burnham argues that "the very high . . . swing ratios of the late nineteenth century were associated with a period in which party identification and party voting were extremely salient, by all aggregate indicators."⁹ In a somewhat earlier contribution, Erikson anticipated Burnham's point:

An increased incumbency advantage in 1966 is not so mysterious as it may seem, since the timing of its occurrence coincides with that of the reported erosion of party identification as an electoral force in the late sixties. Possibly the electorate's

decreasing partisan loyalty, signaled by such indicators as the post-1964 surge in the number of independent voters, is the cause of the apparent boost in the incumbency advantage.¹⁰

A third, intermediate, possibility is that institutional change has modified voter behavior. For example, Mayhew argues that people in the same situation (in terms of information about the candidates) behaved in the same way in 1966 as they did in 1958 but that incumbents had more of an advantage in promulgating information than they did in the earlier period. According to this view there is aggregate behavioral change, but it is caused by a shift in the marginal distributions of people across the various informational categories. Mayhew hypothesizes that these shifts stem from the increasing use of the institutional advantages of incumbency such as the franking privilege, or from increasing skill in using polls and publicity. Mayhew writes, "the answer to the incumbency advantage question could be a remarkably simple one: the more hundreds of thousands of messages congressmen rain down on constituents the more votes they get."¹¹

In this paper some data are presented which will help to clarify some of the issues in this debate. I argue that both Tufte's pure institutional change theory and Mayhew's argument that the informational advantage of incumbents has increased, are inadequate to account for the observed phenomena. Thus any acceptable explanation of why the incumbency advantage has increased must be based on a basic shift in the behavior of the electorate. Of course, a shift in electoral behavior may be of two basic sorts. What might be called the distribution theory holds that different kinds of party identifiers (strong Democrats, weak

Democrats, etc.) are acting the same as always but the distribution of people into these categories has shifted. The behavioral change theory holds that within each party-identification category there has been a change in behavior. The data I present will provide some evidence that at least part of the change occurring is of the latter sort.

The plan of the paper is as follows. First, by presenting data on redistricting, I show why Tufte's explanation fails. Second, I analyze survey data which indicate an increase in incumbency voting at the level of the individual voter. Third, I show that increased incumbency voting results only partly from the increased informational advantage of incumbents over nonincumbents and the propensity of voters to cast their ballots in favor of candidates who are known to them. Both of these factors have undergone some change between 1958 and 1970, but the change in the informational advantage is not adequate to account for the change in incumbency voting. Finally, data are presented which suggest that the inclination of voters to vote for candidates they know has increased over the period under study at all levels of party identification.

REDISTRICTING AND COMPETITION

In his reply to Burnham's comment on his 1973 article, Tufte remarks that more important than ascertaining whether or not there has been an underlying shift in voter behavior that would account for the shift in the swing ratio is "allocating the effects on political competition of redistricting on the one hand and the increase in incumbent resources on the other."¹² This prescription is sensible as

long as there is some reason to believe that these two effects capture a substantial fraction of the variance in the dependent variable. In this section I argue that there is no reason to expect that redistricting has much influence on the variables of interest.

In two papers and a reply to a comment, Tufte has advanced several pieces of evidence indicating that redistricting has a major effect on the decline of the swing ratio. In his first paper (1973), Tufte notes that the proportion of competitive seats in the House has declined from about .20 in 1958 to .13 in 1970, while in the Senate (where no redistricting ever takes place), there has been no decline. He then says that "some recent redistricting laws have been described as the Incumbent Survival Acts of 1972."¹³ He claims that "reapportionment rulings have given incumbents new opportunities to construct secure districts for themselves. . . ." ¹⁴ Tufte goes on to present data on the number of marginal seats in Michigan, Illinois, Pennsylvania, and Ohio for the 1970 elections (all these states had been redistricted during the decade). Finally he claims that "the independent contribution of reapportionment to the job security of incumbents can also be seen in the elections immediately following reapportionment in a state: there is an immediate decline in the competitiveness of the races in the first election after the new districting."¹⁵

In his rejoinder to Burnham's communication, Tufte presents what he calls the "seats-votes" curves for California in 1966 (before redistricting) and 1968 (after redistricting). These curves indicate a substantial decline in the number of competitive districts in the state following the redistricting.

Finally, in his article, ¹⁶ Tufte presents the seats/votes curves for Illinois, Michigan, Pennsylvania, and Ohio for 1950 and 1970. In each case there is a substantial decline in the swing ratio (and of course in the number of competitive districts). As far as I know, this is all the evidence that Tufte has presented in support of the redistricting explanation.

As the reader may suspect, I have several objections to this explanation. First, it is highly implausible a priori. Before the Court rulings on reapportionment, there were fewer legal restrictions on the amount of gerrymandering that could be done than there are now. Aside from some anecdotal remarks, Tufte has presented no evidence that incumbents have more control over redistricting now than they ever did. It appears to me that he must bear the burden of proof on this point and establish the plausibility of his contention.

Second, while Tufte presents some data on the number of competitive districts in certain states before and after redistricting, he fails to look at changes in the number of competitive districts in states where no reapportionment has occurred. If any of the opposing explanations are correct he would find that there has been a decline in the number of competitive seats after reapportionment but that decline need have nothing to do with the reapportionment itself. In those states which underwent it, reapportionment is simply correlated perfectly with the change in voting behavior (if Burnham and Erikson are right) or with the increase in resources held by the incumbent (if Mayhew is correct). This problem seems to be easily remedied by comparing the number of marginal districts over time in states which redistricted

with those which did not. In Tables 1 and 2 any district in which the winner received no more than 60 percent of the vote is called competitive, while all others are called noncompetitive.

TABLE 1

Decline in Percentage of Competitive Seats in Non-Southern States That Have and Have Not Been Redistricted, 1962-1966^a

	Redistricted	Not Redistricted
1962	51	51
1966	40	28

Number of districts 182 132

^aThe data are from America Votes, Vol. 9, ed., Richard Scammon, Congressional Quarterly, 1972. Entries are the percentage of competitive districts.

TABLE 2

Decline in Percentage of Competitive Seats in Non-Southern States That Have and Have Not Been Redistricted, 1966-1970^a

	Redistricted	Not Redistricted
1966	35	39
1970	27	33

Number of districts 177 153

^aThe data are from Scammon. Entries are the percentage of competitive districts.

These tables indicate that the drop in the percentage of competitive seats that Tufte found following reapportionments is not due to redistricting, since the decline occurred in unredistricted areas as well. These data suggest that redistricting has no influence at all on the swing ratio. The decline in the number of marginal districts is a general one which must be accounted for by a theory of the sort advanced by either Mayhew or Burnham.

Before proceeding with a somewhat more detailed consideration of the explanations of Mayhew, Burnham and Erikson, I shall present one more piece of evidence which seems to bear on the problem. In an article on postwar Senate elections, Kostroski found that when the percentage of a senatorial candidate's popular vote is regressed on measures of "base party vote," "national tides," and "incumbency" within party, there has been a substantial increase in the effect of incumbency on vote percentage.¹⁷ For the present purposes it is significant that this increase has occurred in "districts" in which no redistricting took place. In my view, Kostroski's results fit quite well with the observed drop in the swing ratio in House districts, since this drop might well be due to an increase in incumbency voting in House elections. Kostroski's research indicates that incumbency voting has in fact increased during the postwar period and that this increase occurred in areas which have not been redistricted.

ON THE INCUMBENT'S INCREASING CONTROL OF RESOURCES

Mayhew suggests that a principal source of the change in the number of competitive seats may be found in the "greater electoral

advantage" that incumbents hold over their opponents. He cites two pieces of evidence that this advantage has increased. First he remarked that Erikson found that the incumbency advantage more than doubled between the 1950s and 1966.¹⁸ Second, Mayhew computed the drops in the percentage of the vote that a party suffers in a district when an incumbent retires. He found that these drops were larger in 1966, 1968 and 1970 than in 1962 and 1964. He concluded that "Incumbency does seem to have increased in electoral value, and it is reasonable to suppose that one effect of this increase has been to boost House members of both parties out of the marginal electoral range."¹⁹

Mayhew attempted to trace the decline in the number of marginal districts and the concomitant apparent increase in the advantage of incumbency to real changes in the quantity of resources held and employed by incumbents. He argued that incumbent congressmen currently make substantially greater use of the franking privilege than did incumbents in the 1950s. Indeed the quantity of junk mail quadrupled between 1954 and 1970. Further, this increase in the control and utilization of tangible resources has allegedly translated into an increase in the level of recognition enjoyed by incumbents. Mayhew cites Gallup poll data which indicate that there was a seven percent increase in the percentage of people who knew their congressman between 1966 and 1970.

While I do not have data that bear directly on whether incumbent congressmen enjoy more of an advantage over their opponents in the control of campaign resources than did the incumbents of the

1950s, it is possible to utilize data collected by the SRC to question whether any effects on voting behavior may be imputed to this alleged change. If Mayhew's argument is correct, one should be able to observe, first of all, an overall increase in the level of recognition of the incumbent. Second, the relative level of recognition of incumbents versus challengers should also show an increase. Additionally one ought to find that the increased level (or relative level) of recognition translates behaviorally into an increased level of incumbency voting.

The data I present below indicate the following: (1) a substantial increase in incumbency voting on the level of the individual voter; (2) no increase in the level of recognition of incumbents; and (3) little if any increase in the gap between recognition levels of incumbents and challengers. I reserve treatment of the behavioral linkage between candidate recognition and voting until the next section of the paper.

The data utilized here are from the SRC election surveys for 1956, 1958, 1960, 1964, 1966, 1968 and 1970. These are all of the years in which information on incumbency was collected by SRC or in which congressional districts identification was provided so that incumbency status could be supplied by the author. Unfortunately, only three off-year elections are available for these purposes, and so some of the results are advanced here only tentatively.

Has there been a change in the frequency of incumbency voting during this period? To answer this question for each year and for Democrats, Republicans and Independents, the percentage of voters in

Percentage difference in voting Democratic due to voting in a district with a Democratic incumbent rather than a Republican

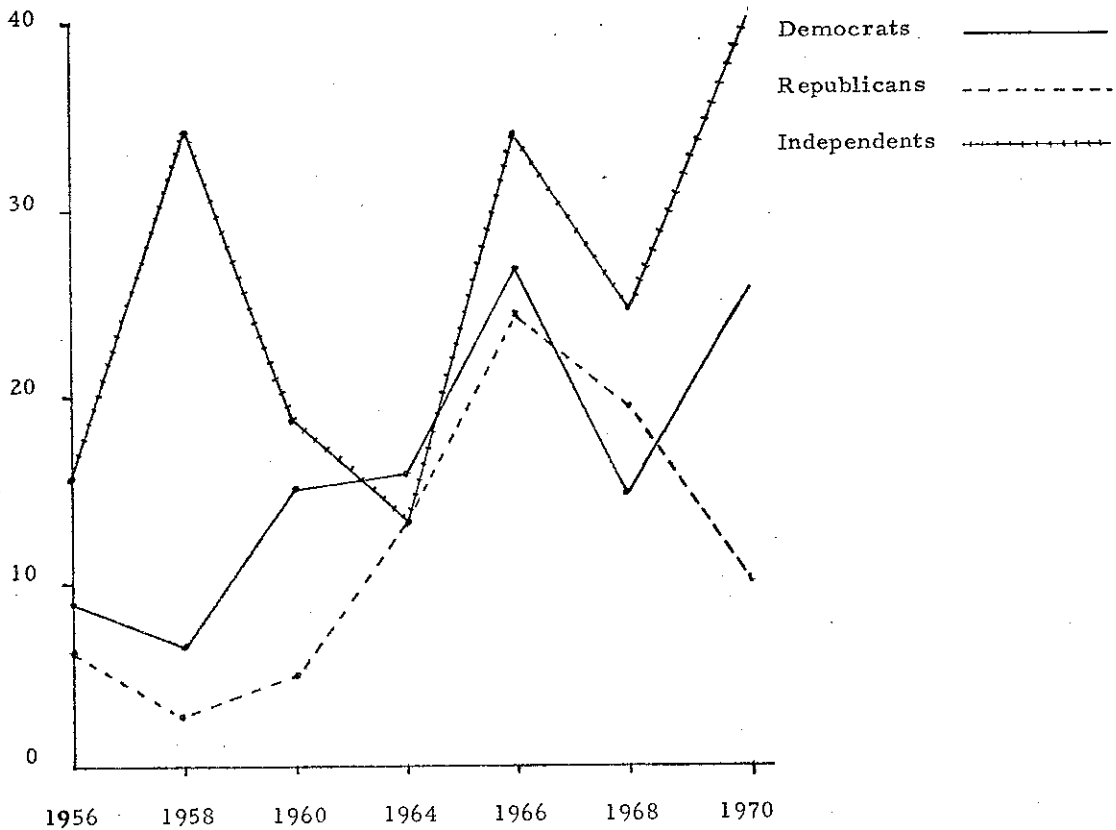


FIGURE 1
Change in Incumbency Voting, 1956-1970, for Republicans (SR & WR), Democrats (WD & SD) and Independents (ID & I & IR) in All Contested Districts

each partisan category in districts with Democratic incumbents who voted for the Democratic candidate was subtracted from the percentage of voters (in the same category) in districts with Republican incumbents who cast their ballots for the Democratic candidate. Figure 1 reports these data during the period.

First notice that for Independents the tendency to vote for the incumbent is substantially greater in off years than in years of presidential elections. Further, while there is some discernible, long-term shift in the behavior of the Independents, it is particularly interesting that partisan identifiers (especially the Democrats) became more likely to respond to incumbency later in the period of observation than they had been earlier. One may conjecture that their behavior has become more like that of the Independents over time. Of course, until more data are available, this possibility is only speculative.

We now examine an important intervening step in Mayhew's argument. Has the informational advantage held by incumbents increased during the period? To answer this question, each respondent was asked to name the candidates for the House in his district. If the respondent could provide the name of a candidate, then he was considered to be "aware" of the candidate, otherwise not. Among the surveys for which we had incumbency information, this question was asked only in 1958, 1964, 1966, 1968 and 1970 so that the data are a bit more limited than those reported earlier.

If Mayhew's theory is correct, these data should show that incumbents are more likely to be known to voters after 1964 than in 1958. Further, the advantage which incumbents enjoy in this respect

ought to have increased over the three elections. Table 3 gives the percentage who know a candidate given that this candidate is or is not an incumbent in all three years. This table indicates that among voters in contested districts with incumbents running there has been no increase in awareness of the incumbent. Rather, in years of presidential elections among voters in contested elections who live in districts with an incumbent running, the percentage who know the incumbent's name is constant at 63 percent. In off years the figure remains constant at about 55 percent. On the other hand, the corresponding variable for nonincumbents displays no clear trend. During the off years, recognition of nonincumbents has declined, while during presidential election years, it seems to have increased somewhat. These data suggest that the increasing control of resources by incumbent, if it has any effect at all on incumbency voting, does not directly impinge on voter awareness of congressional candidates. In my view this result casts serious doubts on Mayhew's explanation of the declining number of competitive seats.

INCUMBENCY AND SALIENCE OF CONGRESSIONAL CANDIDATES

A critical component of Mayhew's argument is that an increase in the salience of a candidate will have the effect of increasing his vote. No doubt the source of this assumption is to be found in Stokes and Miller's classic article demonstrating that candidate salience has an effect on congressional vote. Mayhew drew the following policy conclusion from this study: if a candidate is able through the expenditure of campaign resources to increase his level of recognition, his

Percentage of Voters Who Are Aware of House Candidates
in Contested Districts

TABLE 3

	Incumbent	Nonincumbent
1958	57.6 (738) ^a	38.0 (947)
1964	63.0 (856)	39.8 (920)
1966	55.9 (583)	37.6 (703)
1968	63.7 (703)	46.5 (861)
1970	54.7 (548)	31.3 (630)

^aThe number in parentheses is the number of voters in districts with an incumbent running (column 1) or a nonincumbent running (column 2).

vote will increase. This proposition, although never directly examined, seems to play a large part in popular reasoning about congressional elections. The following analysis is designed to illustrate whether or not this policy conclusion may be safely drawn from the Stokes-Miller data.

Under the assumption that the effects of salience would not interact with the effects of party identification or of incumbency status, the following regression equation was estimated utilizing an iterative generalized least-squares procedure described in Goldberger. 20

$$(1) Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_6 X_6 + \epsilon,$$

where $Y = \begin{cases} 1 & \text{if respondent voted Democratic} \\ 0 & \text{otherwise} \end{cases}$

$X_1 = \begin{cases} 1 & \text{if respondent resided in a district with} \\ & \text{Republican incumbent} \\ 0 & \text{otherwise} \end{cases}$

$X_2 = \begin{cases} 1 & \text{if respondent was aware of the Democratic candidate} \\ 0 & \text{otherwise} \end{cases}$

$X_3 = \begin{cases} 1 & \text{if respondent was aware of the Republican candidate} \\ 0 & \text{otherwise} \end{cases}$

$X_4 = \begin{cases} 1 & \text{if respondent was aware of both candidates} \\ 0 & \text{otherwise} \end{cases}$

$X_5 = \begin{cases} 1 & \text{if respondent was a Democrat (SD or WD)} \\ 0 & \text{otherwise} \end{cases}$

$X_6 = \begin{cases} 1 & \text{if respondent was a Republican (SR or WR)} \\ 0 & \text{otherwise.} \end{cases}$

The samples of observations on which the equation was estimated consisted of all contested districts in which an incumbent was running during 1958, 1964, 1966, 1968 and 1970 taken separately.

The question at issue was whether or not, when incumbency status and party ID were fixed, changes in candidate salience had an intuitively predictable effect on the vote. In particular, if a citizen learned of the Democratic candidate, having previously known neither candidate, or, alternatively, known only the Republican, would that citizen's probability of voting Democratic increase significantly? Table 4 gives the regression results.

The estimates reported in Table 4 indicate that, except for 1966 when a voter who knew the Republican candidate was more likely to vote Democratic than one who knew both candidates, the effect of salience was in the predicted direction. Further, the data in Table 4 indicate that in 1958, incumbency had no independent effect on voting (at the .05 level) once the effect of awareness is taken into account. On the other hand, these data suggest that in 1964, 1966, 1968 and 1970 incumbency had a significant effect on the voting decision, once salience is controlled. Voters were apparently using incumbency as a voting cue whether or not they could recall the names of the incumbent candidate in the interview situation.

The model estimated here is obviously extremely simplified and, in light of Tufte's results on the causes of voting decisions in congressional elections, using more aggregated data, unsatisfactory as an explanatory model of congressional voting behavior. It was employed here to learn if the widely held belief that the incumbency effect in

TABLE 4

Regression Estimates for Equation (1)

	1958	1964	1966	1968	1970
β_1 (R Inc.)	-.023 (.026) ^a	-.082 (.034)	-.228 (.040)	-.067 (.028)	-.099 (.03)
β_2 (Aware Dem.)	+0.073 (.028)	.148 (.037)	.123 (.032)	.177 (.048)	.301 (.04)
β_3 (Aware Rep.)	-.089 (.030)	-.092 (.040)	.041 (.039)	-.110 (.033)	-.033 (.03)
β_4 (Aware Both)	+0.032 (.036)	.012 (.047)	-.176 (.046)	.011 (.053)	-.147 (.05)
β_5 (Dem.)	.465 (.050)	.213 (.044)	.373 (.049)	.375 (.039)	.283 (.05)
β_6 (Rep.)	-.321 (.051)	-.345 (.047)	-.249 (.052)	-.170 (.036)	-.250 (.05)
α	.446 (.051)	.558 (.045)	.509 (.050)	.331 (.041)	.366 (.05)
R^2	.583	.305	.455	.304	.380
N	720	920	555	723	592

^aStandard errors are in parentheses.

voting works through candidate salience had any validity. Based on these data it appears that the popular view cannot be rejected for the 1958 data but that in 1964, 1966, 1968 and 1970 data there was evidently an independent incumbency effect. In the later period perhaps many voters who were not able to identify the candidate for the interviewer were able nevertheless to distinguish incumbent from nonincumbent in the voting booth and use that information in making their voting decision.

Analysis of the residuals from the regression equations indicated that a number of cases produced estimates for the probability of voting Democratic outside the range between zero and one. This finding indicates interactions between the independent variables in their effects on the dependent variable; that is, the effect of salience on the conditional probability of voting Democratic apparently varies according to incumbency status or party identification.

In order to examine this phenomenon the following table was examined utilizing essentially the same information that was contained in the regression equations but allowing for the interactions between salience and incumbency.

The striking thing about Table 5 is that controlling for incumbency status, in four of ten comparisons increased awareness of own party candidate actually decreased the probability of voting for him. In two other comparisons there was essentially no difference at all. These data must cause scholars to reconsider very carefully the maxim advanced by Stokes and Miller "to be perceived at all is to be perceived favorably."²¹ A candidate of the same party as a given voter may be more likely to receive his vote if the voter does not recognize

Percentage Voting for Own Party by Awareness and Incumbency

	1958		1964		1966	
	Own Party Candidate Incumbent	Other Party Candidate Incumbent	Own Party Candidate Incumbent	Other Party Candidate Incumbent	Own Party Candidate Incumbent	Other Party Candidate Incumbent
Aware of Own Party Candidate	91.3 (206) ^a	85.2 (115)	92.0 (264)	71.3 (136)	95.4 (152)	72.6 (73)
Not Aware of Own Party Candidate	95.7 (140)	91.2 (137)	90.3 (145)	79.3 (140)	91.4 (116)	68.4 (95)
	1968		1970			
	Own Party Candidate Incumbent	Other Party Candidate Incumbent	Own Party Candidate Incumbent	Other Party Candidate Incumbent		
Aware of Own Party Candidate	85.6 (174)	70.8 (113)	92.5 (133)	79.2 (72)		
Not Aware of Own Party Candidate	89.2 (102)	70.1 (117)	92.2 (103)	68.4 (114)		

^a Entries in Parentheses are the number of cases on which the percentages are based.

him than if he does. On the other hand, if a similar set of tables were displayed with a variable indicating whether or not the voter is aware of the other party's candidate, the effects of salience appear to be much more intuitive. One may only conclude that the effects of name recognition seem to be quite complex and that more investigation is required before one can conclude that increased name recognition will increase a candidate's vote.

BEHAVIORAL CHANGE THEORIES

The arguments in the first three sections of this paper provide strong *prima facie* evidence to believe that neither Tufte's nor Mayhew's theories can adequately explain the decline in the number of marginal districts. In this section I wish to turn from the gleeful enterprise of attacking existing theories to the more difficult and thankless one of constructing part of a new one. Unfortunately, while I cannot claim the credit for inventing the new theory -- that must be divided between Burnham and Erikson -- I would hold myself partly responsible if it too should turn out to be invalid.

The data in Figure 1 (p. 11) suggest that the principal change in incumbency voting between 1956 and 1970 occurred primarily among the partisan identifiers rather than among Independents. Thus, this section focuses mainly on examining the behavior of the partisans rather than that of the Independents. The major question is this: is the changing level of incumbency voting due to the changing distribution of partisan identifiers or to changes in behavior within the various party identification categories? Of course one cannot expect a simple answer to such

a question, and it seems likely that both kinds of change will be found. Nevertheless, I would think it significant and interesting if the hypothesis of behavioral change within party identification categories could not be rejected.

In their paper on congressional elections, Stokes and Miller showed that "the saliency of the candidate is of critical importance if he is to attract support from the opposite party."²² They produced the following table based on survey data from the 1958 elections.

TABLE 6
Effect of Information on Congressional Voting
in Contested Districts in 1958

Percentage Who Voted for Candidate	Voter Was Aware of:			
	Both Candidates	Own Party Candidate	Other Party Candidate	Neither Candidate
Of Own Party	83	98	60	92
Of Other Party	17	2	40	9
N =	196	166	68	368

These data suggest that while party is a fairly good indicator of how a party identifier will cast his vote, the various categories of knowledge of the candidates have some effect on this relationship.

In Table 7, data are presented from the 1958, 1965, 1966, 1968 and 1970 SRC surveys which correspond roughly to the 1958 data presented by Stokes and Miller. The numbers on which the 1958

percentages are based do not quite agree with those presented by the earlier authors but the percentages are fairly close to theirs.

TABLE 7
Effect of Information on the Congressional Vote
in Contested Districts^a

Percentage Who Voted for Own Party in	Voter Was Aware of:			
	Both Candidates	Own Party Candidate	Other Party Candidate	Neither Candidate
1958	81.0 (221)	99.3 (134)	66.7 (30)	95.1 (290)
1964	78.8 (245)	94.8 (164)	59.6 (34)	85.6 (250)
1966	80.7 (163)	96 (96)	34.9 (15)	86.5 (193)
1968	77.0 (235)	94.9 (94)	48.3 (28)	81.7 (192)
1970	75.9 (107)	99.1 (110)	36.4 (16)	89.8 (185)

^aNumber of cases in each awareness category are in parentheses.

The first thing to notice in Table 7 is that in every information category a smaller fraction of people voted for the candidate of their own party in 1964, 1966, 1968 and 1970 than did in 1958. This difference is most pronounced in the category of people who could mention only the candidate of the other party. Chi-square tests for homogeneity between 1958 and each of the ensuing years were computed under the null

hypothesis that the observations were drawn from the same populations. In each case this hypothesis was rejected at the .05 level.

To construct Table 7, all party identifiers were aggregated (weak, strong, and Independent-leaning). Perhaps a shift in the distribution of the electorate across the various categories in the seven-point SRC party identification scale accounts for this apparent change in behavior. If so, then one may hope to explain the apparent change in voting behavior by explaining why this distribution has shifted. Indeed, if the percentage of strong identifiers who resided in districts in which an incumbent was running in 1956 and 1958 is compared with the same percentages in 1966 and 1968, there was a decline from approximately 43 percent to about 36 percent. There was an increase in weak and Independent-leaning identifiers over the same period of about 6 percent. Since party is less of an anchor for weak and Independent-leaning identifiers than for strong identifiers, the observed change in Table 7 may be due to the changing proportion of the electorate in various party identification categories.

In order to test whether this distributional shift accounts for these changes, a regression model was constructed in which the dependent variable was 1 if the respondent voted for the Democratic candidate and 0 if he or she voted for the Republican. The independent variables were constructed to yield a two-way layout with six party identification categories (excluding Independents) and the four informational categories with all interaction terms included. If the changes in Table 7 are due solely to change in the marginal distribution of party identifiers, then the estimated parameters should not change between 1958 and 1964, 1966, 1968 and 1970. If, on the other hand,

some of the change in that table is due to a changing propensity of citizens in a given category of information and party affiliation to vote Democratic, there should be a change in the parameters between 1958 and each of the four following elections -- 1964, 1966, 1968 and 1970.

The statistical model and estimation procedure are given in the Appendix as are the coefficient estimates for each of the equations. Of particular interest was the null hypothesis, i.e., that no parametric change had occurred between 1958 and each of the four later elections. This hypothesis was rejected at the .01 level in every case. Thus, the present evidence indicates that not all of the changes from 1958 can be accounted for by the changing distribution of party identifiers. At least some of the change in voting behavior has occurred within party identification levels.

This finding suggests that while political observers have been lamenting or celebrating, depending on their inclinations, the decline in the number of partisan identifiers, a related sort of change has been occurring. Those people who still identify with one of the parties seem to be using it less and less as a cue in making their voting decisions in congressional elections.

DISCUSSION

The main purpose of this paper is to elucidate and examine critically the principal explanations proffered by scholars for the widely observed decline in the number of marginal seats. By and large the view advanced by Burnham and Erikson, that a behavioral change

accounts for the decline, has received the greatest support. Voters are different than they used to be, and not merely because there are more Independents. The party identifiers seem recently to be more responsive to nonpartisan criteria for decisionmaking in House elections than they have been in the past, and in that sense they are behaving more like the Independents.

As Tufte pointed out, the decline in the number of marginal seats may have the effect of mediating the responsiveness of House elections to national tides. The claim here is that the cause of this phenomenon is to be found in a shift in the behavior of the electorate. Perhaps, as some analysts suggest, the change in electoral behavior is rooted in an increased unwillingness of voters to utilize party identification as a voting cue. This possibility is certainly consistent with many other findings. For example, Tufte, and Arsenau and Wolfinger report that party identification accounts for a decreasing proportion of the congressional vote over time.²³ At the level of congressional voting the decreasing reliance on party as a "shorthand" cue may not turn voters toward issue voting but may simply increase their reliance on other rules of thumb such as incumbency or satisfaction with presidential performance. This would be a curious consequence, since it would suggest that increased issue voting in presidential elections and the declining number of competitive House districts have essentially the same causes. As the voters come to approximate more closely the "ideal citizens" of certain democratic theories, they may (inadvertently) end up insulating their congressmen from defeat and hence to some extent reduce their representatives' incentive to respond

to constituent desires.

Indeed, recent research reported by Kennell indicates that the perceived performance of the President in office has a pronounced effect on individual citizens in deciding whether and how to vote in off-year elections.²⁴ Tufte found that at the aggregate level, presidential performance was an important variable in accounting for the midterm votes. Such findings suggest that the scarcity and resulting costliness of information in congressional elections forces most citizens to rely on simple decision rules in deciding how to cast their votes. The decision rules that currently seem to be operating in the electorate are based on party affiliation, presidential performance, and incumbency. The findings in this paper suggest that voters seem to be shifting away from the use of party affiliation as a decision rule and toward increased utilization of incumbency. I have had nothing at all to say about the fact that voters apparently also respond to presidential performance in deciding how to cast their vote. If the importance of this explanatory component is increasing, then at least the partisan makeup of Congress may end up being quite responsive to national forces.

Given the limited quantity of data presented here and the difficulty of ascertaining voter responsiveness to national forces in the SRC data, only guesses and speculations can be advanced about the significance of the results reported here. One effect of the apparent increase in the electorate's use of incumbency as a voting cue has been to decrease the proportion of competitive seats. We might conjecture that a congressman with a safe seat would be less concerned with

responding to constituency demands. I hesitate to endorse this conclusion since part of the explanation of the increased incumbency effect may be found in the increased ability of sitting congressmen to satisfy constituency requests. Indeed, the increasing decentralization of the policymaking process in the Congress would seem to point in this direction. It may still be true that if a congressman decides not to make use of his many opportunities to assist his constituents, he would not benefit from any incumbency advantage. Indeed, congressmen and congressional scholars are able to recount many stories illustrating this very point. Obviously much more research is needed to settle these questions.

APPENDIX: PROCEDURES

The following regression equation formed the basis for the analysis in the discussion of Behavioral Change Theories in this paper:

The regression equation that was estimated was

$$(A.1) \quad Y_k = \alpha + \sum_{i=1}^5 \beta_i X_{ik} + \sum_{i=1}^3 \gamma_i Z_{ik} + \sum_{i=1}^5 \sum_{j=i}^3 \delta_{ij} X_{ik} Z_{jk} + \epsilon_{1k}$$

where $Y_k = \begin{cases} 1 & \text{if respondent voted for Democratic candidate} \\ 0 & \text{if respondent voted for Republican candidate} \end{cases}$

$$X_{1k} = \begin{cases} 1 & \text{if respondent is a strong Democrat} \\ 0 & \text{otherwise} \end{cases}$$

$$X_{2k} = \begin{cases} 1 & \text{if respondent is weak Democrat} \\ 0 & \text{otherwise} \end{cases}$$

$$X_{3k} = \begin{cases} 1 & \text{if respondent is independent leaning Democrat} \\ 0 & \text{otherwise} \end{cases}$$

$$X_{4k} = \begin{cases} 1 & \text{if respondent is independent leaning Republican} \\ 0 & \text{otherwise} \end{cases}$$

$$X_{5k} = \begin{cases} 1 & \text{if respondent is weak Republican} \\ 0 & \text{otherwise} \end{cases}$$

$$Z_{1k} = \begin{cases} 1 & \text{if respondent is aware of neither candidate} \\ 0 & \text{otherwise} \end{cases}$$

$$Z_{2k} = \begin{cases} 1 & \text{if respondent is aware of his own party's candidate} \\ 0 & \text{otherwise} \end{cases}$$

$$Z_{3k} = \begin{cases} 1 & \text{if respondent is aware of other party's candidate} \\ 0 & \text{otherwise.} \end{cases}$$

The initial least-squares estimates $(\hat{\alpha}, \hat{\beta}, \hat{\gamma}, \hat{\delta})$ were employed to estimate the conditional probability that the kth respondent would vote Democratic as follows.

$$P(k \text{ votes Democratic} | X_1 = x_{1k}, X_2 = x_{2k}, \dots, X_5 = x_{5k}, Z_1 = z_{1k},$$

$$Z_3 = z_{3k}) = Y_k = \alpha + \sum_{i=1}^5 \beta_i x_{ik} + \sum_{i=1}^3 \gamma_i z_{ik} + \sum_{i=1}^5 \delta_i \sum_{j=1}^3 x_{ijk} z_{jk}$$

Thus, since $(\hat{\alpha}, \hat{\beta}, \hat{\gamma}, \hat{\delta})$ are consistent estimates of the parameters \hat{Y}_k is also a consistent estimate and so one can obtain a consistent estimate of the variance of $\hat{\epsilon}_k$ as $\hat{Y}_k(1 - \hat{Y}_k)$. We employed these estimates to generate an estimated variance -- covariance matrix and then to form the generalized least squares estimates $(\tilde{\alpha}, \tilde{\beta}, \tilde{\gamma}, \tilde{\delta})$. These are reported below.

TABLE A
Generalized Least-Squares Estimates of Equation A.1

	1958		1964		1966		1968		1970		1958-1964		1958-1966		1958-1968		1958-1970	
	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors	Coeff.	Std. errors
α	.085	.04	.133	.04	.050	.03	.119	.05	.038	.05	.112	.03	.069	.03	.098	.03	.066	.03
β_1	.878	.04	.748	.05	.814	.06	.738	.06	.787	.07	.810	.04	.860	.03	.795	.04	.830	.04
β_2	.712	.06	.648	.07	.634	.08	.523	.08	.586	.08	.677	.05	.680	.05	.579	.05	.647	.05
β_3	.524	.10	.597	.09	.617	.13	.714	.08	.337	.16	.561	.07	.560	.08	.574	.07	.402	.09
β_4	.248	.11	.158	.10	.283	.12	.068	.08	.362	.15	.197	.07	.264	.08	.109	.06	.291	.09
β_5	.242	.07	.229	.07	.220	.08	.209	.08	.179	.09	.233	.05	.234	.05	.211	.05	.204	.06
γ_1	-.085	.04	-.133	.04	.013	.07	-.119	.04	-.038	.04	-.112	.03	-.046	.03	-.098	.03	-.066	.03
γ_2	.486	.18	-.133	.04	.700	.21	-.119	.04	-.038	.07	.123	.09	.567	.14	.045	.09	.184	.15
γ_3	-.069	.04	-.133	.04	.050	.06	-.070	.05	-.008	.05	-.102	.03	-.025	.03	-.068	.03	-.045	.03
δ_{11}	.122	.04	.239	.06	.124	.08	.208	.07	.163	.09	.183	.04	.117	.04	.147	.05	.152	.05
δ_{21}	.257	.07	.216	.08	.303	.10	.432	.09	.368	.09	.231	.06	.275	.06	.302	.07	.264	.07
δ_{31}	.476	.10	.403	.09	.121	.19	.063	.16	.663	.17	.439	.07	.299	.11	.292	.11	.597	.10
δ_{41}	-.248	.11	-.158	.10	-.346	.13	-.068	.08	-.218	.20	-.197	.07	-.288	.08	-.109	.07	-.224	.11
δ_{51}	-.214	.08	-.047	.13	-.211	.12	-.209	.08	-.179	.09	-.169	.06	-.218	.06	-.194	.06	-.190	.06
δ_{12}	-.825	.22	-.248	.20	-.939	.27	-.147	.16	-.429	.15	-.454	.13	-.871	.17	-.331	.14	-.581	.18
δ_{22}	-.394	.21	-.016	.12	-1.241	.26	-.142	.16	-.433	.14	-.198	.12	-.760	.19	-.198	.15	-.488	.19
δ_{32}	-.595	.28	.003	.23	-1.167	.30	-.521	.14	.163	.26	.251	.18	.832	.21	-.440	.16	-.153	.22
δ_{42}	.180	.21	.342	.26	-.478	.29	.333	.16	.210	.24	.234	.22	.264	.22	.081	.18	-.041	.25
δ_{52}	-.225	.22	.464	.14	-.278	.25	.422	.19	.266	.19	.165	.13	-.237	.17	.090	.16	-.086	.19
δ_{13}	.087	.05	.208	.06	.066	.08	.020	.09	-.082	.09	.150	.04	.078	.04	.026	.05	-.030	.05
δ_{23}	.191	.07	.242	.07	.125	.10	.137	.10	.004	.10	.218	.05	.159	.06	.141	.06	.071	.07
δ_{33}	.243	.13	.153	.12	-.190	.18	-.404	.13	.133	.19	.193	.09	.064	.11	-.124	.10	.135	.11
δ_{43}	-.077	.15	.231	.15	-.071	.17	.130	.12	-.342	.16	.086	.11	-.058	.11	.028	.09	-.232	.10
δ_{53}	-.165	.08	.073	.10	-.247	.10	-.176	.09	-.118	.11	-.047	.06	-.194	.06	-.178	.06	-.156	.06
N	853		845		565		755		585		1698		1418		1561		1391	
R^2	.653		.488		.530		.464		.558		.560		.589		.530		.598	

FOOTNOTES

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²David Mayhew, "Congressional Elections: The Case of the Vanishing Marginals," Polity, 6(Spring 1974), 295-317. Throughout this paper I define a competitive seat as one in which the margin of victory exceeds 20 percent. This definition is not only arbitrary but also has the defect of suggesting that what might be called the vulnerability of a seat is related in some simple way to vote margin. While it is possible that the connection between vulnerability and vote margin is not only complicated but is also unstable in time, I cannot investigate this question in the present paper. The reader is therefore asked to keep in mind the provisional nature of this definition in interpreting the results reported here.

³Robert S. Erikson, "The Advantage of Incumbency in Congressional Elections," Polity, 3(Spring 1971), 395-405; and "Malapportionment,

Gerrymandering, and Party Fortunes in Congressional Elections," American Political Science Review, 66(December 1972), 1234-1335.

⁴Edward R. Tufte, "The Relationship Between Seats and Votes in Two-Party Systems," American Political Science Review, 67(June 1973), 540-554.

⁵Warren Lee Kostroski, "Party and Incumbency in Postwar Senate Elections," American Political Science Review, 67(December 1973), 1213-1234.

⁶Tufte, "Relationship Between Seats and Votes," p. 551.

⁷Ibid., p. 553.

⁸Walter Dean Burnham, "Communications," American Political Science Review, 68(March 1974), 210.

⁹Ibid.

¹⁰Erikson, "Malapportionment," p. 1240.

¹¹Mayhew, "Congressional Elections," p. 311.

¹²Edward R. Tufte, "Communications," American Political Science Review, 68(March 1974), 212.

¹³Tufte, "Relationship Between Seats and Votes," p.551.

¹⁴Ibid.

¹⁵Ibid., p.553.

¹⁶Edward R. Tufte, "Determinants of the Outcome of Midterm Congressional Elections," American Political Science Review, 69(September 1975), 812-826.

¹⁷Kostroski, "Party and Incumbency in Postwar Senate Elections."

¹⁸Erikson, "Malapportionment."

¹⁹Mayhew, "Congressional Elections," p.310.

²⁰Arthur S. Goldberger, Econometric Theory (New York: John Wiley, 1964).

²¹Donald E. Stokes and Warren E. Miller, "Party Government and the Saliency of Congress," in Elections and the Political Order, ed. Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes (New York: John Wiley, 1966).

²²Ibid., p.204.

²³Tufte, "Communications"; and Robert B. Arsenau and Raymond E. Wolfinger, "Voting Behavior in Congressional Elections," paper presented at the meeting of the American Political Science Association, New Orleans, September 1973.

²⁴Samuel Kernell, "Presidential Popularity and Negative Voting," paper presented at the meeting of the American Political Science Association, Chicago, September 1974.