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The Effect of Variation of Ballot Form on the Vote

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I.

Among the numerous factors which influence the outcome of an election, one set of factors—variation in ballot form—has been given minimal emphasis in election analysis. In this paper we shall present additional evidence to suggest that variations in ballot form can influence both the decision making of the individual voter and the aggregate outcome of an election.

Variations in ballot form refer to differences in the organization and positioning of offices and propositions on ballots used by voters, including distinctions between voting machine ballots and paper ballots. That such variations can affect electoral behavior has been documented by many scholars.¹ Among the many propositions which have been put forth, we shall examine the following:

- (1) that the installation of voting machines affects electoral participation, specifically by reducing turnout for Constitutional Amendment races;²
- (2) that the installation of voting machines can influence the outcome of Constitutional Amendment races;³

¹ See for example Henry M. Bain and Donald S. Hecock, *Ballot Positioning and Voter Choice: The Arrangement of Names on the Ballot and Its Effect on the Voter* (Detroit: Wayne State University Press, 1957); Angus Campbell, Philip E. Converse, Warren E. Miller and Donald E. Stokes, *The American Voter* (New York: Wiley, 1960), pp. 266-289; John E. Mueller, "Voting on the Propositions: Ballot Pattern and Historical Trends in California," *American Political Science Review*, 63 (1969), 1297-1312; Jerrold Rusk, "The Effect of the Australian Ballot on Split Ticket Voting in 1876-1908," *American Political Science Review*, 64 (1970), 1220-1238; Norman C. Thomas, "Voting Machines and Voter Participation in Four Michigan Constitutional Revision Referenda," *Western Political Quarterly*, 21 (1968), 409-419; Jack R. Walker, "Ballot Forms and Voter Fatigue: An Analysis of the Office Block and Party Column Ballots," *Midwest Journal of Political Science*, 10 (1966), 448-463. For a history of the ballot, see Walter Dean Burnham, "The Changing Shape of the American Political Universe," *American Political Science Review*, 59 (1965), 7-28; and Burnham, "Theory and Voting Research: Some Reflections on Converse's 'Change in the American Electorate,'" *American Political Science Review*, 68 (1974), 1002-1023.

² George B. Mathers, *A Preliminary Report of an Analysis of the Effects of the Use of Voting Machines in Voting on Special Questions in Iowa—1920-1956* (Iowa City: Institute of Public Affairs, University of Iowa, 1964); Thomas, *op. cit.*

³ Thomas, *op. cit.*

- (3) that position on a ballot can influence the partisan division of the vote;⁴ and,
- (4) that the form of the ballot can affect roll-off, or the difference in participation between races at the top of the ballot and races at the bottom of the ballot.⁵

Our data will come from the results of several elections in Durham County, North Carolina, beginning in 1952, when Durham County began to install voting machines, through 1970.⁶

II.

Participation in referenda on constitutional amendments varies according to whether voting machines are used or not. George B. Mather published a study in which he showed that the use of voting machines rather than paper ballots in such elections results in lower participation.⁷ Norman P. Thomas concurs with Mather's findings and suggests that the more complex mental and physical actions that are required to cast a referendum vote on a voting machine explain this occurrence.⁸ His study of the voting on referendum questions in Michigan reveals the data of Table 1.

TABLE 1. Participation Levels in Machine and Paper Ballot Precincts in Four Referenda Questions^a

	1958	1960	1961	1963
Machine	61.0%	65.0%	83.0%	94.0%
Paper	87.0%	87.0%	99.0%	100.0%
Total	74.0%	76.0%	92.0%	97.0%

^a Source: Norman C. Thomas, "Voting Machines and Voter Participation in Four Michigan Constitutional Referenda," *Western Political Quarterly*, 21 (1968), p. 415.

In 1952, Durham County was in the process of replacing its paper ballots with voting machines. Consequently, six precincts—Pearson, Lakewood, Fuller, Hillside, Bragtown, and Forest Hills—used voting machines while the rest of the precincts still had paper ballots. This transition period provides us with a convenient measure of the ballot's effect on the outcome of Constitutional Amendment races and more specifically, whether participation on Constitutional Amendment contests is higher on paper ballots or voting machines.

⁴ Bain and Hecock, *op. cit.*; Howard White, "Voters Plump for First on the List," *National Municipal Review*, 39 (1950), 110-111.

⁵ Walker, *op. cit.*

⁶ Election results were gathered from the Durham *Morning Herald* and Durham *Sun* newspapers from 1952 through 1970.

⁷ Mather, *op. cit.*

⁸ Thomas, *op. cit.*

In the six voting machine precincts, 7,123 people voted in the election. Of these voters, 37.2% voted on Amendment I; 35.4% voted on Amendment II; and 35.6% voted on Amendment III. The percentage of participation in the paper ballot precincts was much greater, however. In the paper ballot precincts, 23,488 people voted in the 1952 election. Of these 23,488 voters, 75.5% voted on Amendment I; 69.4% voted on Amendment II; and 67.5% voted on Amendment III. (See Table 2.)

TABLE 2. Participation in Constitutional Amendment Races in 1952

<i>Amendment</i>	<i>Paper</i>	<i>Machine</i>	<i>Difference</i>
I	75.5%	37.2%	38.3%
II	69.4%	35.4%	34.0%
III	67.5%	35.6%	31.9%
Average	70.8%	36.1%	34.7%

The data show, then, that there is a substantial difference between participation on these special questions on voting machines and on paper ballots.

Several explanations can be offered for the Durham County data. First of all, because voting machines were new, many people may have been unsure as to how to operate them. Second, the Constitutional Amendment questions were not placed centrally on the machine ballot, but instead, these special questions were located above the major offices. Therefore, many people entering the voting booth may have had the major offices in mind and might not have focused on the Amendment issues, thus producing the low participation rates. Third, the format of the paper ballots was crucial. A separate ballot was handed out for each group of races. Hence, the Constitutional Amendment contests occupied their own ballot. This forced people to focus on these questions individually without being detracted by the other races. The ballot, in effect, increased the visibility and importance of the Amendment questions and, consequently, made voters more apt to vote in the election. In short, participation on Constitutional Amendment questions was shown to be higher on paper ballots as opposed to voting machines.

Finally, the Board of Elections might have introduced voting machine into precincts in which it anticipated the least resistance to their introduction and the least difficulty in their use. If in fact voting machine precinct voters were systematically different from nonmachine precinct voters with respect to one or more criteria other than the presence of the machines, then these other differences might account for the differences we have observed in the voting behavior of machine and paper ballot precincts. Our examination reveals, however, that the six precincts that contained the voting machines in 1952 were not distinguished from

the other precincts in Durham County with regard to socioeconomic status, race, or educational level, so the Board of Elections seems not to have chosen these precincts on the basis of one or more of these census characteristics. In turn, socioeconomic status, race, and educational level do not seem to account for the differences in Table 2 between voting machine precincts and paper ballot precincts.

III.

Thomas also feels that machine precincts tend to be more supportive of state constitutional revision than paper ballot precincts.⁹ This was found to be true even when he controlled for partisan tendency, urban-rural composition, and census characteristics. (See Table 3.)

TABLE 3. Mean Percentage Support for Constitutional Revision in Machine and Paper Ballot Precincts^a

	1958	1960	1961	1963
Machine	53.0%	46.0%	37.0%	48.0%
Paper	48.0%	42.0%	31.0%	45.0%
Total	50.0%	44.0%	34.0%	46.0%

^a Source: Norman C. Thomas, "Voting Machines and Voter Participation in Four Michigan Constitutional Referenda," *Western Political Quarterly*, 21 (1968), p. 415.

This observation is also easily testable in Durham County due to the ballot transition in 1952. In this year, three Constitutional Amendments were brought up for votes. The first Amendment provided for a limitation of tax levies; the second dealt with the procedure of filling vacancies in certain legislative offices; and the third concerned the filling of vacancies in certain state offices.

On Amendment I, 2,534 people voted in voting machine precincts; 69.0% voted in favor of the reform, while 31.0% voted against the Amendment. In the paper ballot precincts, 17,830 people voted; 63.0% voted in favor of the reform, whereas 37.0% voted against the Amendment.

On Amendment II, 2,801 people voted in the machine precincts; 71.0% voted "yes," for reform, while 29.0% voted "no." In the paper ballot precincts, 16,004 voted and 67.0% supported the revision and 33.0% did not.

On Amendment III, 2,346 people voted in the voting machine areas. Of these people, 72.0% favored the reform and 28.0% did not. In the paper ballot precincts, 16,033 voted, of which 77% voted "yes" and 23.0% voted "no."

⁹ *Ibid.*, p. 415.

TABLE 4. Effects of Voting Machines on Affirmative Responses to Proposed Constitutional Amendments

Amendment I	<i>Machine</i>	<i>Paper</i>
For	69.0%	63.0%
Against	31.0%	37.0%
Total	100.0%	100.0%
(N)	(2534)	(17839)
Amendment II		
For	71.0%	67.0%
Against	29.0%	33.0%
Total	100.0%	100.0%
(N)	(2801)	(16004)
Amendment III		
For	72.0%	77.0%
Against	28.0%	23.0%
Total	100.0%	100.0%
(N)	(2346)	(16033)

Thomas' assertions are thus partially correct for the case of Durham County in 1952. A slightly higher proportion of participants in the voting machine precincts voted in favor of Constitutional revision in two out of three races. Voting machine precincts favored the first Amendment almost 40 percentage points more than their counterparts voting on paper ballots. However, the paper ballot precincts registered a 5.0% higher acceptance of the third Constitutional question than did the voting machine precincts.

What is clear from these Durham data, however, is that the individual Constitutional question can affect both participation rates and divisions of the vote. In paper ballot precincts, approximately 11.0% more people voted for Amendment I (limitation of tax levies) than for either Amendment II (filling vacancies of certain legislative offices) or Amendment III (filling the vacancies of certain state offices). Yet the *number* of voters for Amendment I fell between the number of Amendment II and the number for Amendment III, even though the percent opposing I and the number opposing I both surpassed the respective figures for the other Amendments.

Amendment differences are also evident within the group of voting machine precincts. Here, however, Amendment II attracted the largest number of participants and the largest number of supporters.

In sum, although voting machine precincts and paper ballot precincts seem to differ in the extent of their support for Constitutional revision, the nature of the proposed Constitutional revision can cause greater variation in support than that caused by the machine versus paper ballot distinction.

IV

Having discussed the importance of the type of ballot (voting machine or paper), we shall now examine the effect of name position on the ballot. In general, the studies done on this topic reveal that positioning plays little or no part in high visibility elections. The importance of position on the ballot emerges, however, in elections that the voters are apt to know little about, for example races given little press coverage or races for more obscure offices. For instance, in Howard White's study of the 1948 Republican primary for an Ohio Senate seat in which I. E. Baker defeated William Tyrell, the data reveal that the candidate whose name appears at the top of the ballot will benefit from that position. In the 144 voting machine precincts where Baker's name appeared first, 7,262 votes were cast of which Baker won 61.5% and Tyrell 38.5%. Tyrell's name appeared first in 128 precincts in which a total of 6,218 votes were cast. Tyrell won 59.9% of these votes while Baker got 40.5%. Thus, 60.0% of the total was cast for the name appearing on the top line. Additionally, out of the 272 voting machine precincts, 231 (84.9%) were carried by the candidate whose name appeared on the top line whereas only 33 (12.1%) were carried by the candidate whose name appeared on the second line (eight precincts were tied).¹⁰

Similar data were found by Henry M. Bain, Jr. and Donald J. Hecock in their studies of elections in several Michigan cities. They discerned that position was a significant factor determining voter choice in primary and non-primary elections when both paper ballots and voting machines were used. According to them, the first position on the vertical list was universally preferred when paper ballots were used. However, no position within any one horizontal row was consistently favored.¹¹

In elections with a long list of candidates, additional positions seem to be favored. In a race for a new Junior College's Board of Trustees in California, there were 133 candidates of which seven were to be elected. The names were listed alphabetically in a vertical line over seven pages of a ballot. One would expect that the order effect on a list of this length would follow a "J" curve pattern; that is, while the names at the top of the list gain substantially from that position, those at the bottom of the list would benefit somewhat as well. According to this theory, the worst position to occupy is shortly before the end. Traces of this effect were seen in the Junior College election but with a modified application. Because the names were listed over seven pages of a ballot,

¹⁰ White, *op. cit.*

¹¹ Bain and Hecock, *op. cit.*

the candidates who appeared first and last on each page did receive some 5,000 votes more than one would expect on the basis of other considerations.¹² Hence, the "J" curve hypothesis seems to be correct.

Ballot position is also a crucial factor in determining the amount of abstention an item garners. A non-controversial proposition which can be expected to have a relatively low abstention rate seems to have a higher one if it is placed among propositions with high expected abstention rates. Similarly, races which immediately follow intensely fought contests seem to have lower abstention rates than normally would be expected.¹³ Our study of a series of Senatorial and Congressional races in Durham County seems to reflect these findings, too.

During Presidential election years, the senate race has always been placed toward the end of the Durham County ballot. However, in non-Presidential election years, the Senatorial contest is given the first or second position on the ballot. An examination of the elections for the years 1950 to 1968 shows that in every case a higher percentage of election participants vote for the senate contest in non-Presidential years.

In 1950, both Senate seats were up for election—one seat had to be filled for an unexpired term. Of the voters who went to the polls, 94.8% voted in the regular term race and 94.6% voted in the unexpired term race. In 1954, one of the seats was up for re-election. Since it was a non-Presidential year, the contest was placed second on the ballot and 95.4% of the voters that year participated in the Senate election. The other seat came up for election in 1956—a Presidential year—and, consequently, it was placed in the twenty-fifth position on the ballot. That year the race received only 77.6% participation.

In 1960, the Senate race was placed in the sixteenth position on the ballot. The percentage of participants who voted for that race was 74.7%. The off-year Senate seat election in 1962 was placed at the top of the ballot and 78.9% of the voters that year expressed a preference in the race. Finally, in 1966, with the race located near the top once again, 80.3% voted in the contest. Hence, each year that the Senatorial race was placed near the top of the ballot, it received proportionately fewer abstentions than when it appeared near the bottom. (See Table 5.)

This same phenomenon can be observed in the Congressional races in Durham County as well. Each year that the Senatorial race shifted positions, the Congressional race did likewise, while the other races remained more or less stationary.

¹² John E. Mueller, "Choosing Among 133 Candidates," *Public Opinion Quarterly*, 34 (1970), p. 399.

¹³ Mueller, "Voting on the Propositions," *op. cit.*, p. 1207.

TABLE 5. Senatorial Race Participation Rates, 1950-1966

	Position of Race on Ballot					
	Top			Bottom		
	1950	1954	1962	1966	1956	1960
Number of Voters in Senatorial Race	6771*	5018	11436	20961	22814	26899
Number of Voters in Senatorial Race as % of All Voters	94.7%*	95.4%	78.9%	80.3%	77.6%	74.7%
Total Number of Voters	7159*	5261	14497	25036	28121	36030

* This number represents the average of the two Senatorial races that year.

In 1960, 1964, and 1968 the Congressional race was located near the bottom of the ballot and these races received participation rates of 77.8%, 76.8% and 83.8%, respectively. However, when this race was placed at the front of the ballot, as it was in 1962, 1966, and 1970, the participation rates were 90.0%, 97.0%, and 96.4%. In short, abstention rates were quite a bit higher when the Congressional contest was given a less visible position. (See Table 6.)

The difference in abstention and participation rates would seem to correspond to known differences between the electorates participating in Presidential election years and those participating in off-year elections. Roll-off occurs in Presidential election years because peripheral voters who have entered the electorate to vote for President fail to vote for lesser offices. Their low levels of political interest are not sufficient to sustain their participation in elections for offices which have generated lower levels of political stimuli and publicity. Thus, these peripheral voters fail to vote for offices listed toward the bottom of the ballot. In off-year elections, these peripheral voters have not been attracted to the polls, so that the participating electorate is composed mainly of core voters.¹⁴ The core voter, who is able to sustain his own interest in politics and elections even in off-year elections, despite the reduced levels of political stimuli in off-year elections, might therefore be expected to participate in all of the races listed on the ballot. In fact, for Senatorial and Congressional elections, the more visible ballot position in off-year elections is probably not necessary to stimulate the

¹⁴ The seminal piece on core and peripheral voters is Angus Campbell, "Surge and Decline: A Study of Electoral Change," pp. 40-62 in Angus Campbell, Philip E. Converse, Warren E. Miller, and Donald E. Stokes, *Elections and the Political Order* (New York: Wiley, 1966). See also Robert B. Arsenau and Raymond E. Wolfinger, "Voting Behavior in Congressional Elections," paper prepared for delivery at the 1973 Annual Meeting of the American Political Science Association, Jung Hotel, New Orleans, Louisiana, September 4-8, 1973; and Samuel Kernell, "Presidential Popularity and Negative Voting: An Alternative Explanation of the Mid-Term Electoral Decline of the President's Party," paper prepared for delivery at the 1974 Annual Meeting of the American Political Science Association, Palmer House Hotel, Chicago, Illinois, August 29-September 2, 1974.

TABLE 6. Congressional Race Participation Rates, 1960-1970

	1962	Position of Race on Ballot				
		Top 1966	1970	1960	Bottom 1964	1968
Number of Voters in Congressional Race	13044	24844	21809	27658	30560	37921
Number of Voters in Congressional Race as % of All Voters	90.0%	97.0%	96.4%	77.8%	76.8%	83.8%
Total Number of Voters	14497	25036	22616	36030	39777	45227

participation of these core voters, whereas the less visible ballot position in Presidential election years serves only to make it easier for peripheral voters to leave the electorate and to cause roll-off. We might suppose that a more prominent position for Senatorial and Congressional races on the Presidential-year ballots could increase the participation of peripheral voters in these contests. At the same time, a less prominent position on the off-year ballots probably would not seriously affect the participation rates of the core voters, who make up such a large portion of the off-year electorate.¹⁵

Roll-off reflects not only the presence of peripheral voters in the participating electorate but also general "voter fatigue," which can be induced by increasing the complexity of the ballot.¹⁶ For instance, roll-off is more widespread when the Office Block version of the Australian Ballot is used rather than the Party Column version,¹⁷ since the Office Block requires more effort to complete. Kansas adopted the Office Block Ballot in 1913 and roll-off from the race for the Presidency to that for the House of Representatives increased sharply.¹⁸ (See Table 7.)

Further proof of the roll-off resulting from ballot form can be found in a comparison of Ohio and Michigan, two states with similar

TABLE 7. Percent Roll-Off From President to National House of Representatives in Kansas, 1896-1932^a

Election Year	1896	1900	1904	1908	1912	1920	1924	1928	1932
Election Year	1896	1900	1904	1908	1912	1920	1924	1928	1932
% Roll-Off	3.0%	3.0%	5.0%	1.0%	4.0%	9.0%	8.0%	10.0%	9.0%

^a Source: Jack R. Walker, "Ballot Form and Voter Fatigue: An Analysis of the Office Block and Party Column Ballots," *Midwest Journal of Political Science*, 10 (1966), p. 452.

¹⁵ The findings of Campbell, *et al.*, *The American Voter*, *op. cit.*, would similarly suggest that core voters would be more or less impervious to the form of the ballot while peripheral voters would be most sensitive to variations in ballot form. As they state the proposition (p. 283; emphasis in original): "formal political institutions have their greatest impact on behavior when the attitudes relevant to that behavior are least intense."

¹⁶ Walker, *op. cit.*, p. 452.

¹⁷ For a description of the Office Block and Party Column versions of the Australian Ballot, see Rusk, *op. cit.*

¹⁸ Walker, *op. cit.*, p. 452.

economic structures, political competition, and social backgrounds of their populations.¹⁹ Ohio adopted the Office Block in 1949 and Michigan used the Party Columns throughout the same period. (See Table 8.)

In comparing the roll-off rates in Ohio and Michigan, we can see that the introduction in 1949 of the Office Block Ballot had a major impact on the rate of roll-off. When the Office Block was adopted in

TABLE 8. Comparison of Roll-Off in Michigan and Ohio, 1940-1958^a

Election Year	Offices Involved	Percent Roll-Off		Difference
		Ohio	Michigan	
1940	Pres.-State Sec.	9.0%	5.4%	3.6%
1942	Gov.-State Sec.	8.0%	8.0%	0.0%
1944	Pres.-State Sec.	7.9%	2.0%	5.9%
1946	Gov.-State Sec.	7.5%	5.6%	1.9%
1948	Pres.-State Sec.	3.0%	2.0%	1.0%
1950	Gov.-State Sec.	8.0%	4.0%	4.0%
1952	Pres.-State Sec.	10.0%	1.0%	9.0%
1954	Gov.-State Sec.	7.0%	2.6%	4.4%
1956	Pres.-State Sec.	10.3%	3.0%	7.3%
1958	Gov.-State Sec.	7.3%	2.8%	4.8%

^a Source: Jack R. Walker, "Ballot Form and Voter Fatigue: An Analysis of the Office Block and Party Column Ballots," *Midwest Journal of Political Science*, 10 (1966), p. 454.

Ohio, roll-off doubled. In the period from 1940 to 1948, the differences in roll-off between the two states averaged 2.4%; but in the period from 1950 to 1958, the average difference was 5.8%.²⁰

The positioning of the races on the voting machines in Durham County allows us to study the roll-off in several elections as it is caused by ballot placement. An examination of the ballots on which the Presidential contest appears reveals that sometimes the Presidential race is located on the same line as the rest of the races. This means that by pressing one lever, one can vote a straight ticket on all races. However, during other years, the Presidential race is given a separate line. One has to vote for the Presidential race separately. A look at the roll-off rate between the Presidential race and the Secretary of State race will help us determine whether separating the Presidential contest from the rest of the ballot increases roll-off.

On the voting machine ballots in 1952, the Presidential race was located on the same line as the other races. One lever was sufficient to vote a straight ticket for all the positions; 98.9% of the voters partici-

¹⁹ *Ibid.*

²⁰ James K. Pollack, *The Initiative and Referendum in Michigan* (Ann Arbor: Michigan Government Studies No. 6, Bureau of Government, University of Michigan, 1940).

pated in the Presidential contest and 93.0% participated in the Secretary of State contest. Thus, the roll-off rate was 5.9%.

In 1956, the Presidential race was placed above the rest. One was forced to vote for one's Presidential preference and the rest of one's choices separately. With this format, 96.2% of those taking part in the election voted in the Presidential race and 79.6% voted for their choice for Secretary of State. Roll-off equalled 16.6%.

The 1960 ballot had the same format as the 1952 ballot. The statistics for the year showed 92.6% voting for President, 78.0% voting for Secretary of State, and a roll-off rate of 11.6%.

In 1964 and 1968, the Presidential and other races were separate. In 1964, 95.9% of the voters voted for President and 76.0% voted for Secretary of State, with a roll-off of 19.9%. In 1968, 94.4% participated in the Presidential contest and 78.4% in the Secretary of State contest, making roll-off 16.0%. (See Table 9.)

TABLE 9. Roll-Off Between Participation in Presidential and Secretary of State Races

	1952	1956	1960	1964	1968	Mean
Presidential Race Separate		16.6%	...	19.9%	16.0%	17.5%
Both Races Together	5.9%	...	11.6%	8.8%

The roll-off rate seems to increase substantially when the Presidential race is separated from the rest. The mean roll-off rate for the years when the race was separate, 17.5%, was twice that for the years when the races were combined, 8.8%.

This evidence suggests the possibility of voting a straight ticket by pulling one lever is very inviting for a voter. The more levers one is required to use, the less likely is one to participate in the less visible races. Hence, the Durham County statistics reaffirm the proposition that many voters are enticed into voting a ticket that requires the least effort.

In summation, statistics from several Durham County elections have substantiated many of the propositions in the literature about the effects of variations in ballot form. George B. Mather's findings about the differences in voting machine ballots and paper ballots were tested and verified in the 1952 election. We found, as did Mather, that voters were more likely to vote on referendum questions when paper ballots were used. Additionally, there was some indication that the Durham County results concurred with Thomas' findings that the use of voting machines could affect a referendum election outcome. Thomas feels that voting machines tend to screen out more negative votes than positive ones, and we, too, found some evidence that Constitutional

reforms passed by larger percentages when voting machines were used. Ballot positioning, also, was found to play a role in determining the rate of participation for particular races. Our study of a series of Congressional and Senatorial contests showed us that races at the top of a ballot will receive more votes by virtue of their position on the ballot. When these races were positioned at the middle or end of the ballot, they received fewer votes than they did at the beginning. Hence, as the ballot gets longer, the roll-off increases as well. Finally, we found that when the Presidential race is placed on the same line as other races and when one is able to vote for all the contests by pulling one lever, roll-off decreases substantially. We can explain this in one of two ways: (1) favorable positioning of otherwise less visible races increases both the attention given to these races and thus the participation rate as well; or, (2) the ability to vote a straight ticket with minimal effort is an enticing alternative. Undeniably, the ballot form can be a very important determinant of election outcomes.

Finally, however, we must return to our findings that ballot forms in Presidential and off-year elections serve to reinforce the behavioral differences in the respective electorates. What would seem an interesting line of inquiry for future research is to determine exactly how ballot form and individual motivation interact. To what extent can core voters withstand the fatiguing effects of complex ballots and less visible positioning? And how sensitive are peripheral voters to these same variations in ballot form? Walker found that the more educated and more informed voters were more able to withstand the fatiguing complexities of ballot form,²¹ and Campbell and Miller have demonstrated how motivational factors can affect straight or split ticket voting.²² What would be interesting to determine is exactly how institutional factors such as ballot form interact with systematic differences between the predominantly core-composed off-year electorate and the less predominantly core-composed Presidential year electorate.

²¹ Walker, *op. cit.*, p. 460.

²² Angus Campbell and Warren E. Miller, "The Motivational Basis of Straight and Split Ticket Voting," *American Political Science Review*, 51 (1957), p. 311.