How voters work around institutions: Policy balancing in staggered elections

Orit Kedar*

Political Science, ISR, University of Michigan, 426 Thompson Street, P.O. Box 1248, Ann Arbor, MI 48106, USA

Abstract

This work provides a general framework for analysis of issue voting across democratic polities. Unlike current frameworks of analysis for issue voting, I argue that voters are concerned not only with party positions, but also with policy outcomes. This simple principle carries implications for voter choice under various institutional environments. In consensual parliamentary systems, taking into consideration the bargaining built into policy formation process in the parliament, voters often endorse parties whose positions differ from their own views. In presidential elections, incorporating the compromise between the president and the legislature into their decision making, voters adjust their vote, balancing the two institutions against one another. Finally, in federal systems, voters engage in vertical balancing, utilizing state elections to balance the federal government. I illustrate the latter implication analyzing election returns from Germany between 1965 and 2002.
© 2005 Elsevier Ltd. All rights reserved.

Keywords: Elections; Compensational voting; Policy balancing; Federal; Staggered; Germany

How do voter issue positions translate into voter choice? Since the spatial model has been introduced and popularized (Hotelling, 1929; Downs, 1957; Enelow and Hinich, 1984), issue voting has been continuously considered a crucial factor in

---

* Tel.: +1 734 936 2774; fax: +1 734 647 4575.
  E-mail address: oritk@umich.edu

determining voter choice. In the past decade issue voting has become an even more important predictor of voter choice (Barnes, 1997). The vast majority of analyses of voter choice in advanced industrialized democracies include voter views and party positions on the relevant issues.

Numerous studies analyzed voter choice in search for theoretical accounts. The Proximity Theory, utilized in most studies of electoral politics, contends that voters endorse the party whose policy positions are most similar to their own views. The Directional Theory posits that voters support parties whose positions are in the same direction as but more intense than their own views. While some studies conclude that proximity voting best describes voter behavior (Blais et al., 2001; Westholm, 1997) and others conclude that directional voting provides a more powerful explanation (Macdonald et al., 1991, 1995, 1998, 2001; Rabinowitz, 1978; Rabinowitz and Macdonald, 1989), a large number of studies report mixed findings (Cho and Endersby, 2003; Granberg and Gilljam, 1997; Iversen, 1994a,b; Krämer and Rattinger, 1997; Lewis and King, 2000; Pierce, 1997). Hence, in spite of the increasing importance of issue voting in explaining voter behavior, disagreement as to a theoretical account for regularities in voter choice is a commonplace.

In this article, I focus on a motivation of voter choice pertaining to issue voting overlooked both by proximity and directional models. I argue that while neglected by current models, policy outcomes are crucial for understanding voter choice. Voter support for a party is motivated not only by the party's ideological positions, but also by the (expected) marginal impact of the party on policy. Voters reward parties for pulling policy toward their preferred positions and penalize them for pushing it away from them. This logic provides tools for understanding variations in voter strategy across types of democracy, across electoral contexts, and among individuals. The article reviews the general argument derived from this motivation, and focus on its implications for staggered elections.

The article proceeds as follows. The next section reviews current accounts in the literature on issue voting. The following section lays out the argument and derives empirical implications. The following two sections examine voter behavior in U.S. Congressional elections and in German Land elections. The final section concludes.

1. Issue voting

Numerous fields of research in political science engage in discussions about policy outcomes. Bargaining theory analyzing the allocation of divisible goods, study of class politics addressing distribution of resources, and institutional analysis examining how the rules of the game lead to particular outcomes are only a few examples. Outcomes are also inherent to some aspects in the study of voter behavior. Whether adopting a prospective or a retrospective approach, theories of economic voting presume that when casting their ballot, voters take into consideration the state of the economy. Theories of strategic and tactical voting assume that when casting their ballot, voters take account of electoral outcomes. Issue voting, on the

other hand, ignores both electoral outcomes, and post-election activity that shapes policy outcomes, and thereby excludes a major dimension of politics from the realm of analysis.

The application of Hotelling's model (1929) to political situations describes a two-party system where the winner can implement her policy platform as is. In this setting, endorsement of the party whose positions are most similar to the voter's ideal point is equivalent to endorsement of the party that will produce policy as similar as possible to the voter's ideal point. The same result, convergence to the median voter, is an outcome of either of the two micro-foundational motivations. While in the two-party case the two motivations are observationally equivalent, in multi-party systems they may lead to different choices. Nonetheless, empirical research unanimously adopts the latter motivation – vote over platforms.

Following Enelow and Hinich's standard-setting book (1984), the proximity model has become the benchmark model in studies of issue voting. Almost all empirical studies of voter choice include a vector of distances between the voter's ideal points and the party's positions on the relevant issues on the right-hand side. According to the model, utility of voter i ($i = 1...n$) for party j ($j = 1...m$) is negatively related to the weighted sum of Euclidean distances between the voter and the party's issue positions on the relevant issues. In two dimensions:

$$
\begin{aligned}
U_{ij} = -\left\| v_i - p_j \right\|_A &= -\mathrm{WED}\left(v_i, p_j\right) \\
&= \left[a_{11}\left(v_i^{(1)} - p_j^{(1)}\right)^2 + 2a_{12}\left(v_i^{(1)} - p_j^{(1)}\right)\left(v_i^{(2)} - p_j^{(2)}\right) + a_{22}\left(v_i^{(2)} - p_j^{(2)}\right)^2 \right]^{1/2}
\end{aligned}
\tag{1}
$$

where v_i is a vector of voter i's positions such that $v_i^{(1)}$ and $v_i^{(2)}$ are her issue positions on dimensions (1) and (2), respectively, p_j is a vector of candidate j's positions such that $p_j^{(1)}$ and $p_j^{(2)}$ are her issue positions on dimensions (1) and (2), respectively, and A is a matrix of weights (diagonal when preferences are separable, and identity when dimensions are of equal salience).

Nonetheless, in the last two decades, advocates of the Directional Model have persistently challenged proximity voting. Rabinowitz (1978) and Rabinowitz and Macdonald (1989) propose an alternative theory of voting linking issue positions to voter choice. For issues to have impact, the authors claim, they have to convey a symbol and evoke sentiments. Symbols have two qualities that trigger voter sentiments: *direction* (voters feel favorable or unfavorable toward a symbol), and *intensity* (the symbol conjures feelings with varying degrees of emotional content). Rather than different levels of extremity of issue positions, voters respond to issues with different levels of intensity. Building on ideas of symbolic politics (Edelman, 1964), the directional model predicts that a voter will prefer a party placed ideologically farther away from her as long as she is on the same side of the issue as the party to a party closer to her but placed on the opposite side. Parties, on their side, are vote maximizers and will thus adopt positions that are more intense than

voters' positions. The two components, direction and intensity, are integrated into a simple utility function. In one dimension:

$$U_{ij} = v_i p_j \tag{2}$$

The authors add an additional component: 'Of course, it is possible for a candidate to be so intense as to become an unacceptable "extremist",' (1989, p. 97). While a candidate seeks to make the most effective use of a symbol, there are limits on how aggressive she might be. These are the bounds of reasonableness (referred to as the Region of Acceptability) which a candidate should not cross, lest she lose her support. The prediction of the model, in turn, is that parties will locate right at the edge of the Region of Acceptability.

A handful of explanations for voting of directional nature that hint at outcome-oriented motivation are found in the literature. Building on Przeworski and Sprague (1986), Iversen (1994b) suggests that consistent with the directional model voters look at politicians in quest for direction, but also that party elites, on their side, pull electorates toward sharper positions.[1] Lacy and Paolino (1998) put forth a discounting hypothesis in the American case, claiming that voters in a separation-of-power system differentiate between candidate platforms and policy outcomes. Furthermore, Grofman (1985) proposes a formal model in which voters evaluate potential success of parties in implementing changes from the status quo. Grofman highlights the importance of the location of the status quo relative to the party's platform in determining the voters choice (i.e., the shift she hopes to achieve), as well as party impact (Performance Weight) which is a function of past performance and circumstantial constraints on its ability to implement its policy.

As mentioned above, the proximity-directional debate is standing, and empirical evidence is mixed. In the next section I re-examine aggregate-level regularities and propose an account that reinterprets, rather than declares a winner in the debate.

2. The Compensational-Vote Model

To examine the distribution of parties and their constituencies, Fig. 1 presents voter and party placement on a unidimensional ideology spectrum in seven polities. The figure utilizes survey data collected by the Comparative Study of Electoral Systems in the Netherlands (1998), Sweden (1998), Denmark (1998), Japan (1996), Switzerland (1999), and New Zealand (1996), and by the Norwegian Elections Study in Norway (1989). The top scale of each panel of the figure presents the average placements of party positions as perceived by those who endorsed each of these parties in the recent elections. Corresponding with each party, the bottom scale of

---

[1] This model is fundamentally different from other models of issue voting in that it allows for positions to be endogenous to the political process.
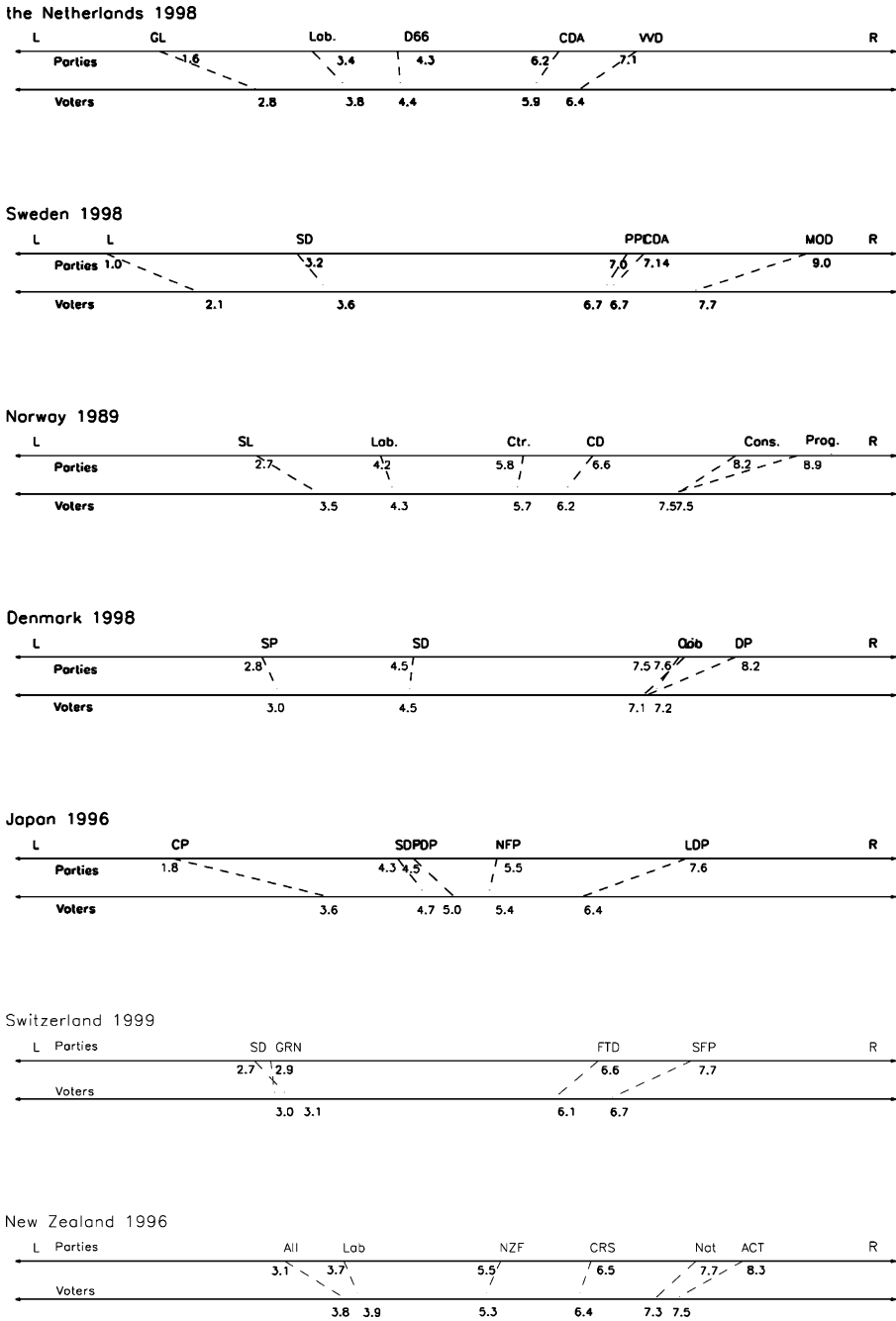
Fig. 1. Voter and party placement in ideological continuum.

each section marks the average self-reported position of those who voted for that party.[2] For example, the top left point on the parties scale is the average placement of the Green Left in the 1998 Dutch elections. The point connected to it on the voters' scale is the average self-placement of supporters of the Green Left.

As the figure shows, in all seven systems parties' perceived positions are, on average, more ideologically dispersed than positions of voters. In some cases it is easy to see that voters are, on average, often closer in their positions to a party different from the one they endorse. It is striking that so much variation unexplained by proximity voting seems to be taking place. Notice that generally, the more extreme a voter is, the greater the distance to her chosen party. This aggregate pattern is consistent with directional voting. It is also consistent, as I explain below, with outcome-oriented voting. I turn now to offer this latter account.

2.1. Intuition

Consider a voter in a parliamentary democracy sitting at the center of a seesaw and wishing to balance forces (parties) to her right with forces (parties) to her left. By definition, perfect balancing will yield a policy outcome identical to the voter's position. Such outcome-oriented voter prefers a party to her right if the left is too powerful, and a party to her left if the seesaw tilts to the right. A party located exactly at the voter's position will be less efficient in balancing out any counter-force than a party at the opposite side of the counter-force with respect to the voter. When facing a powerful Conservative Party, an outcome-oriented moderate-left Norwegian voter may be better off with a strong Socialist Left than with a strong Labour even if her positions are closer to the Norwegian Labour Party; ceteris paribus, the former might be more effective in balancing the Conservatives than the latter.

Similarly, consider a voter in a presidential system sitting on a seesaw, wishing to balance the executive and the legislature. When facing a Republican President in office, a centrist American voter might endorse a Democratic candidate in her Congressional district, even if her views are more similar to those of the a Republican candidate − after all, a compromise of agents of the two opposite camps might be closer to the views of our centrist voter than a compromise of a Republican President with a Republican Congress.

Finally, consider a voter in a federal system sitting on a seesaw, wishing to balance federal and regional agents. When facing a CDU/CSU led coalition in the Bundestag, a centrist German voter might support the SPD or the Greens in her Land, even if her views are closer to the moderate right. After all, a policy formed by the right and implemented by the left is more likely to yield an outcome close to her preference than a policy formed *and* implemented by representatives of the right.

---

[2] I also examined the placement of each party as perceived by *all* voters in the sample. The pattern obtained is similar to the pattern reported in the figure.

This logic may lead to several empirical implications which I discuss below. But first, let me present the argument in more detail. Voter motivation under either proximity or directional frameworks is expressive: she prefers party *A* to party *B* if *A* better represents her views. By voting for either the party most similar to her ideologically or for the party in her ideological direction the voter declares her affinity and her expressive attachment. This interpretation is consistent with the theory of expressive choice offered by Schuessler (2000). Schuessler posits that mass elections is an instance individuals use to express and reaffirm their identity. Nonetheless, as mentioned above, expression of opinions or representation is only one motivation for choosing one party over another. Voters might also be interested in shifting policy outcomes toward their ideal point. According to this logic, they endorse parties that push outcomes in their direction and shun those that pull it away from them.

When evaluating each party, an outcome-oriented voter may entertain a counter-factual. Imagine a voter watching a report about the environment in the evening news. She may ask herself: how did politics look in the old days when nobody cared about the environment? *What would it have looked like without the Greens?* She then rewards the Greens if they pull policy in her direction and penalizes them if they pull it away from her. The counterfactual policy outcome is the outcome that would be produced if all parties except for the party evaluated were included in the policy-formation process. It takes different forms in different types of democracy. In parliamentary systems the counterfactual is the absence of the party from the parliament or from the coalition, holding the distribution of power of the other parties fixed. In legislative elections in presidential systems the counterfactual policy is the one that would have evolved under a different legislature (holding position of the president fixed). In state elections in federal systems the counterfactual policy might be a different party in office at the state level, leaving the federal government intact.

The counterfactual analysis compares policy produced by a policy-formation process in which the party participates with policy produced by a process from which it is absent. If the party pulls the outcome closer to the voter, this differential is positive. If, on the other hand, it pulls it away from the voter it is negative. Voter utility for the party approaches maximum when the original policy approaches the voter's bliss point and the counterfactual policy is far from it. The comparison of expected policy and expected counterfactual policy represents the marginal impact of the party on policy outcomes. This, of course, does not imply that the voter believes the impact of her own participation in the election to be the presence or absence of the party from the map. Rather, the differential captures the marginal benefit to the voter from the *party's* impact: the comparison of the ideological distance between her bliss point and the expected policy with the ideological distance between the bliss point and the counterfactual policy represents the marginal benefit of the party to the voter.

I conceptualize policy outcomes as a weighted average of policy positions of the participants in policy formation, where the weights are the relative impacts of the different forces. In parliamentary systems the parties in parliament are the various forces, and the weights are the relative party impacts. In presidential systems, the executive and the legislature are assigned weights based on the features of the two

institutions, the personality of the president, or both (Fiorina, 1996; Mebane, 2000). In federal systems, state and federal governments are assigned weights depending on the distribution of authority between the two.[3]

That voters wish to affect policy outcomes is hardly earth shattering (see, for example, Austen-Smith and Banks, 1988; Baron and Diermeier, 2001). My analysis, however, provides a framework where types of democracies, types of electoral contexts, and characteristics of individuals explain variations in voter behavior. The key principle of outcome-oriented voting implies several empirical predictions that shed light on the ambiguous results of issue-voting studies mentioned above and demonstrated in Fig. 1. I turn now to listing some of these predictions, with particular focus on staggered elections.

2.2. Empirical implications

2.2.1. Parliamentary elections

In parliamentary elections various parties potentially participate in post-election bargaining in the parliament. When a bargaining is expected (usually based on past elections), voters, I contend, understand that their vote will be diluted by power-sharing mechanisms, and so they compensate for the dilution of their vote by endorsing parties whose positions differ from their own issue positions. This compensational vote often results in a regularity observationally similar, yet not identical to, directional voting. Unlike under directional voting, the extent to which voters engage in such compensational vote depends on the degree to which their vote is watered-down by power-sharing allowed by institutional mechanisms. Obviously, aggregation of preferences via proportional representation results in greater power-sharing than aggregation of preferences in majoritarian regimes. Similarly, in systems where the opposition is allowed to chair parliamentary committees, power is more diffused than in systems where agenda-setting power in committees is reserved to members of the coalition alone (Strøm, 1990). Elsewhere, I estimate the extent to which voters engage in compensational vote over policy outcomes relative to proximity voting over platforms. Using data from 10 parliamentary elections, I demonstrate that voters under majoritarian contexts vote in line with the proximity model while voters under proportional representation vote instrumentally over policy outcomes (Kedar, 2005).

While parliamentary elections are a context for manifestation of instrumental vote by balancing the objects of choice themselves, parties, against each other, federal and presidential systems present cases where institutions as a whole balance one another; the policy outcome function under each setting is a compromise between two institutions (state and federal governments in the federal case, and executive and legislature in the presidential case). Let l and k note the two institutions. Policy outcome (P) is a convex combination of policy positions of the two: $P = w^k P^k + w^l P^l$, where w^k and w^l are the relative impact weights of l and k, respectively, and

---

[3] Elsewhere, I utilize a range of party impact measures to calculate policy, as well as the counterfactual policy, including vote share, seat share, an average of portfolio allocation in the government and seat share in the parliament, Shapley-Shubik Power Index, and Banzhaf Power Index (Kedar, 2003a).

similarly, P^k and P^l are the two policy positions. Normalizing $w^k + w^l = 1$ and employing a Downsian framework in one dimension, voter utility for party j in the elections for institution k is:

$$U_{ij}^k = -\beta(v_i - P)^2 = -\beta\left[v_i - \left(wP^k + (1-w)P^l\right)\right]^2 \qquad (3)$$

where β is an issue salience parameter, and $P^k = \sum_{j=1}^{J_k} s_j^k p_j^k$, and $P^l = \sum_{j=1}^{J_l} s_j^l p_j^l$, such that the policy position of institution k is a function of the positions of the various parties in the institution weighted by their relative impacts within institution k.[4] I unpack below the vote setup in each of the two contexts.

2.2.2. Elections in federations

In some federal systems regional and federal elections are concurrent, yet in others they are staggered, occurring either concurrently across regions or on different cycles in different regions. When federal and regional elections are concurrent both governments are up for grabs, and uncertainty characterizes voter calculation. When elections are staggered, at the time of the regional election the policy of the federal government is known with certainty − the federal arm of the seesaw is fixed − and so voters may use their regional ballot(s) in a targeted way. Let k note regional legislature and l federal legislature. At the regional elections the utility of voter i for party j is:

$$U_{ij}^k = -\beta\left[v_i - \left(wP^k + (1-w)\overline{P}^l\right)\right]^2 \qquad (4)$$

where $\overline{P}^l$ is fixed. Since $\overline{P}^l$ is known, voters can signal to the federal government a preference for policy shift. I therefore expect to observe different results in regional elections depending on whether they are concurrent or staggered with federal elections. In particular, I expect the parties in control at the federal arena to do poorly in staggered regional election compared to concurrent ones.

2.2.3. Elections in presidential systems

While in federal systems voters may engage in vertical balancing across institutions, in presidential systems they may balance horizontally. Evidence shows that voters often split their ticket in the general elections in order to balance the executive and the legislature against one another (Mebane and Sekhon, 2002). Similar to the federal case, when elections are staggered, the policy of the executive is known at the time of the legislative elections, and so voters can target their ballot. Let k note the legislature and l the president, then at time of legislative elections voter utility can be represented by Eq. (4). At that time policy set by the executive ($\overline{P}^l$) is not only fixed, but it is also the policy of a single party. I therefore expect the party

---

[4] While important, a detailed conceptualization of policy production function within each institution is not within the scope of this study.

holding the presidency to do poorly in staggered legislative elections (for similar hypotheses, see Alesina and Rosenthal, 1995; Shugart, 1995).

In addition to the macro-level implications, at least two micro-level implications follow from the model.

2.2.4. Voter characteristics

While institutional environments affect the extent to which voters employ one strategy over another, they are likely to have a differential effect across voters. To vote instrumentally, voters ought to understand at least in general terms the institutional mechanisms that convert votes to policy. Therefore, under institutional power-sharing I expect the politically sophisticated to employ instrumental voting while the less sophisticated to vote over platforms.

In addition to voter sophistication, I expect party attachment to affect the extent to which voters employ compensational or proximity voting. Compensational vote is representationally costly − it entails vote for a party whose positions differ from those of the voter. Therefore, expect that under institutional power-sharing, the less attached to a party is a voter, the more likely she is to vote instrumentally. In a study of parliamentary elections in the Netherlands (1998), I find that among the unattached to a party the better politically informed is a voter the more she votes instrumentally. Among the attached, I detect no significant relationship between sophistication and voting strategy (Kedar, 2003b).

3. Horizontal balancing: midterm elections in the U.S.

Voter behavior in the U.S. has been studied extensively. Effects of specific variables on vote choice, changes in voter tendencies and attachments over time, critical elections, the effects of exogenous shocks on candidate accountability, candidate personality, split-ticket voting, and vote-switching in midterm elections have been the focus of numerous studies. The latter is of particular relevance to the argument I develop in this study. The midterm electoral cycle is consistent with the compensational-vote framework.

Alesina and Rosenthal (1995) employ a balancing framework to explain the midterm electoral cycle. It is generally observed that the party holding the White House loses plurality in Congress in the midterm election. In their model "the midterm cycle is *always expected* to occur, as long as the presidential elections are not completely certain…" (p. 84, emphasis in original). The magnitude of the cycle depends on the degree of surprise in the general elections: in the case of an unexpected outcome, many middle-of-the-road voters cast their ballot in the Congressional race of the general elections thinking they balance a president from the opposite party of the one that actually gets elected. Therefore, the more surprising the outcome of the presidential race, the greater the expected midterm loss for the party of the president. Voters thus use the off-year elections to switch and balance the elected president.

Following Alesina and Rosenthal, Mebane and Sekhon (2002) examine policy moderation as well as coordination across voters in midterm elections. The authors

build on Mebane (2000) and find that the non-strategic model explains policy balancing of voters in midterm elections to a limited degree. Indeed, according to their findings, coordination across voters explains not only electoral results of the off-year elections, but also turnout considerations. Their findings are similar in spirit to those of Mebane (2000) about ticket-splitting in the general elections; although the institutional constellations voters face differ between the general and the midterm elections, the results of the two studies support similar theoretical conclusions.

Fig. 2 presents the performance of the party holding the White House in off-year elections compared to its performance in on-year elections between 1918 and 2002. The vertical axis presents the difference between the vote share in midterm elections and the vote share in general elections. As the figure demonstrates, in almost all years the party holding the White House loses support at midterm.

As mentioned above, the midterm cycle in the U.S. has been analyzed extensively. That Americans switch their vote at midterm is hardly an innovative finding. My objective in introducing it here is to draw a link between the general framework of compensational voting and the U.S.-specific literature about policy balancing and suggest that key principles of policy balancing under the institutional features idiosyncratic to the U.S. are a specific case of a broader set of policy-balancing motivations that hold across institutional settings.
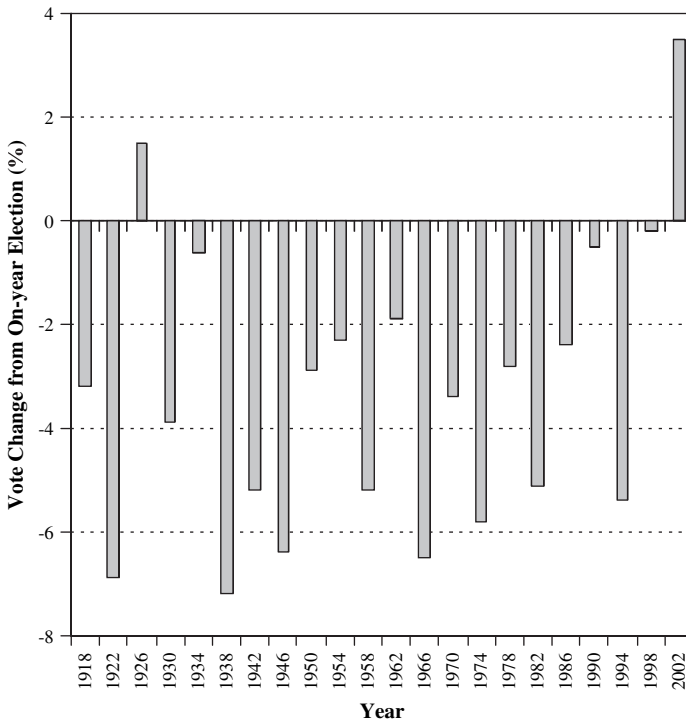

Fig. 2. Midterm vote change for the party in control of the White House, 1918–2002.

4. Vertical balancing: Land elections in Germany

The institutional design of the German system allows for a particularly interesting analysis. Different schedules of federal and Land elections, on the one hand, and different cycles across Länder, on the other hand, enable students of electoral politics to conduct an analysis of voter behavior in Land elections under different contexts. As state elections take place throughout the federal cycle, a comparison of different elections is illuminating. The institutional design of the German system introduces an additional mechanism by which voters may use regional elections to balance the federal government. Not only do the Länder implement the policy designed by the federal government, but also, since the Land governments or their representatives constitute the Bundesrat, policy decisions taken at the federal level have to be approved by representatives of the Länder.

Lohman et al. (1997) conduct an analysis of state and federal elections between 1961 and 1989. The authors demonstrate that economic retrospective voting, party identification, and moderation all play a role in state election cycles in Germany. Anderson (1996) analyzes Land elections between 1950 and 1992 under the framework of barometer elections. Barometer elections represent changes in voter attitudes toward the government following changes in the state of the economy. Analyzing aggregate data, he finds that partisanship, rate of unemployment, and incumbency in general elections explain vote share of the Chancellor's party in Land elections. My analysis will follow the empirical premises of Lohman et al.'s but will focus on the framework of policy-oriented voting.

Fig. 3 presents the performance of the parties in power federally in Land elections. The vertical axis describes for the parties in power at the federal level the difference between their combined vote share in the state legislative elections and their combined vote share in the same state in the most recent Bundestag elections. For expository purposes I present elections chronologically, where elections that took place at the same month are displayed next to each other.

The four panels of the figure present four federal cycles. The first panel presents the performance of the SPD and the Greens in the Land elections following the Bundestag elections of 1998 where the two parties formed a coalition. As an example, the second bar indicates that in the Land elections in Hesse taking place five months after the federal elections, the combined vote share of the two parties was 3.2 percentage points lower than it was in Hesse in the 1998 federal elections. The second panel shows the same differential for the CDU/CSU and the FDP in the 1994–1998 cycle when the two parties secured majority in the Bundestag. The last two panels are from elections prior to reunification. In both the 1976 and 1972 cycles the SPD and FDP formed a coalition. As all four panels show, the parties in power at the federal level do poorly in almost all subsequent state elections. Although variation in the degree of withdrawal across states exists, the general pattern is overwhelming.[5] In each of these elections, the opposition

---

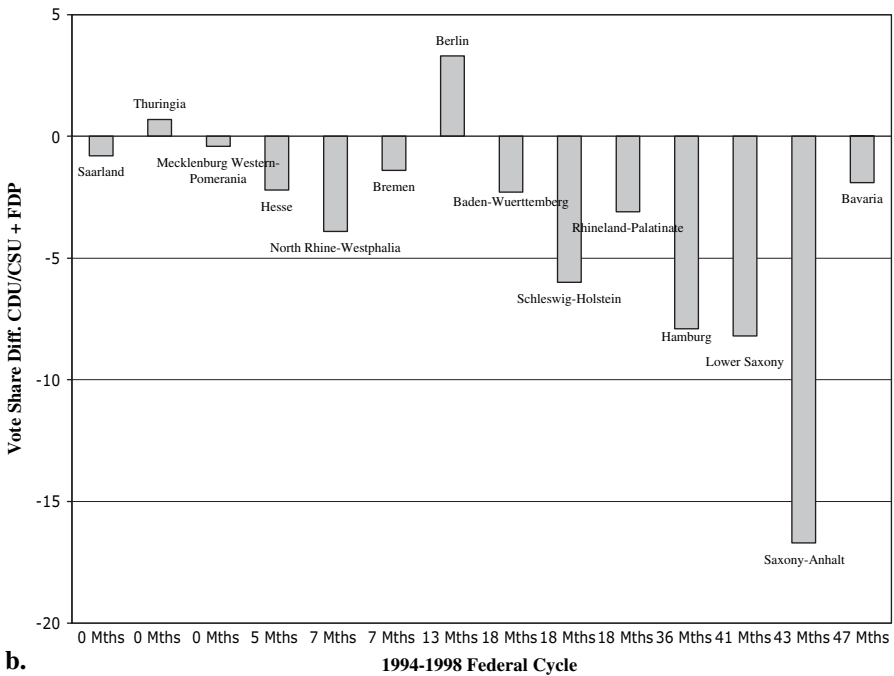[5] Similar pattern emerges from examination of the performance of the party holding the chancellery alone (not presented).
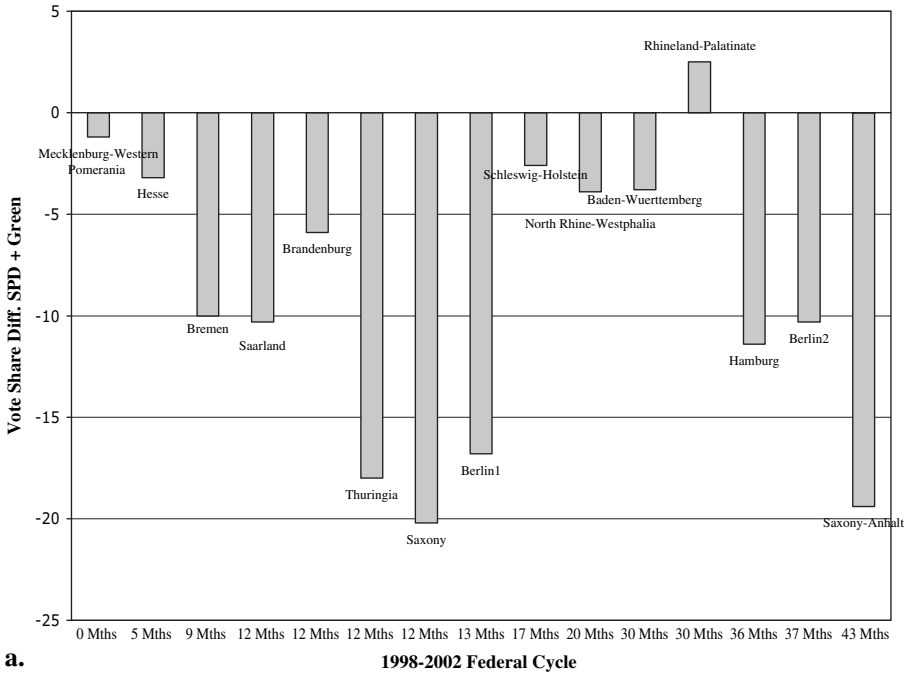
a.

b.

Fig. 3. Vote-share differentials, federal and Land elections.

c.   **1976-1980 Federal Cycle**

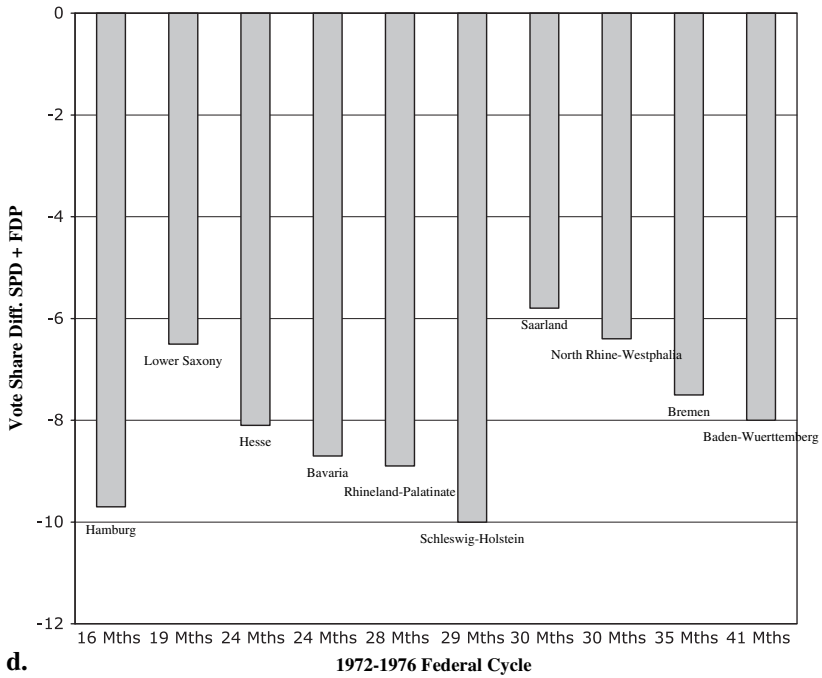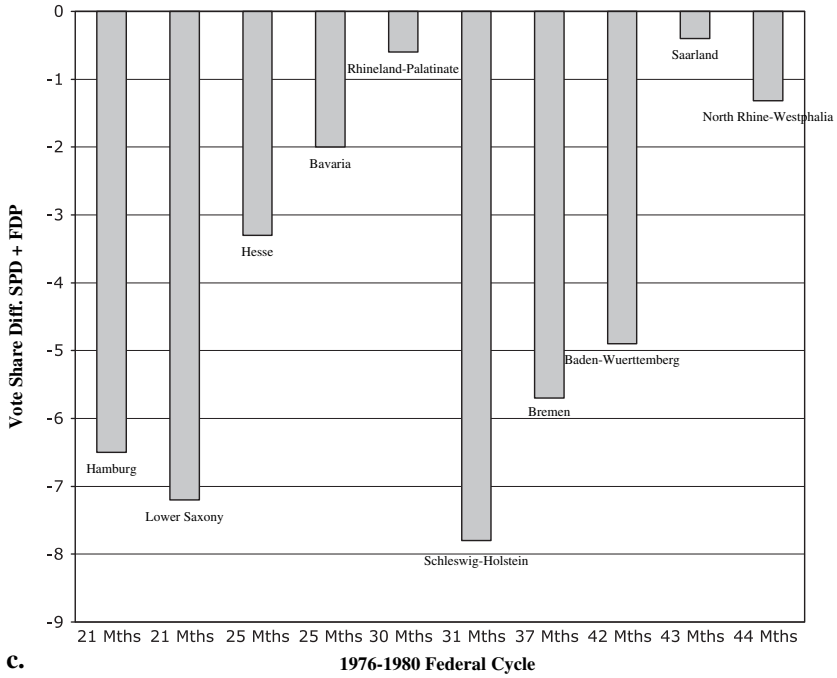**d.**   **1972-1976 Federal Cycle**

Fig. 3. (*continued*)

block has gone through a mirror-image trend — the right did relatively well in state elections during the 1972–1976, the 1976–1980, and the 1998–2002 cycles, and the left did relatively well in state elections during the 1994–1998 cycle.

What can explain this pattern? Accounting for the regularity utilizing frameworks of Proximity or Directional Theory is difficult. In fact, for either of these frameworks to account for the pattern a major shift in voter preferences immediately after the Bundestag elections would have to take place. Under the directional framework a shift beyond the neutral point is required, and under proximity framework a large enough shift such that new voter positions are similar to the minority party is required. Such a systematic (and recurring) shift in preferences is unlikely.

To be able to draw a broader inference, I examine all federal cycles between 1965 and 2002. Fig. 4 presents these 117 elections altogether. The length in time of all federal cycles is normalized to one, such that the zero point on the horizontal axis represents the most recent Bundestag elections and one represents the last month of each of the federal electoral cycles. Therefore, the timing of each election on the chart is the fraction of time passed since the last bundestag election. As in Fig. 3, the vertical bars are the difference in vote share between federal and Land elections of the parties in control of the Bundestag in the relevant cycle. With the exception of one cycle (1969), the same pattern holds across all cycles; the parties of the governing coalition in the Bundestag lose votes in the following state elections in the same states where they did well only a few months earlier.

Further analysis of the vote-share differentials allows me to better understand the sources of the gap. Six of the Land elections took place concurrently with Bundestag elections (presented on top of one another in Fig. 4) while the rest took place at different points during the federal cycles. The average vote change (−6 percentage points overall) is greater in the staggered elections than in the concurrent ones (−6.9 percentage points in the former compared to −0.65 in the latter).
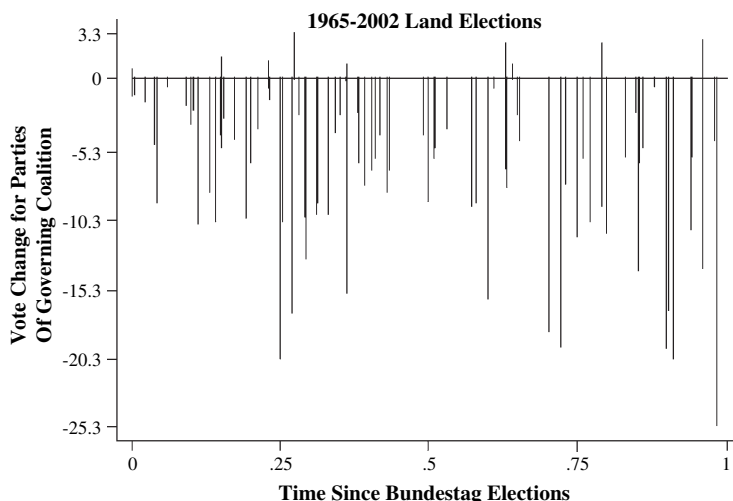

Fig. 4. Land elections aggregated.

In addition to the dichotomy of concurrent versus staggered elections, timing within the federal cycle may make a difference as well. Timing of elections, is addressed in a different line of research — research on second-order elections. In their study of elections for the European parliament, Marsh and Franklin (1996) find a quadratic relationship between timing and loss of national government. However, in a study of four European Parliament elections, Marsh (1998) examines first, second, and third-order polynomials with respect to timing and finds partial support for each of these models depending on the circumstances. The effect of elections timing is not of central concern in this study. Nonetheless, I find that a quadratic specification describes the data best.

How does turnout play out in the vote-share differential? Is it simply a different set of voters who turn out in Land and federal elections that causes the vote-share gap? Although turnout in federal elections is higher than in Land elections, the gap is not big; the (non-weighted) average turnout in federal elections across states is 84.9 percentage points in the relevant period, while the (non-weighted) average turnout in Land elections is 73.9 percentage points. The correlation between the vote-share differential and the turnout differential (calculated in the same way as the vote-share gap) is -0.17 ($n = 107$, p value $= 0.09$); the greater the turnout differential from federal to state election, the bigger the loss for the parties in power at the federal level. However, a multi-level analysis reveals a different picture.

Table 1 presents the results of a multivariate analysis of the vote-share gap in the 107 Land elections. Based on preliminary bivariate analysis and the literature on second-order elections, I compare six different models. The first two include a linear and a quadratic time variables (this is the fraction of time since the federal elections as calculated in Fig. 4). In addition to timing, in the first model I also allow for

Table 1
Change of vote share, multivariate analysis

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Time since federal elections	−3.8 (0.023)	−14.5 (0.003)	−23.4 (0.001)	−23.3 (0.002)	−12.7 (0.064)	−22.7 (0.003)
Time squared		9.8 (0.131)	18.4 (0.005)	18.0 (0.11)	8.2 (0.215)	17.8 (0.016)
East	−2.6 (0.108)		−4.7 (0.005)	−4.6 (0.007)		−4.6 (0.008)
Post-unification	−0.9 (0.434)		−1.3 (0.255)	−1.3 (0.256)		−1.3 (0.282)
SPD in power	−1.5 (0.142)			−0.1 (0.895)		−0.1 (0.911)
Turnout differential					−0.11 (0.255)	−0.1 (0.881)
Constant	−3.5 (0.001)	−2.9 (0.035)	−0.3 (0.867)	−0.3 (0.857)	−2.1 (0.181)	−0.2 (0.902)
R^2	0.12	0.09	0.21	0.21	0.10	0.21
N	107	107	107	107	107	107

P-values in parentheses.

region (East versus West), period (pre/post unification) and political orientation of the federal government (left vs. right) to affect election returns. The linear component of timing since the last federal elections holds, while surprisingly, the quadratic effect does not. In addition, while the later period has no effect, the vote loss in the former East is greater than in the former West by almost 4 percentage points. This finding is curious; to the extent that voters use Land elections to balance the federal government, one might expect that voters who were introduced to democratic governance only recently will be less accustomed with the separation-of-power mechanisms than their experienced counterparts in the West. This result does not fade away when both quadratic effect and period are included in the model (Model 3), nor when the political orientation of the federal government is added (Model 4). The quadratic effect, however, holds through these specifications. Finally, the last two models are similar to Models 3 and 4 but include in addition the turnout differential. As the results show, the bivariate effect of turnout differential reported above does not hold once controlling for other variables. The quadratic effect holds, and the loss peaks at around 0.65 fraction of the cycle.

While it is difficult to explain the systematic pattern under the frameworks of proximity or directional voting, the framework of outcome-oriented voting can help. Once the composition of the federal government is announced, voters are able to use state elections to balance the federal government in a way impossible under concurrent elections: they know in what direction the seesaw tilts, and they can push in the other way. Vertical power-sharing is anchored on the federal end, and so voters adjust their vote on the regional end accordingly.

5. Conclusion

Voters in general, and American voters in particular, are often accused of ignorance and lack of sophistication. Random attitudes, low rates of political knowledge, and lack of understanding of the political world are only some of their notorious characteristics, according to numerous studies (e.g, Converse, 1964). The thesis presented in this article provides a reason for optimism regarding individuals functioning in a complex political environment. My argument suggests that a non-negligible portion of voters 'work around' political institutions. They understand the push and pull taking place in Washington (or in Berlin) and compensate for it at the voting booth. While I do not claim that voters have a nuanced comprehension of the checks and balances embedded in federal or presidential institutions and the role these mechanisms play in fostering the endurance of democracy, they do, it seems, have a general understanding of what power-sharing means.

Outcome-oriented behavior in a system of power-sharing has further implications for the way political scientists formalize utility functions than discussed in this article. Take our German voter as an example. Returning to the seesaw analogy, depending on the weight and the length of one arm, the voter will decide what shape she prefers the opposite arm to take. Unlike arguments of tactical voting, the argument presented above is not a claim about a voter preferring one party but voting for another for winnability considerations. It is an argument about sincere

preferences. In other words, voter utility for each party depends on characteristics of (all) other parties that participate in policy formation.

Voters' time horizons are often longer than what political scientists assume. They do not end at the moment election results are declared, but rather when government policy is implemented. If voters backward-induct then post-electoral activity is crucial for understanding their choices. This activity, shaped by political institutions, determines the extent to which votes will be watered-down, and therefore, whether a compensational strategy is in order. It is the interaction of political institutions and voter calculation that explains voter choice.

Acknowledgements

References

Aardal, B., and Valen, H. Norwegian Election Study 1989 [computer file]. Norwegian Gallup Institute [producer]. Norwegian Social Science Data Services (NSD) [distributor].

Alesina, A., Rosenthal, H., 1995. Partisan Politics, Divided Government, and the Economy. Cambridge University Press, Cambridge (Chapters 1−4).

Anderson, C.J., 1996. Barometer elections in comparative perspective. Electoral Studies 15 (4), 447−460.

Austen-Smith, D., Banks, J., 1988. Elections, coalitions, and legislative outcomes. American Political Science Review 82 (2), 405−422.

Barnes, S.H., 1997. Electoral behavior and comparative politics. In: Lichbach, M.I., Zuckerman, A.S. (Eds.), Comparative Politics: Rationality, Culture, and Structure. Cambridge University Press, Cambridge, pp. 115−141.

Baron, D.P., Diermeier, D., 2001. Elections, governments, and parliaments in proportional representation systems. Quarterly Journal of Economics 116 (3), 933−967.

Blais, A., et al., 2001. The formation of party preferences: testing the proximity and directional models. European Journal of Political Research 40 (1), 81−91.

Cho, S., Endersby, J.W., 2003. Issues, the spatial theory of voting, and British general elections: a comparison of proximity and directional models. Public Choice 114, 275−293.

Converse, P.E., 1964. The nature of belief systems in mass publics. In: Apter, D.E. (Ed.), Ideology and Discontent. Free Press, New York, pp. 206−261.

Downs, A., 1957. An Economic Theory of Democracy. Harper & Row, New York.

Edelman, M., 1964. The Symbolic Uses of Politics. University of Illinois Press, Urbana.

Enelow, J.M., Hinich, M.J., 1984. The Spatial Theory of Voting: An Introduction. Cambridge University Press, New York.

Fiorina, M., 1996. Divided Government. Allyn and Bacon, Massachusetts.

Granberg, D., Gilljam, M., 1997. Implausible hypotheses in the directional theory of issue voting. European Journal of Political Research 32, 31−50.

Grofman, B., 1985. The neglected role of the status quo in models of issue voting. Journal of Politics 45, 230−237.

Hotelling, H., 1929. Stability and competition. Economic Journal 39, 41−59.

Iversen, T., 1994a. Political leadership and representation in West European democracies: a test of three models of voting. American Journal of Political Science 38 (1), 45−74.

Iversen, T., 1994b. The logics of electoral politics. Comparative Political Studies 27 (2), 155−189.

Kedar, 2003a. Policy balancing in comparative context: institutional mediation of voter behavior. Dissertation submitted to the Department of Government at Harvard University.

Kedar, O., 2003b. Who prefers extreme parties: voter sophistication and policy balancing. Paper prepared for delivery at the Annual Meeting of the American Political Science Association, August 28−31, 2003. Philadelphia, PA.

Kedar, O., 2005. How diffusion of power in parliaments affects voter choice. Forthcoming, *Political Analysis* Fall 2005.

Krämer, J., Rattinger, H., 1997. The proximity and the directional theories of issue voting: comparative results for the U.S. and Germany. European Journal of Political Science 32, 1−29.

Lacy, D., Paolino, P., 1998. Downsian voting and the separation of powers. American Journal of Political Science 42 (4), 1180−1199.

Lewis, J.B., King, G., 2000. No evidence on directional vs. proximity voting. Political Analysis 8 (1), 21−33.

Lohman, S., Brady, D.W., Rivers, D., 1997. Party identification, retrospective voting, and moderating elections in a federal system: West Germany, 1961−1989. Comparative Political Studies 30 (4), 420−449.

Mebane Jr., W.R., 2000. Coordination, moderation, and institutional balancing in American presidential and House elections. American Political Science Review 94 (1), 37−58.

Mebane Jr., W.R., Sekhon, J.S., 2002. Coordination and policy moderation at midterm. American Political Science Review 96 (1), 141−157.

Macdonald, S.E., Listhug, O., Rabinowitz, G., 1991. Issues and party support in multiparty systems. American Political Science Review 85 (4), 1107−1131.

Macdonald, S.E., Rabinowitz, G., Listhaug, O., 1995. Political sophistication and models of issue voting. British Journal of Political Science 25, 453−483.

Macdonald, S.E., Rabinowitz, G., Listhaug, O., 1998. On attempting to rehabilitate the proximity model: sometimes the patient just can't be helped. Journal of Politics 60 (3), 653−690.

Macdonald, S.E., Rabinowitz, G., Listhaug, O., 2001. Sophistry versus science: on further efforts to rehabilitate the proximity model. Journal of Politics 63 (May), 482−500.

Marsh, M., 1998. Testing the second-order election model after four European elections. British Journal of Political Science 28, 591−607.

Marsh, M., Franklin, M.N., 1996. The foundations: unanswered questions from the study of European elections, 1979−1994. In: Van der Eijk, C., Franklin, M.N. (Eds.), Choosing Europe? The European Electorate and National Politics in the Face of Union. The University of Michigan Press, Ann Arbor, pp. 11−32.

Pierce, R., 1997. Directional versus proximity models: verisimilitude as the criterion. Journal of Theoretic Politics 9, 61−74.

Przeworski, A., Sprague, J., 1986. Paper Stones: A History of Electoral Socialism. University of Chicago Press, Chicago.

Rabinowitz, G., 1978. On the nature of political issues: insights from a spatial analysis. American Journal of Political Science 22 (4), 793−817.

Rabinowitz, G., Macdonald, S.E., 1989. A directional theory of issue voting. American Political Science Review 83 (1), 93−121.

Schuessler, A.A., 2000. A Logic of Expressive Choice. Princeton University Press, Princeton.

Shugart, M.S., 1995. The electoral cycle and institutional sources of divided presidential government. American Political Science Review 89 (2), 327−343.

Strøm, K., 1990. Minority Government and Majority Rule. Cambridge University Press, Cambridge.

The National Election Studies and the Comparative Study of Electoral Systems, Center for Political Studies, University of Michigan. Electronic resources from the NES World Wide Web site (http://www.umich.edu/~nes). Ann Arbor, MI: University of Michigan, Center for Political Studies [producer and distributor], 1995−1998, 1998−2002.

Westholm, A., 1997. Distance versus direction: the illusory defeat of the proximity theory of electoral choice. American Political Science Review 91 (4), 865−885.