1976

The Ecological Basis of Voting Behavior in Two State Senates

Wesley Sutphen Dennis

*College of William & Mary - Arts & Sciences*

Follow this and additional works at: [https://scholarworks.wm.edu/etd](https://scholarworks.wm.edu/etd)

Part of the [Public Administration Commons](https://scholarworks.wm.edu/etd)

**Recommended Citation**


[https://dx.doi.org/doi:10.21220/s2-m5zc-vs04](https://dx.doi.org/doi:10.21220/s2-m5zc-vs04)

This Thesis is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.
THE ECOLOGICAL BASIS OF VOTING BEHAVIOR
IN TWO STATE SENATES

A Thesis
Presented to
The Faculty of the Department of Government
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

by
Wesley Dennis
1976
APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of

Master of Arts

Approved, May 1976

Richard E. Damon
George W. Grayson
John J. McLennan

[Signatures]
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>CHAPTER I. REVIEW OF THE LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>CHAPTER II. METHODOLOGY</td>
<td>26</td>
</tr>
<tr>
<td>CHAPTER III. RESULTS OF ANALYSIS</td>
<td>39</td>
</tr>
<tr>
<td>CHAPTER IV. CONCLUSIONS</td>
<td>59</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>64</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table                                                  Page

1. Mean Index of Cohesion and Index of Likeness (IL) on Selected Issue Areas in California, 1961, 1965          40
2. Inter-Party Differences on Selected Issue Areas in California, 1961, 1965          42
3. Mean Index of Cohesion on Selected Issue Areas in Florida, 1961, 1965          44
4. Bifactionalism in the Florida Senate as Measured by the Index of Agreement, 1961, 1965          47
5. Bifactionalism in the Florida Senate as Measured by an 80 Base Index of Agreement, 1961, 1965          48
6. Percentage of Minority Faction Dividing Along SMSA and North-South Criteria, 1961, 1965          48
9. Comparison of Ecological Variables of SMSA Districts with Two Atypical SMSA Districts in Florida, 1965          56
10. Percent Rural Republicans with Voting Index Above the Mean Index, 1961, 1965          58
11. Percent Urban Democrats with Voting Index Below the Mean Index, 1961, 1965          58
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Connections between a Constituency's Attitude and Its Representative's Roll Call Behavior</td>
<td>12</td>
</tr>
</tbody>
</table>
ABSTRACT

The purpose of this study is to determine the extent to which factionalism serves as a surrogate for partisanship in explaining the strength of the relationship between ecological variables and roll-call votes. The study also examines selected hypotheses on voting behavior to analyze the effect of constituency on patterns of legislative voting in two state senates during the 1961 and 1965 sessions.

Analysis of intra-party opposition votes in Florida and inter-party opposition votes in California reveal that factionalism serves the same function as partisanship in explaining the association between aggregate territorial data and voting behavior. The factions appear to be based on urban-rural cleavages, but not on a sectional alignment of the constituencies.

For both states, the correlations between ecological variables and roll-call voting are weak. This suggests that either the legislators do not use the selected socio-economic characteristics of their districts as information guiding their perceptions of constituency attitudes, or that the legislators are not responsive to their constituents across the selected issue domains. Confirmation of other hypotheses relating constituency characteristics to roll-call voting suggests that the ecological variables are in fact insufficient cues to legislative voting.
THE ECOLOGICAL BASIS OF VOTING BEHAVIOR

IN TWO STATE SENATES
INTRODUCTION

Legislatures, as political institutions, are essentially patterns of behavior by virtue of the specific behavioral uniformities exhibited by each legislative generation and passed on from it to the next.¹ Current study of legislative behavior, instead of prescribing norms of behavior from normative assumptions about legislatures' functions, strives to discover, describe, and explain observable patterns of behavior which presumably are relevant to those functions, for it is only through the accumulation of empirically verifiable data on patterns of legislative behavior that a body of intersubjectively transmissible knowledge of such behavior can be acquired. As this knowledge is systematically developed and integrated with other elements peculiar to the legislative system, a more accurate understanding of the American legislative process becomes realized. The research presented in this paper intends to employ the behavioral approach in its analysis of the influence of specific constituency variables on voting behavior in selected competitive and noncompetitive state senates. It is hoped that this approach will contribute not only to an understanding of the legislative processes involved in the

two selected state senates, but also to a better understanding of the legislative system at large.

The study of legislative behavior refers to the analysis of the actions and the reciprocal expectations of individuals in the legislative system. The term "system" is used here to denote a conceptual scheme involving a number of individuals who interact within a legislative, environmental framework in order to effectively satisfy goal-oriented needs or desires. Thus, David Easton conceptualizes the political system in general as constituted by the multiplicity of social interactions involved in the policy-making process oriented toward the authoritative allocation of values for a society. It has become increasingly accepted that legislative behavior in the legislative system is social behavior in a particular institutional context. The research efforts of the past several decades have been to conceptualize and explain legislative behavior more fully with respect to its effect on legislative functioning and output, and with respect to its relationship to more general principles of human behavior from psychological and sociological perspectives. Recent studies by Patterson in 1958 and Wahlke in 1962 have used this latter approach to relate the behavior of legislators to the group life of the society, to the role concepts of legislators as individuals, and to explain significant aspects of legislative behavior in terms of

---

role theory. One important dimension of legislative behavior, therefore, is the number of different categories of behavior which have analytically been found to be involved in legislative role concepts and manifested in legislative role behavior. Concomitant with this dimension of legislative behavior is the amount and type of variation in these respects found empirically to occur between patterns found in different legislatures and between members of a given legislature.

This research, although acknowledging the important contributions of role theory, will nevertheless focus on legislative functioning and output as products of external influences, for example, constituency variables, rather than internal role conceptualizations. It is well to bear in mind, however, that both approaches are complimentary and are not to be considered alternative explanations or descriptions of the American legislative process. Periodic reference to role concepts, as applicable to legislative output, will be made when deemed appropriate.

---

CHAPTER I

REVIEW OF THE LITERATURE

Underlying the examination of legislative behavior is the larger context of representational behavior. Representational behavior refers to that aspect of legislative conduct that is studied for the nature, extent, and basis of its correspondence with constituency opinions. Representatives are assumed to differ in the extent to which they reflect their constituents' opinions in their legislative activities, most notably in their decision making. The question of the nature of representation is central to nearly all studies of the functions of legislatures or the behavior of legislators, for it is assumed that in democratic political systems, legislatures are authoritative and legitimate decision-making institutions on the basis of their representative character. The nature of this representative character, however, has been perennially debated on a normative basis.

A classic argument advocating political responsibility over strict representativeness was presented by Edmund Burke in his speech to the Electors of Bristol in 1774. According to Burke, the proper

role of the representative was to respect his constituents' opinions, but not to yield to them over his own unbiased opinions concerning the public good. For Burke, the representative assembly was a deliberative assembly of one nation (or state) with only the interest of "the whole" in mind. Local prejudices and the particular interests of each constituency would thereby be mitigated by the rational faculty of the legislator serving the greater public interest.

Another prescription of the proper relationship between the representative and his constituency is known as the instructed delegate theory. Those advocating this model suggest that the primary responsibility of the representative is to his immediate constituency, or more narrowly, to the effective constituency which was instrumental in his election to office. By adhering to the mandate of the people, the representative would be most effectively representing those interests of his constituency which may be quite distinct and unique from other constituencies and which may remain otherwise unrepresented.

Out of the structure of the American two-party system, yet another form of representation was prescribed. This involves the notion of the party loyalist who, by voting the party line, would be responsive to both his constituency and the greater interests of the nation at large. The underlying assumption of this line of thought rests on the belief that each party generally reflects the interests

---

and values of a certain type of constituency, the characteristics of
which are distinct from those of the other party.

Whereas the Burkean model assumes responsibility as a necessary
premise, the Delegate and Party models involve an assumption of role
orientations based upon goal expectations. Thus, the representative
seeking re-election must show a degree of responsiveness to his
constituency's needs if the goal of re-election is to be realized.

Inquiry into what ought to be the relationship of the repre-
sentative to his constituency elicited several normative prescriptions
but did not encourage exacting, empirical analysis. As political
scientists borrowed from other disciplines and developed their own
sophisticated methodological techniques to study these questions, the
focus turned from what "ought" to be to what "is" the nature of
representation in American legislatures. In their comprehensive
analysis of the role of legislators in the legislative process,
John Wahlke, et alii, labeled the distinction between the types of
representation as differences between style and focus.6 The style of
representation refers to the particular criterion of judgment the
representatives uses in deciding on legislative issues. It is
dependent upon how the legislator sees himself, as a free agent
following his own conscience, or under a mandate to look at his party

6 Wahlke, et al., pp. 267-310.
See also Heinz Eulau, et al., "The Role of the Representative:
Some Empirical Observations on the Theory of Edmund Burke," American
or constituency as a reference group for instructions. The focus of representation refers to the particular clientele group that the representative feels he should consider in deciding on legislative issues.

Heinz Eulau, et alii, tested the validity of the theoretical distinctions referred to above in four state legislatures by means of a questionnaire dealing with stylistic and areal-focal orientation types. Responses concerning the stylistic dimension yielded three major role types, trustee, delegate, and politico; while the areal-focal orientations were delineated as district-oriented, state-oriented, and district-and-state-oriented. It should be noted that the distinctions among the various orientations are not clearly defined and representatives may find themselves adapting different orientations as specific demands upon them alter in intensity. The authors point out, for instance,

Burke's linkage of a particular areal focus of representation with a particular representational style, constitutes only a special case on a generic series of empirically viable relationships between possible and different foci of representation and appropriate styles of representation.

This brief overview of role orientations shows how representatives may see themselves in their representative function. Despite the typologies presented, many studies proceed with the assumption

---

7 Eulau, et al., p. 749.
8 Ibid., pp. 750-753.
9 Ibid., p. 745.
that representatives must direct their behavior in some manner consistent with the wishes of their constituents if they plan to win re-election. The study of legislative voting behavior permits the analyst to examine the extent to which constituency interests and representatives' voting patterns reflect electoral accountability. The central research problem confronted by this study is to determine, via legislative voting behavior, the similarities or differences in electoral accountability between two state senates with strikingly different levels of party competition. More specifically, this study will focus on determining the extent to which factionalism in a one-party dominant state senate serves as a surrogate for partisanship in explaining the strength of the relationship between district or constituency characteristics and legislative voting behavior. The underlying assumption of this study is that in both partisan and non-partisan senates, distinct aggregate ecological characteristics of the senatorial districts serve as significant reference indicators for the decision-making actors in the political arena. Justification for this assumption is based on many studies of constituency-representative relations. For instance, W. A. Crane's 1960 study of the deliberations on daylight savings time in the lower house of the Wisconsin Assembly questioned the extent to which the votes of

---

representatives are consistent with the wishes of their respective constituents. The bill in question, if passed, would have had a differential impact on rural and urban dwellers, and representatives from these districts were predicted to vote in accordance with that distinction. The study revealed, by comparing Assembly votes with a later referendum on the same issue, that 85 percent of the assemblymen voted in accord with their district's interests. Of the 15 percent who voted inconsistently, all claimed to have misread their constituencies with the exception of one assemblyman who admittedly voted without regard to his constituency.\(^\text{11}\)

The Crane study reveals, in this particular case, that the link between constituency interests and representatives' decisions, as expressed in their voting record, is quite strong. The study was somewhat limited in its generality due to only one issue being undertaken for analysis. In 1963, however, Miller and Stokes addressed themselves to the question of whether the saliency of legislative action to the public is so different in quality and degree on different issues that the legislator is subject to very different constraints from his constituency.\(^\text{12}\) Their study also sought to describe the causal connections between a constituency's attitude and its

\(^{11}\) W. A. Crane, "Do Representatives Represent?" *Journal of Politics*, 22 (May 1960), 295-299.

\(^{12}\) Warren E. Miller, and Donald E. Stokes, "Constituency Influence in Congress," *American Political Science Review*, 57 (March 1963), 45-56.
representative's roll-call behavior. This would explain which of two alternative ways a constituency can control or influence the policy actions of its representative. The district could choose a representative who shares its views and would reflect those views in following his own convictions, or the representative would follow his perceptions of district attitudes in order to win re-election (see Figure 1).

From their investigation of three policy domains, Miller and Stokes found evidence that representatives vote both their own policy views and their perceptions of their constituents' views, depending on the issue at hand. The strength of the intercorrelations, however, showed that the congressman's perception of his constituency's attitudes was the main path by which the local district ultimately influenced the representative's output, especially when the representative felt the issue to be both visible and salient to his constituency. In light of this finding, the senators studied in this research may be likely to use their respective district demographics as cues contributing to the development of their perceptions of constituency attitudes.

13 Ibid., pp. 51-53.
C.f. Charles F. Cnudde and Donald J. McCrone, "The Linkage between Constituency Attitudes and Congressional Voting Behavior: A Causal Model," American Political Science Review, 60 (March 1966), 62-72. Utilizing the Simon-Blalock technique for making causal inferences, Cnudde and McCrone improve upon Miller and Stokes' model and correct the direction of the causal links between representative's attitude and representative's perception of constituency's attitude. Overall, the authors reconfirm the impact of Congressmen's perceptions in linking mass attitudes to policy making.
CONNECTIONS BETWEEN A CONSTITUENCY'S ATTITUDE
AND ITS REPRESENTATIVE'S ROLL CALL BEHAVIOR

In an effort to examine the influence of additional variables on legislative voting behavior, Waldman, in 1967, demonstrates the combined influence of the constituency vote for the congressman and for the President on legislative voting behavior. He concludes that the model of representation which most closely fits the case of the liberal-voting congressman is that of the instructed delegate. The representative would be taking his voting cue from the large presidential vote in relation to the vote he received in his district. This study adds credibility to Miller and Stokes' findings in that it shows again that congressmen rely on their perceptions of constituency attitudes as voting cues and that those perceptions can be based on various information flows to them. Although this study shows a strong, positive correlation between the selected variables and voting behavior, it cannot be determined from the data to what extent the congressmen actually use this information as voting cues.

If Eulau, et alii, and Miller and Stokes are correct in suggesting that congressmen seeking re-election will be responsive to the particular needs of their districts, it can be assumed that particular bills benefiting certain constituencies will be supported by more congressmen from those districts than by congressmen whose districts would not benefit. Consequently, in a study similar to Crane's (1960), Clotfelter in 1970 tested the hypothesis that

---

legislators from states that depend heavily on defense spending will be more likely to support legislation to increase or maintain defense spending than legislators who do not represent such states. The results of the research revealed that the most widely used measure of defense spending, military prime contracts, correlated very poorly with roll-call votes. Although some of the other defense-related variables correlated better with roll-call voting, the general conclusion had to be that the representatives were not noticeably responsive to their constituents in this defense spending dimension.  

These series of studies have shown that although representatives may perceive themselves as following a particular role requiring cues from their constituencies to shape their perceptions of their respective constituent's attitudes, the extent to which they correctly read and respond to those cues may substantially differ.

Previous studies have revealed that Party is the most important predictor of roll-call behavior, while constituency factors explain most of the deviation from party votes. As mentioned earlier, one model of representation, the responsible party model, states that the representatives who vote the party line are being


responsive to their constituents' needs through the assumption that
the parties differ in terms of socio-economic constituency character-
istics. In 1963, Froman examined this assumption in an attempt to
demonstrate that the differences between Democrats and Republicans are
not merely a matter of party label or ideology, but are rooted in
basic differences in the kinds of constituencies from which Democrats
and Republicans come. Using socio-economic data and the Kennedy
Support Score of liberal-conservative tendencies as independent
variables, Froman found that Democrats rated high percentages on
owner-occupied dwelling units, nonwhite population, population density
and urban residents, while Republicans rated low percentages in the
same categories. This data indicates that Republicans would tend to
be "conservative" and Democrats "liberal," a finding confirmed by the
correlations on the Kennedy Support Score. It was predicted and
confirmed in this study that Democrats from conservative-type
districts and Republicans from liberal-type districts would tend to
vote more conservatively and liberally, respectively, than their
party colleagues. This phenomenon has been confirmed elsewhere in
regard to the voting behavior of representatives from districts
atypical of their party's ecological characteristics.

17 Lewis A. Froman, Jr., "Inter-Party Constituency Differences
and Congressional Voting Behavior," American Political Science Review,
57 (1963), 57-62.

18 See Samuel C. Patterson, "The Role of the Deviant in the
State Legislative System: The Wisconsin Assembly," Western Political
Quarterly, 14 (June 1961), 460-472.
The findings of the above two studies are not entirely conclusive. In 1963, Stone questioned Froman's contention that inter-party differences can be attributed to constituency differences, especially when Democrats and Republicans represent the same kind of constituencies. By holding constituency factors constant while measuring party differences, Stone finds coalition formations supporting Democrats and Republicans of the same districts divergent on bases independent of socio-economic factors. Many Democrats from normally Republican districts tended to vote liberally, not conservatively as Froman would predict.¹⁹

The hypothesis examined by Froman was tested again in 1964 by Flinn. To the extent that parties find their support in contrasting constituencies, party responsibility is the consequence. Legislators from similar constituencies will allegedly vote together and in opposition to legislators from constituencies with contrasting characteristics. Data from this Ohio study, however, revealed that rural Democrats and rural Republicans do not vote alike, nor do urban Republicans and urban Democrats. Rather, likeness was apparent between urban and rural Democrats and urban and rural Republicans.²⁰ His conclusion was that the view that on party opposition votes


members vote their constituencies and that different parties represent different constituencies was incorrect. The differences in constituencies did, however, relate to intra-party differences to some degree where members from districts typical of the party supported the party position more often than members from districts atypical of the party.\textsuperscript{21} The implications of the study seem to weaken the argument supporting the instructed delegate model and favors the support of the responsible party model of representation.

In a partial description of the theory behind the responsible party model, Eulau states,

\begin{quote}
. . . Competitive parties are structural requisites of the democratic political system in that they facilitate the achievement of some of its goals, notably the crystallization, institutionalization and resolution of conflicts.\textsuperscript{22}
\end{quote}

This being the case, two assumptions can be made. First, where there exists a greater propensity for conflict, that is, urban areas, one would expect to find a competitive party system. Second, where a high degree of party competition is found, one would expect to find a high degree of party cohesion, since such unity would appear efficacious to conflict resolution. In this regard, Jewell, in 1955, finds that the degree of party voting appears to be significantly higher in those two-party states which are larger and more urban, but that among

\textsuperscript{21}Ibid., p. 70.

those states with two strong parties, those with the most intense party competition are not necessarily those with the highest levels of party voting. In 1957, Eulau confirmed Jewell's finding that there is a direct relationship between the character of an area's ecological structure and the structure of an area's party system; urban structures are conducive to the existence of competitive party systems, whereas rural areas appear to be related to noncompetitive or one-party systems.

In a response and extended replication of Eulau's study, Gold and Schmidhauser found that among the ninety-nine counties of Iowa in 1960, there was not a single positive correlation between degree of urbanization and intensity of party competition. Thus, with the accumulation of studies, one encounters the emergence of numerous contradictions. The differences may be due to methodological variances, to unique institutional discrepancies in each legislature studied, or to any number of intervening variables which may account for some major differences in the conflicting conclusions.

In an attempt to take measure of a possible intervening variable, McRae, in 1952, finds that the socio-economic characteristics

---


of a constituency do influence the roll-call behavior of representatives in the Massachusetts House of Representatives, but that the closeness of the vote in the district has a distinct effect over and above socio-economic characteristics. In the study, it was found that the closer the characteristics of the constituency were to the general characteristics of the party, the party cohesion appeared greater; however, when close election margins were introduced, party cohesion was less. This was particularly noted in those districts atypical of the party to which the representative belonged. Dye's study of the Pennsylvania Legislature in 1961 confirmed McRae's findings, indicating that the closeness of the vote may be an important intervening variable. In contrast, however, Dye's research also reported the relationship between constituency characteristics and voting behavior to be very weak for the Pennsylvania Senate. Again, one confronts conflicting results.

The research employed in this study will attempt to re-examine a number of the hypotheses referred to above as they pertain to the two states of this analysis. Although this research cannot hope to resolve the contradictions thus far encountered in the literature of legislative voting behavior, it can provide further empirical evidence.


supporting the findings similar to those contained within the scope of this inquiry.

Regardless of the role a legislator may perceive himself acting in, it is obvious that in his legislative capacity many other demands may be put to him other than those of his constituency. "The more active a representative becomes in the legislative process, the less likely he is to act publicly simply as a representative."[28]

There are a number of political actors besides constituents who have varying degrees of influence on the legislator's decision-making process. Committee members, staff, colleagues, interest groups, and the executive branch are all possible reference groups to which the legislator may turn or be advised by on how to vote on specific pieces of legislation.[29] In some instances, a representative's decision processes for roll-call votes can be described as repetitive problem-solving behavior. Their responses to legislation may become routine and independent of the bill being considered.[30] The representative may rely on a variety of sources of voting cues without ever having to analyze a particular bill in regard to its relative impact on constituency, party, or his own ideological predilections. The


premises that Shapiro utilizes in the development of a simulation model of roll-call voting in the House of Representatives may illustrate the variety of influences acting on a representative and the reference groups which he may or may not refer to on any one issue. The premises presume that there is a predisposition toward voting on a bill that a legislator develops when he assesses his past voting behavior on that type of bill; that he may seek or be confronted by individuals and groups in the House with positive or negative positions on the bill; that he will consider the bill in terms of its benefits for his constituency or region; that he may have his own ideological posture on the bill; or that he may feel inclined to follow executive wishes on the legislation, independent of party position.31 Investigations into each of these dimensions have sought to describe the relative association these variables may have with legislative behavior. The analysis undertaken in this paper, although acknowledging the contribution of other variables in explaining roll-call behavior, has concentrated on constituency-related variables as their association to representational behavior in terms of electoral accountability seems singularly important.

The literature on legislative voting behavior is extensive. Thus far, this paper has presented only a sample of some of the more frequently cited studies in the field which provide a theoretical

background for this research. Most of these studies were quite specific in their design, and only a few were concerned exclusively with state legislative systems. Many of the studies which are conducted at the state level are indebted to V. O. Key for the wealth of information he provided through his studies of eleven southern states. Duane Lockard's regional study of seven New England states also generated a wide inventory of propositions using, like Key, electoral data as a central focus for empirical investigations. Both authors followed their regional studies with broader, comparative works examining some of their earlier findings within this larger framework. In 1957, J. C. Wahlke, et alii, conducted a comprehensive study of four state legislatures during a single legislative session to gain knowledge about generic problems of legislative institutions and processes in American state governments. In 1966, Jewell and Patterson synthesized a wide range of legislative research at the state level with the intention of giving a descriptive account of the structure and functions of the American legislative system at one point in time, and explaining behavioral patterns of the legislative


process over a period of time. These works provide in a cumulative manner much of our knowledge about state legislatures, both singly and comparatively.

Many studies narrower in scope than those mentioned above have focused their research on specific hypotheses, either explicitly stated or inferred from the above studies. However, the *Encyclopedia of the Social Sciences* notes:

> ... quantitatively speaking, the literature to date offers primarily studies of a single legislature rather than comparative studies, either of different legislatures or of a single legislature at different points in time. As a result, it is relatively difficult to establish generalizations by cumulating findings about legislative behavior even in a particular legislature, despite the qualitative richness with many available studies.  

It is hoped that the research presented in this study, being comparative in design, will contribute to the expanding body of knowledge of legislative behavior at the state level by clarifying the nature of the relationship between ecological variables and voting behavior in two contrasting state senates.

A few studies have examined the relationship of ecological variables to voting behavior in order to determine the degree to which the demographic and socio-economic characteristics of a representative's district correlate to his voting record. This

---


information would theoretically give the analyst greater predictive measures to determine how a representative will vote on legislation affecting his particular constituency. Some of these variables have been examined to determine their relationship to the make-up of the two major political parties.38 Other studies have related ecological variables to voting behavior on specific types of legislation.39 Overall, there is considerable evidence that legislators will in many ways reflect the ecological and demographic characteristics of their districts regardless of their own individual backgrounds.40 Although these studies have shown that a significant relationship exists between aggregate territorial data and representatives' decisions as expressed in their roll-call votes, they generally do not attempt to explain the nature and extent of the intervening processes involved in the relationships. LeBlanc's 1969 study attempted to rectify this deficiency by measuring the extent to which levels of partisanship affected the strength of the relationship between ecological-constituency variables and roll-call votes. His findings indicate

38See Eulau, "The Ecological Basis of Party Systems"; Gold and Schmidhauser; Froman; Stone; and Flinn.


that the more partisan-minded senates display higher average correlations with ecological variables than the lesser partisan-minded senates. By introducing an essentially nonpartisan, one-party dominant state senate into the equation, the research presented in this paper will attempt to show that partisanship, per se, only partly explains the strength of the association between the aggregate data and the voting behavior, and that the degree of association can be better attributed to voting alignments based on common constituency characteristics, even in the absence of strong partisanship. Due to the nature of the data in this research, this study will also be able to examine a number of propositions concerning constituency influence on voting behavior.

---

CHAPTER II

METHODOLOGY

This study will examine the impact of ecological variables on voting behavior on selected issues in the competitive, partisan state senate of California and the noncompetitive, one-party dominant state senate of Florida. By comparing the differential or nondifferential effect of those variables as functions of levels of partisanship, this study will be able to comment on the accuracy of LeBlanc's findings regarding partisanship and on the question of electoral accountability per ecological association with roll-call votes. Using data from roll-call votes, census and demographic information for the years 1961 and 1965, this research will examine LeBlanc's conclusions on voting with selected issues indicative of intra-party conflict in Florida and inter-party conflict in California.

According to LeBlanc, higher degrees of partisanship relate to stronger correlations between ecological variables and roll-call votes than do lower degrees of partisanship. The rationale is that in highly partisan states, the constituency characteristics of each party are fairly well divided along party lines. Thus, by voting with his party, a legislator is simultaneously voting in accord with his constituents' needs. LeBlanc remarks:
It is probably true that legislative partisanship is encouraged when party and constituency factors are interlocking variables influencing roll-call votes. One might argue further that the successful marriage of party and constituency provides the linkage between legislative divisions and constituency characteristics required of responsible political parties.42

Since Florida is a one-party dominant state, it would appear logical to hypothesize that the influence of ecological-constituency variables on legislative voting behavior would be considerably less in Florida than the effect of those same variables on legislative voting in California, thereby concurring with LeBlanc's findings on the importance of partisanship as an intervening variable affecting the strength of the relationship between ecological variables and roll-call voting. Zeller, however, states that factionalism may have the same effect as a two-party system.43 V. O. Key categorizes Florida as a multi-factional state based on a diversity of economic interests rooted within geographical boundaries.44 Examining Zeller's hypothesis, Parsons finds that conflict on selected issues in the Florida Senate approximates the operations of a two-party system based

---


on constituency differences.  

It can be expected, therefore, that the bi-factional character of the Florida Senate will serve the same function as a two-party system, thereby making it amenable to comparative analysis with the competitive and partisan California Senate. Just as the Democrats and Republicans generally represent different types of constituencies with sometimes conflicting needs and values in a partisan state, it is hypothesized that the legislators of northern and southern Florida represent constituencies with similarly differentiated needs and values and will align their voting patterns accordingly. Consequently, the difference between the selected variables and roll-call voting in Florida and California should be only marginal.

**Scope**

Few studies have been concerned with the analysis of legislative behavior in state senates. Yet, the forces acting upon and within these upper houses are similar to those operating within the context of the legislative system as a whole. Every legislative body is unique, but there exist uniformities in patterns of legislative behavior which, through carefully applied empirical research, can be explained in terms of common processes of legislative functions. Although the generality of this study is limited in its

---

use of only two state senates for comparative purposes, it is hoped that the research design employed herein will be amenable to replication using other states and larger legislative bodies as an analytical base.

The states chosen for this analysis were selected on the basis of their broad, common characteristics and their satisfaction of the partisan-factional requirement. Both states are coastal, have significant urban and rural elements, have a high rate of population growth from outside the state, and are both somewhat atypical of the states in their geographic region in that they resemble each other more along socio-economic lines than they do their bordering states. The availability of senate roll-call data was also an important criterion in the selection of these two states.

The two years selected for this research, 1961 and 1965, were chosen for three considerations. First, they fall within the time period used by Jewell and Patterson to classify states by level of party competition. This study used that classification in the initial selection of state senates. Second, by using years which offset election years, it is possible to check for consistencies and guard against "apparent trends" which may be unique to a given legislative session. Third, roll-call and other data were available for these years.

---

46 Both Key and Parsons note Florida's more industrially advanced status among the Southern states, while LeBlanc comments that California does not follow the legislative patterns exhibited by the other partisan states in his study despite its industrialized status.
years while unavailable for several previous and later years.

**Method of Analysis**

In order to clarify some of the terms and concepts employed in this study, the following operational definitions will be used:

**Ecological variables:** aggregate territorial characteristics derived from the distribution of individual attributes within a Senatorial District.

**Competitive two-party state:** a state with a partisan legislature in which during the years 1947-1966 neither party had dominant legislative control, and in most cases where party control of the legislature approximated control of the governorship. 47 The California Senate was under Democratic control eight years, Republican control ten years, and was equally balanced twice. During this same period, each party controlled the governorship ten years.

**Noncompetitive, one-party dominant state:** a state in which the same party controlled the governorship and both houses with only slightly more than negligible minority representation (10 percent

---

47 This definition is used by Jewell and Patterson to classify state legislatures according to degree of two-party competition. See Malcolm E. Jewell and Samuel C. Patterson, *The Legislative Process in the United States* (New York: Random House, 1966), pp. 143-144.
or less for any one year) during the period of 1947-1966. Florida has met this requirement until recent years.

**Partisanship:** pertaining to California, the degree of partisanship will be determined by three indices:

a. party voting on roll-calls on which a majority of the members of one party vote in opposition to a majority of the members of the other.

b. Rice Index of Cohesion.

c. Index of Likeness.

**Factionalism:** pertaining to Florida, factional alignments will be determined through matrix analysis of senators with Index of Agreement (I.A.) base scores above 75. The I.A. scores will be calculated from intra-party opposition votes where a minimum of

---

48. Jewell and Patterson, p. 143. The authors label this type of state one-party; however, to differentiate between actual one-party states such as Mississippi, Alabama, Louisiana, Arkansas, and South Carolina with negligible minority representation, and states with more than negligible minority representation, this writer is calling this latter group one-party dominant. This classification does not include modified one-party dominant legislatures wherein the same party controlled both houses but not always the governorship during the 1947-1966 period.

49. This is the measure used by Congressional Quarterly. Turner used 90 percent and Jewell used an index of cohesion of 80 for both parties on opposition votes. Since the vast majority of state legislative roll-calls are unanimous or near unanimous, a simple majority differential is required to provide sufficient data for a party voting index when only a small sample of roll-calls are being examined.

10 percent of the Democratic senators vote in opposition to the remaining Democrats.\textsuperscript{51}

The hypotheses to be tested in this study, as they relate to the LeBlanc article and other propositions regarding legislative voting behavior, are:

1. Voting in a partisan-minded senate will display similar average correlations with constituency variables as voting in an essentially nonpartisan, one-party dominant senate.

2. Intra-party voting cleavages will most often occur among senators representing districts atypical of their party identification.

3. Factional voting cleavages will resemble party voting cleavages on certain issues associated with national party identifications.

4. Legislators from similar constituencies will vote alike and in opposition to legislators from constituencies with contrasting ecological characteristics.

5. The voting alignment in the Florida Senate will parallel to a significant degree a sectional alignment of the constituencies. The majority faction will correspond to the strong Democratic districts of north Florida, while the minority faction will correspond to those Democratic constituencies of south Florida that

\textsuperscript{51}This method of identifying legislative factions has proven successful elsewhere; see Anderson, pp. 40-43.
are involved in emergent Republicanism. 52

The ecological variables which will be tested for their association to roll-call votes in the specific issue domains are the following:

1. Presence or absence of Standard Metropolitan Statistical Areas
2. Population per square mile
3. Percentage of population which is urban
4. Percentage of population which is Negro
5. Percentage of population which is of foreign stock
6. Percentage of population employed in manufacturing
7. Percentage of population with white collar jobs
8. Percentage of population with income under $3,000.
9. Percentage of population with income $10,000. and over
10. Number of farms in district

The data for the above percentages for each district will be derived from the County and City Data Book for the years selected in this research. 53

---

52 Delineation of Senatorial Districts into "northern" and "southern" regions is based on William C. Havard and Loren P. Beth, The Politics of Mis-Representation (Baton-Rouge, Louisiana: Louisiana State University Press, 1962), p. 45.

The issue domains were selected on the basis of their ability to elicit factional and partisan voting behavior in the senates. Experience in legislative behavior analysis has consistently shown the following issue areas to produce most of the voting cleavages found in state legislatures.  

1. Taxation and Finance  
2. Conservation and Agriculture  
3. Constitutional Revision  
4. Health and Welfare  
5. Race Relations  
6. Apportionment  
7. Education  
8. Labor  
9. Regulation of Business  

The roll-call votes for each issue area, as found in the California and Florida Journal of the Senate will be examined. The respective State Rosters and Blue Books will provide district and

54 For an excellent explanation of the various legislative issues and the process whereby they are categorized, see Wayne L. Francis, Legislative Issues in the Fifty States: A Comparative Analysis (Chicago: Rand McNally Co., 1967).

party information on each senator. Any missing data will be provided by the respective State Election Commissions. All roll-calls in which a 10 percent opposition vote is present will be used for further analysis. The voting record of each senator in all opposition votes meeting the 10 percent requirement will be calculated into an Agreement Index of the number of times the representative voted with the Democratic majority. The index ranges from zero to 100, with a score of zero indicating complete opposition to the Democratic Party majority in California and Florida, and a score of 100 indicating perfect loyalty to the Democratic Party. A Pearson product-moment correlation will measure the linear relation between the independent constituency variables and the voting indexes of the senators for each state. Comparison of the correlations between the two states will reveal whether the lack of a formal partisan structure in Florida diminishes the relationship between ecological variables and senate voting as compared to California. The strength of the correlations will show the extent to which the selected independent variables relate to roll-call voting in the two senates.

Examination of the ecological basis for the Florida factions

---

56 See California Secretary of State, California Blue Book, 1961; California Secretary of State, California Roster, 1965; Florida Secretary of State, Florida Blue Book, 1961; and Florida Secretary of State, Florida Blue Book, 1965.

57 This is the same index calculated by LeBlanc for the senators of his study. See Hugh L. LeBlanc, "Voting in State Senates: Party and Constituency Influences," Midwest Journal of Political Science, 8 (February 1969), p. 48.
and the two California parties will reveal whether or not factional and party identity relates to contrasting ecological characteristics. Cohesion and likeness scores will indicate the relative influence of contrasting constituency characteristics on voting behavior in the senates. The districts of senators whose voting index falls below their party's mean score will be examined to determine whether they are atypical of their party.

**Limitations**

The research presented in this paper is confronted with three limitations: the ecological fallacy; roll-call analysis; and the use of only two states to test the hypotheses.

The ecological fallacy questions the validity of inferences drawn from different levels of analysis. In this research, the question concerns the validity of generalizations made about individual voting behavior on the basis of aggregate demographic characteristics. Erik Allardt, however, defends the use of ecological analysis primarily because the inferences drawn from different levels of analysis are not always fallacious.

---

analysis tend to have a high informative value. The United Nations International Data Confrontation Seminar reports that on both technical and conceptual grounds, it is clear that the case against ecological data and inferences drawn therefrom has been greatly exaggerated.

... ecological studies that interrelate the characteristics of particular groups, populations, or areas can be productive of important findings and can certainly serve as useful if not indispensable supplements to investigations at the individual level. Moreover, investigators are often interested in the characteristics of a group or territorial unit in order to provide a context for understanding individual characteristics.

Contextual analysis as used in this study is useful, for the ecological correlations may tell something about territorial units which can be used as contextual properties to explain the variations in the correlated variables. Contextual generalizations, such as this study is expected to generate, tend to be less trivial than generalizations based entirely on grouped or entirely on individual data. However, it must be realized that the external validity of those generalizations may be threatened by intervening variables which cannot be accounted for in the methodology of this research.

The second limitation concerns the use of roll-call data for


analytical purposes. The roll-call vote is not a perfect index of each senator's contribution to a decision. Nor is it assumed that the vote indicates how a member really feels about an issue. Roll-call statistics reveal how a legislator voted, not why. However, the roll-call is a significant step in the decision-making process of a representative. If a legislator is forced to choose among the competing demands of his constituency, party leadership, or committee colleagues, he may resolve the conflict by playing different roles. Regardless of his choice, his public role stands revealed by the nature of his vote. Causal relationships cannot be proven by roll-call statistics, but, as noted by Jewell and Patterson,

> Roll-call statistics do provide evidence . . . that may be added to our other sources of knowledge about the legislative system, so as to provide the basis for judgments about the importance of party, constituency, and other sources of voting cues.\(^6\)

Limited time and financial resources permit only two states to be analyzed in this study. The history, processes and mechanism involved in factionalism and partisanship may vary from state to state, thereby limiting the scope of the generalizations of this inquiry. Despite the differences among the states, there also exist generic similarities which do allow generalizations of a narrow scope to be made.

\(^6\)Jewell and Patterson, p. 416.
CHAPTER III

RESULTS OF ANALYSIS

The ability of the nine selected issue areas to actually elicit intra-party and inter-party conflict was examined to determine the extent of party voting in California and intra-party opposition in Florida. Three measures were used in this regard: the Rice Index of Cohesion, the Index of Likeness, and Yule's Q. The Index of Cohesion has a range of zero to 100, with zero indicating no cohesion and 100 indicating total cohesion in party voting. The Index of Likeness, a measure of inter-group difference, has the same range with zero representing total dissimilarity in group voting, while 100 represents complete similarity in voting response. The third measure is Yule's Q, with a range of -1 to +1; the extremes indicate strong association, with convergence meaning decreasing strength of association.

Table 1 illustrates the wide range of cohesion and likeness scores found in California during the 1961 and 1965 sessions. It can be seen, with the exception of the apportionment issue, that both parties were generally cohesive on each issue area, with race relations manifesting the highest cohesion. The low cohesion displayed on the apportionment issue is somewhat surprising, for apportionment bills generally evoke strong partisan responses as each
<table>
<thead>
<tr>
<th></th>
<th>1961</th>
<th>1965</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DEM</td>
<td>REP</td>
</tr>
<tr>
<td>Taxation and Finance</td>
<td>49</td>
<td>82</td>
</tr>
<tr>
<td>Apportionment</td>
<td>38</td>
<td>20</td>
</tr>
<tr>
<td>Health and Welfare</td>
<td>65</td>
<td>62</td>
</tr>
<tr>
<td>Education</td>
<td>56</td>
<td>61</td>
</tr>
<tr>
<td>Business Regulation</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Conservation and Agriculture</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>Revision</td>
<td>58</td>
<td>54</td>
</tr>
<tr>
<td>Constitutional</td>
<td>63</td>
<td>100</td>
</tr>
<tr>
<td>Race Relations</td>
<td>68</td>
<td>52</td>
</tr>
<tr>
<td>Labor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The measure of association used to determine the degree of inter-party difference on the issue areas in Yule's Q. This measure will reveal differences between Republicans and Democrats in terms of the portion of total support or opposition each party supplies. Chi square values are also tabulated to assess the existence of differences between the parties beyond the expectations of chance. Table 2 shows that the strength of inter-party differences is strongest in the area of race relations, weakest in business regulation, health and welfare, and conservation and agriculture, while somewhat moderate in the remaining issue domains. These findings suggest that on at least half of the selected issue areas, competitive party voting exists in the California Senate. If this portion of the research had revealed marginal or no indications of partisan conflict in California, any forthcoming conclusions regarding the initial hypothesis would be

---

### TABLE 2

INTER-PARTY DIFFERENCES ON SELECTED ISSUE AREAS IN CALIFORNIA, 1961, 1965

<table>
<thead>
<tr>
<th>Issue</th>
<th>1961</th>
<th></th>
<th>1965</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$X^2$</td>
<td>$Q$</td>
<td>$X^2$</td>
<td>$Q$</td>
</tr>
<tr>
<td>Labor</td>
<td>0.50*</td>
<td>-0.16</td>
<td>5.9</td>
<td>0.39</td>
</tr>
<tr>
<td>Race Relations</td>
<td>5.5</td>
<td>-1.0</td>
<td>6.2</td>
<td>0.83</td>
</tr>
<tr>
<td>Constitutional Revision</td>
<td>20.6</td>
<td>0.46</td>
<td>32.7</td>
<td>0.52</td>
</tr>
<tr>
<td>Conservation and Agriculture</td>
<td>2.7</td>
<td>0.17</td>
<td>31.6</td>
<td>0.23</td>
</tr>
<tr>
<td>Business Regulation</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.20*</td>
<td>0.09</td>
</tr>
<tr>
<td>Education</td>
<td>9.9</td>
<td>-0.35</td>
<td>39.8</td>
<td>0.46</td>
</tr>
<tr>
<td>Health and Welfare</td>
<td>0.10*</td>
<td>-0.05</td>
<td>0.10*</td>
<td>0.03</td>
</tr>
<tr>
<td>Apportionment</td>
<td>0.50*</td>
<td>0.20</td>
<td>9.7</td>
<td>0.57</td>
</tr>
<tr>
<td>Taxation and Finance</td>
<td>10.5</td>
<td>-0.55</td>
<td>1.7*</td>
<td>0.38</td>
</tr>
</tbody>
</table>

d.f. = 1

*not significant at p = .05
spurious. Although Jewell and Patterson used a different method in their classification of California, their partisanship ranking of the state appears consistent with the findings of this research.

To measure the extent of intra-party opposition in Florida requires a different methodological approach than the one utilized for California. In hypothesizing that factionalism is operating within the Florida Senate, this study must first identify the factions, then reveal the basis for the alignments. If intra-party opposition exists in Florida, the Index of Cohesion for the Democratic majority should be generally low across the selected issue domains. Table 3 shows that the cohesion scores for the Florida Senate are generally lower than those found in California but are considerably higher on several issue areas than would be expected. Recalling Miller and Stokes' findings, it may be that only those issues which are perceived to be visible and salient by the legislators elicit intra-party opposition in a factionally dominated senate. Note the discrepancies in cohesion scores on the education and apportionment issues for the two years. Apparently the saliency of the issues can vary tremendously over time.

To identify the factions in the Florida Senate, matrices of interpersonal agreement index scores were calculated. All senators whose scores were 75 or higher were compared to find a faction of senators whose agreement scores were interrelated at the 75 base and above.

For 1961, a minority faction of thirteen senators was
TABLE 3

MEAN INDEX OF COHESION ON SELECTED ISSUE AREAS IN FLORIDA, 1961, 1965

<table>
<thead>
<tr>
<th>Issue</th>
<th>1961</th>
<th>1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>45.0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Race Relations</td>
<td>30.0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Constitutional Revision</td>
<td>42.7</td>
<td>N.A.</td>
</tr>
<tr>
<td>Conservation and Agriculture</td>
<td>44.5</td>
<td>50.5</td>
</tr>
<tr>
<td>Business Regulation</td>
<td>35.4</td>
<td>40.5</td>
</tr>
<tr>
<td>Education</td>
<td>66.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Health and Welfare</td>
<td>45.9</td>
<td>56.3</td>
</tr>
<tr>
<td>Apportionment</td>
<td>64.3</td>
<td>27.1</td>
</tr>
<tr>
<td>Taxation and Finance</td>
<td>44.6</td>
<td>45.8</td>
</tr>
</tbody>
</table>
discovered. In relation to the rest of the senate, an Index of Likeness of 10 was found. For 1965, a faction of twelve senators existed with an IL score of 11. Given the presence of a factional group in Florida, the next step is to determine the basis for this particular alignment of senators.

One way of examining the hypothesis that the bifactional character of the Florida Senate divides along an urban-rural cleavage is to compare the percentage of voting pairs, as evidenced by the Index of Agreement, among senators representing Standard Metropolitan Statistical Area (SMSA) districts and senators from non-SMSA districts. Although SMSA is not in itself an accurate measure of urbanization and only denotes the presence or absence of a statistically defined metropolitan area, it suffices as a generic index of a dichotomous demographic trait.

When the Index of Agreement is averaged for all senators representing SMSAs, a mean of 58 is found. This means, of course, that in 1961 on 85 roll-call votes, the "urban" senators voted alike on only 58 percent of the bills. With such low cohesion on the part of the urban legislators, it is unlikely that an urban-rural cleavage accounts for any extensive faction within the senate. Although the "rural" senators display a slightly higher agreement percentage, they do not, as a group, indicate a pervasive factional alignment. The same method was used to determine whether the senate divided along a north-south cleavage, as suggested by Parsons. The mean agreement index for northern senators in 1961 is 63 and only 60 for the southern
senators. One can only conclude on the basis of this information that northern and southern divisions, like the urban-rural cleavage, do not indicate the presence of extensive bifactionalism in the Florida Senate. The figures for 1965, with slight variation, appear consistent with the finding for 1961 (see Table 4).

Although this research finds no evidence of pervasive factionalism along regional or urban-rural lines, it may be that the factions that were isolated earlier or those senators with very high agreement scores will conform to such distinctions. Tables 5 and 6 reveal some interesting findings in this regard. Both years reveal a high percentage of senators who voted alike on at least 80 percent of all divisive roll-call votes according to SMSA criteria. Of those not pairing along SMSA lines in 1965, the senator from District 8 accounts for 57 percent of the variance in "incorrect" pairing. For both years, then, SMSA appears to be a valid and strongly associative variable to factional roll-call behavior. Table 6 shows that the Democratic minority faction in the Florida Senate consisted primarily of "rural" senators. This finding does provide some evidence that the basis for the bifactional character of the senate can be attributed to an urban-rural cleavage to some extent. On the other hand, the data from both Tables 5 and 6 show little evidence of regionalism accounting for factionalism in the state. Despite northern predominance in the minority faction, the strong percentage of southern districts appears to weaken Parson's argument that the Florida Senate is divided along a north-south cleavage, especially in
TABLE 4

BIFACTIONALISM IN THE FLORIDA SENATE AS MEASURED
BY THE INDEX OF AGREEMENT, 1961, 1965

<table>
<thead>
<tr>
<th></th>
<th>1961</th>
<th>1965</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMSA Districts</td>
<td>58</td>
<td>62</td>
</tr>
<tr>
<td>Non-SMSA Districts</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td>Northern Districts</td>
<td>63</td>
<td>64</td>
</tr>
<tr>
<td>Southern Districts</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>All Districts</td>
<td>61</td>
<td>60</td>
</tr>
</tbody>
</table>
### TABLE 5

**BIFACTIONALISM IN THE FLORIDA SENATE AS MEASURED BY AN 80 BASE INDEX OF AGREEMENT, 1961*, 1965**

<table>
<thead>
<tr>
<th>Year</th>
<th>Agreement along Urban-Rural Cleavage</th>
<th>Agreement along North-South Cleavage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>79%</td>
<td>74%</td>
</tr>
<tr>
<td>1965</td>
<td>69%</td>
<td>47%</td>
</tr>
</tbody>
</table>

*29 total pair combinations  
**53 total pair combinations

### TABLE 6

**PERCENTAGE OF MINORITY FACTION DIVIDING ALONG SMSA AND NORTH-SOUTH CRITERIA, 1961, 1965**

<table>
<thead>
<tr>
<th>SMSA</th>
<th>Non-SMSA</th>
<th>North</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>15%</td>
<td>85%</td>
<td>54%</td>
</tr>
<tr>
<td>1965</td>
<td>8%</td>
<td>92%</td>
<td>66%</td>
</tr>
</tbody>
</table>
1961 when there are nearly as many southern senators as there are northern senators in the minority faction. Also note that the minority faction does not correspond to the Democratic constituencies of the southern section of Florida as Parsons predicted they would.

The fact that different districts formed the factional alignments each year suggests that V. O. Key's initial hypothesis concerning political atomization and multifactionalism in Florida may still hold true to some extent. Because Key used gubernatorial races as the basis for his analysis of multifactionalism, this study cannot accurately examine his hypothesis. The research presented here did find the existence of bifactionalism in the Senate, but the factional elements appear to be based on shifting alliances among northern and southern districts. In terms of electoral accountability, bifactionalism is preferred over multifactionalism. According to Margaret Echols and Austin Ranney,

Multifactional one-partyism makes politics formless and hard for the voters to comprehend. It renders elections useless as devices for holding leaders effectively to account. It constitutes a major deterrent against good people entering politics. And it makes government especially susceptible to manipulation by pressure groups.

Because an urban-rural distinction appears evident with the factions isolated in this study, electoral accountability may not be as


threatened in Florida as these authors would suggest given Key's conclusions. Havard and Beth note that Florida legislators are generally responsive to local influences. They write, "Not only is this concern with local attitudes related to the popular demand for direct representation, but part of the 'modus operandi' of the two houses themselves is built around this expectation."65

To test the hypothesis that factional voting cleavages resemble party voting cleavages in terms of national party identification, this study will compare the mean ecological variable characteristics of the minority faction against the mean characteristics of the rest of the Senate. If a substantial difference exists which makes one group appear Republican-like in relation to the other group, then the hypothesis would be confirmed. The figures from Table 7 do not confirm the hypothesis as the differences between the characteristics of the Democratic faction and the rest of the senate do not resemble party differences to any large extent. On the variables population per square mile, percent urban, percent foreign stock, and number of farms, the faction does appear to take on the characteristics of Republican identity, but for the most part, the differences between the variables are too small to have any significance. Note also the large numerical shift in number of farms within the minority faction between 1961 and 1965. Such a shift suggests again that the

TABLE 7

COMPARISON OF ECOLOGICAL CHARACTERISTICS OF MINORITY FACTION WITH REMAINING SENATORIAL DISTRICTS IN FLORIDA, 1961, 1965

<table>
<thead>
<tr>
<th></th>
<th>1961 Faction</th>
<th>1961 Others</th>
<th>1965 Faction</th>
<th>1965 Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>935</td>
<td>747</td>
<td>435</td>
<td>833</td>
</tr>
<tr>
<td>Income $10,000 and over (percent)</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Income under $3,000 (percent)</td>
<td>42</td>
<td>33</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>Percent White Collar</td>
<td>34</td>
<td>37</td>
<td>36</td>
<td>39</td>
</tr>
<tr>
<td>Percent Employed in Manufacturing</td>
<td>14</td>
<td>14</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Percent Foreign Stock</td>
<td>7</td>
<td>9</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Percent Negro</td>
<td>23</td>
<td>23</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Percent Urban</td>
<td>40</td>
<td>53</td>
<td>34</td>
<td>57</td>
</tr>
<tr>
<td>Population per square mile</td>
<td>39</td>
<td>130</td>
<td>39</td>
<td>148</td>
</tr>
</tbody>
</table>
faction is not very stable over time.

Given the presence of factional politics in Florida and generally competitive party politics in California, this inquiry can proceed to test the hypothesis that voting in a partisan-minded senate will display similar average correlations with constituency variables as voting in an essentially nonpartisan, one-party dominant senate. Table 8 shows the correlation coefficients between the calculated voting index of each state's senators and the selected ecological variables. It can be readily seen that the correlations for California are not consistently higher than those for Florida. Although California displays higher correlations on six of the issue areas in 1961 and on five of the nine issue areas in 1965, the overall weakness of the linear relationships compared to the Florida correlations indicates that factionalism in Florida may have approximated the operations of a two-party system. Apparently, partisanship in itself, as characterized by a structured organization and formal party leadership does not explain the strength of the relationship between ecological variables and roll-call behavior. That aspect of partisanship, however, relating to inter-party constituency differences does appear to correspond to intra-party differences in a factionally dominated senate where constituency characteristics are associated with voting behavior. The weakness of the correlations in both states, however, suggests that the association between ecological variables and voting behavior is moderate in a few instances but negligible in most. Although it cannot be inferred that the senators are not
# Table 8

**Association (r) Between Ecological Characteristics and Voting Index in California and Florida, 1961, 1965**

<table>
<thead>
<tr>
<th></th>
<th>1961 Florida</th>
<th>1961 California</th>
<th>1965 Florida</th>
<th>1965 California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>-.04*</td>
<td>-.27</td>
<td>.04*</td>
<td>-.21</td>
</tr>
<tr>
<td>Income $10,000 and Over (Percent)</td>
<td>-.19</td>
<td>-.03*</td>
<td>-.05*</td>
<td>-.32</td>
</tr>
<tr>
<td>Income under $3,000 (Percent)</td>
<td>.02*</td>
<td>.16</td>
<td>-.16</td>
<td>.28</td>
</tr>
<tr>
<td>Percent White Collar</td>
<td>-.05*</td>
<td>-.22</td>
<td>.08</td>
<td>-.15</td>
</tr>
<tr>
<td>Percent Employed in Manufacturing</td>
<td>-.03*</td>
<td>-.16</td>
<td>-.11*</td>
<td>-.07</td>
</tr>
<tr>
<td>Percent Foreign Stock</td>
<td>.01*</td>
<td>-.28</td>
<td>.28</td>
<td>-.31</td>
</tr>
<tr>
<td>Percent Negro</td>
<td>.08*</td>
<td>-.14</td>
<td>.21</td>
<td>-.31</td>
</tr>
<tr>
<td>Percent Urban</td>
<td>-.13</td>
<td>-.04*</td>
<td>.27</td>
<td>-.11*</td>
</tr>
<tr>
<td>Population per Square Mile</td>
<td>-.41</td>
<td>.20</td>
<td>.22</td>
<td>.06*</td>
</tr>
</tbody>
</table>

*not statistically significant
responsive to their constituents' needs, it is apparent that the influence of the selected constituency characteristics on legislative voting behavior is quite weak. The best single predictor of roll-call behavior in Florida was population density. Since this variable, along with percent urban, appears strongly related to SMSA and urban-rural distinctions, it is not surprising that they account for most of the variance ($r^2$). For California, the best predictors are percent foreign stock and percent of population with income $10,000 and over. Surprisingly, in 1966, LeBlanc found these correlations to be only -.01 and -.16 respectively. Considering the theoretical link between party and constituency in partisan states, one would expect high correlations between socio-economic variables and roll-call voting. Again, the correlations are too weak to infer senatorial responsiveness on the basis of perceived ecological traits.

The hypothesis that intra-party voting cleavages will most often occur from senators representing districts atypical of their party identification proves unconfirmed for Florida, primarily because the heterogeneous character of the Democratic Party in Florida obfuscates the concept of party identification. Only two senators in 1965 representing SMSA districts consistently voted with senators representing non-SMSA districts. The ecological characteristics of their districts were substantially atypical of the other SMSA

districts. Table 9 shows the mean figures for the ecological variables of the SMSA districts, excluding the "atypical" districts one and eight, and the figures for the two atypical districts. The standard deviations are given to show the dispersion of data around the means as well as to illustrate the scope of the difference among the selected variables.

On the variables population per square mile, percent urban, percent Negro, percent white collar, and percent of population with income $10,000 and over, the two districts diverge from the mean scores beyond one standard deviation. Their ratings on the first two variables relating to population density and degree of urbanization appear to characterize District 1 and 8 as more rural than urban. In the 1965 session of the Florida Senate, some intra-party voting cleavages can be explained in terms of senators representing atypical districts, but no evidence exists suggesting that voting cleavages most often occur from senators representing atypical districts.

A less significant, yet valid test of the hypothesis for the 1961 session of the senate is to operationally define all urban districts as "atypical districts," since 71 percent of the senate represented rural districts based on SMSA and percent urban criteria. One could, therefore, hypothesize urban legislators to manifest generically lower voting indices than their rural colleagues. A mean voting index of 73 exists for all roll-call votes across the selected issue domains. Of the urban senators' indices, 70 percent fall below this average. This means, of course, that the majority of the urban
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>District 1</th>
<th>District 8</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td>1,035</td>
<td>624</td>
<td>377</td>
<td>886</td>
</tr>
<tr>
<td>Income $10,000 and Over (Percent)</td>
<td>11</td>
<td>7</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Income under $3,000 (Percent)</td>
<td>26</td>
<td>30</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td>Percent White Collar</td>
<td>44</td>
<td>38</td>
<td>53</td>
<td>3</td>
</tr>
<tr>
<td>Percent Employed in Manufacturing</td>
<td>13</td>
<td>23</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Percent Foreign Stock</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Percent Negro</td>
<td>17</td>
<td>7</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>Percent Urban</td>
<td>83</td>
<td>14</td>
<td>65</td>
<td>14</td>
</tr>
<tr>
<td>Population per Square Mile</td>
<td>343</td>
<td>29</td>
<td>111</td>
<td>138</td>
</tr>
</tbody>
</table>
senators do not vote as frequently with the Democratic majority as do the rural senators. On this basis, the hypothesis may be partially confirmed; yet the presence of a minority rural faction, as previously indicated, may weaken any such conclusions.

Applying the same methodology to California, it is found that the majority of the Republicans represented urban districts during the two legislative sessions while Democrats represented primarily rural districts. If representatives from atypical districts account for most of the intraparty voting cleavages, then rural Republicans should display high voting indices and urban Democrats low voting indices in relation to the mean index for each senate session. Tables 10 and 11 reveal, with the exception of urban Democrats in 1965, that the parties satisfy the hypothetical requirements. This data also appears to confirm the hypothesis that representatives from similar constituencies vote alike and in opposition to representatives from constituencies with contrasting characteristics. The urban and rural cleavages in the Florida Senate, with their corresponding voting alignments, also confirm the hypothesis that different constituencies result in different voting patterns. This does not, however, apply to all the voting patterns found in the senate. As was mentioned earlier, many alignments may be temporarily made on the basis of committee membership, pressure group influences, executive requests, and so forth, all independent of constituency considerations.
### TABLE 10

**Percent Rural Republicans with Voting Index Above the Mean Index,** *1961, 1965*

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>80%</td>
</tr>
<tr>
<td>1965</td>
<td>100%</td>
</tr>
</tbody>
</table>

*1961 mean index = 75  
1965 mean index = 73

### TABLE 11

**Percent Urban Democrats with Voting Index Below the Mean Index,** *1961, 1965*

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>54%</td>
</tr>
<tr>
<td>1965</td>
<td>40%</td>
</tr>
</tbody>
</table>

*1961 mean index = 78  
1965 mean index = 85
CHAPTER IV

CONCLUSIONS

Legislative behavior in the Florida and California senates appears to reflect each dimension of role theory in varying degrees. Representatives may likely assume different rôle orientations as demands upon them change over time. These orientations naturally correspond to the relative impact constituency variables have on representatives' voting behavior. In Florida, members of the minority faction appear to resemble instructed delegates more than party loyalists, while the majority faction, with its more dispersed voting patterns, resembles politicos or trustees more than instructed delegates. Party voting exists in California, but is weak enough on some issues to suggest delegate or trustee-type behavior on the part of many senators. Regardless of the role orientations the legislators may or may not assume, it is apparent from the correlations that either their perceptions of constituency attitudes are not based on ecological characteristics or that they are generally unresponsive to their constituents on the selected issues. This conclusion is not surprising for the Florida Senate despite the presence of a small, but cohesive minority faction. Susan Welch finds that in the absence of party leadership and organization, voting in a nonpartisan legislature is high unstructured, and party and constituency influences appear to
be insufficient cues for the organization of legislative voting behavior.\textsuperscript{67} Although the presence of a limited urban-rural cleavage in Florida does introduce some structure into the voting alignments, it does not manifest distinctive and pervasive voting patterns. This behavior appears to be applicable to the Federal level as well. Jewell and Patterson note that several studies of the United States House of Representatives reveal that the voting behavior of urban congressmen differs from that of rural congressmen, but the differences are not major and seem to vary with the issues.\textsuperscript{68} There is emerging evidence that the Florida Senate will gradually, if it has not already, display increasingly greater party organization and structure. The maturing of the Republican Party into a viable political force in Florida was the outstanding development in Florida politics in the 1960-1970 decade. Hartsfield and Roady state that the ability of the Republicans to win strongly contested elections on a state-wide basis is now a fact, and that the increasing strength of the Republicans, as shown on the voter registration books, is a further manifestation of two-party development in Florida.\textsuperscript{69} Given the ecological heterogeneity

\textsuperscript{67}Susan Welch, "The Impact of Party on Voting Behavior in a Non-Partisan Legislature," \textit{American Political Science Review}, 67 (September 1973), 855.


of the Democratic Party, however, it is unlikely that party voting will come to reflect constituency differences as premised in the responsible-party model of representation.

Summarizing the findings of this research regarding the testing of the initial hypotheses results in the following confirmations:

1. Voting in a partisan-minded senate will display similar average correlations with constituency variables as voting in an essentially nonpartisan, one-party dominant senate.

2. Legislators from similar constituencies will vote together and in opposition to legislators from constituencies with contrasting ecological characteristics.

The hypotheses which were examined and proved unconfirmed by the findings of this study are:

1. Factional voting cleavages will resemble party voting cleavages on certain issues associated with national party identifications.

2. The voting alignment of the Florida Senate will parallel to a significant degree a sectional alignment of the constituencies. The majority faction will correspond to the strong Democratic districts of north Florida, while the minority faction will correspond to the Democratic constituencies of south Florida.

The hypothesis that intra-party voting cleavages will most often occur among senators representing districts atypical of their party identification proved unconfirmed for Florida but confirmed for
California on the basis of SMSA criteria. In one-party states exhibiting factional politics wherein party identity is vague, it is difficult to define what constitutes typical or atypical districts. However, even when considering all Florida senatorial districts with Republican-like constituency characteristics as "atypical," the hypothesis remained unconfirmed.

An ancillary hypothesis that was tested with regard to Florida proposed the presence of an urban-rural cleavage in the Senate which would provide the basis for the factional alignments. Although the Senate was not significantly divided along urban-rural lines, the minority faction did appear to be characterized by a rural distinction which consistently voted in opposition to most urban and a few rural majority faction members.

On the basis of this inquiry, it is apparent that partisanship, as described in terms of party leadership and formal organization, does not explain the strength of the relationship between ecological variables and roll-call votes. That aspect of partisanship, however, relating to the correspondence between party identity and constituency characteristics appears to provide a more accurate explanation of partisanship influence on voting behavior. In this respect, the marginal differences between the correlation coefficients of Florida and California can be understood. The minority faction in the Florida Senate serves the same function as an opposition party based on constituency characteristics, despite the absence of formal structure and leadership.
To place the foregoing in the context of the initial premise which prompted this study, it is probably true that electoral accountability is encouraged when party and constituency are interlocking variables affecting roll-call votes, with responsible political parties as the consequence. However, in the absence of an effective two-party system, bifactionalism may serve as a surrogate for partisanship and realistically contribute to electoral accountability, even if only to a lesser extent. The size of the opposing factions greatly influences the degree to which a state's politics will approximate a two-party system. The fact that Florida's minority faction constitutes less than a third of the total Senate may account for the generally weak association of ecological variables to roll-call votes in that state. The majority faction need not be consistent in its opposition to the numerically weaker minority and much logrolling may occur. The weak correlations for the California Senate can only be explained in terms of obscure links between constituency and party, despite evidence of fairly strong partisanship on certain issues. A plausible alternative explanation would be that the selected ecological variables are not perceived as salient indicators of constituency needs and values. The association of the aggregate ecological characteristics to voting behavior is evident; yet the weakness of the association suggests a need for further empirical analysis utilizing, perhaps, different independent variables and other state legislatures.
BIBLIOGRAPHY


_____. California Roster, 1965.


Campbell, Angus; Philip Converse; Warren E. Miller; and Donald E. Stokes. The American Voter (New York: John Wiley and Sons, 1960).


VITA

Wesley Sutphen Dennis


In September 1974, the writer entered the College of William and Mary as a graduate assistant in the Department of Government. The writer is presently an M.A. candidate with a concentration in American Politics. The course requirements for the degree have been completed and conferral of degree is pending approval of thesis: The Ecological Basis of Voting Behavior in Two State Senates. The writer is married and has one son.