

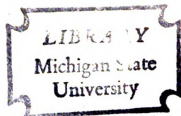
SPATIAL CHANGE IN POST-WAR  
SOUTHERN REPUBLICAN VOTING  
RESPONSES

Dissertation for the Degree of Ph. D.  
MICHIGAN STATE UNIVERSITY  
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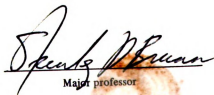
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SPATIAL CHANGE IN POST-WAR SOUTHERN  
REPUBLICAN VOTING RESPONSES

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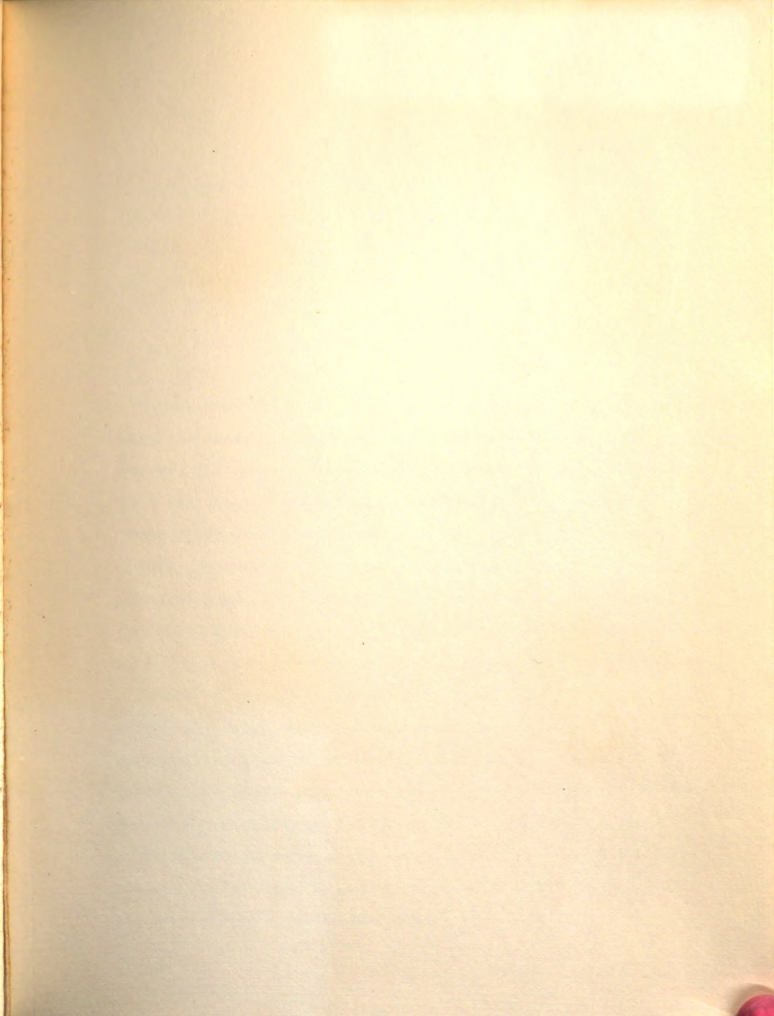




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1. Introduction

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## SPATIAL ANALYSIS OF REPUBLICAN VOTING RESPONSES

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The Republican party, which in previous years had been dominant in the Southern South, has recently begun to demonstrate a significant resurgence in electoral potency. This inquiry focuses on the electoral resurgence associated with the recent growth of Republican electoral support in the Southern South. A sample of 448 counties drawn from seven Southern states is used. Attention is given to the identification of spatial patterns in Republican voting responses at the presidential and congressional levels of competition from 1948 to 1972 and to the identification of regional patterns in the patterns of these responses. Spatial analysis of voting responses is identified by computer techniques which develop the spatial density of a set of weighted data points. Changes in voting responses are identified by the use of ring and sector analysis of the weighted data values. The description of the spatial patterns in the Republican voting response surfaces forms the basis for the subsequent examination which centers on the thesis of an interrelated relationship between change. The hypothesis of positive relationship between the level and level of Republican electoral support is tested.

It appears that electoral change, in the form of increased levels of Republican electoral support, has produced patterns of electoral response quite unlike those of the years preceding 1948. Electoral support has moved from a concentration in historical

ABSTRACT

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SPATIAL CHANGE IN POST-WAR SOUTHERN  
REPUBLICAN VOTING RESPONSES

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The Republican party, long an electoral anathema in the American South, has recently begun to demonstrate a measure of competitive potency. This inquiry focuses on the electoral change associated with the recent growth of Republican electoral support in a contiguous sample of 448 counties drawn from seven southern states. Particular attention is given to the identification of spatial regularity in Republican voting responses at the presidential and senatorial levels of competition from 1948 to 1972 and to the identification of changes in the patterns of these responses. Spatial regularity of voting response is identified by computer techniques which describe the shape and density of a set of weighted data points. Changes in these voting responses are identified by the use of ring and sector analysis of the weighted data values. The description of the spatial structure of the Republican voting response surfaces forms the basis for the primary examination which centers on the thesis of an urban-centered electoral change. The hypothesis of positive relationship between urban size and level of Republican electoral support is examined.

It appears that electoral change, in the form of increased levels of Republican electoral support, has produced patterns of electoral response quite unlike those of the years preceding 1948. Electoral support has moved from a spatial concentration in historical "cores" of traditional Republican support to a distribution of support that approaches spatial uniformity. This change is not constant across varying levels of electoral competition, however, since Republican presidential candidates demonstrate higher levels and more uniform patterns of support than senatorial candidates. Thus a strong evidence of time lag in the growth of support can be identified between these two levels of competition.

The expected positive association between population size or urban structure and the level of Republican support is verified. The pattern of this positive association is, however, strongest in earlier elections (1948-1960) and begins to weaken in later years (1964-1972). In later years a marked tendency toward decreasing levels of support at higher echelons of population size is also notable. The coincidence of more uniform patterns of electoral support, higher levels of support, and a weakening association between urban size and level of vote leads to speculation that the grassroots organizational activity of the Goldwater years are perhaps bearing fruit. And although early electoral change was closely tied to higher levels of urban structure, the later growth has achieved a measure of uniformity suggestive of approaching competitiveness.

Michigan State University  
For the Department of  
Department of Geography



SPATIAL CHANGE IN POST-WAR SOUTHERN  
REPUBLICAN VOTING RESPONSES

By

Gerald Lynn Ingalls

A DISSERTATION

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To Joyce, who believed

Science Research for advice and assistance. And in particular, I would like to express my appreciation to Dr. Robert J. Mitterick for his advice, criticism, time and effort in my behalf.

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## CHAPTER I

### A CONCEPTUAL FOUNDATION FOR THE RESEARCH PROBLEM

#### Theoretical Developments in Voting Behavior Research

With the systematic replication of measurements of significant events, the comparative study of populations in differing political environments, and the integration of information from interrelated levels of the political system, the analysis of political behavior is entering a new phase.

(Campbell, Converse, Miller and Stokes, 1967, 6)

Voting behavior has long held a special fascination for those social scientists concerned with political phenomena. The advent of modern technological advances has served to accentuate this attraction. Increasingly more sophisticated computer technology has made available an ever increasing volume of information while improved measurement and analytical capacities have enhanced the scientists' capacities to deal with it. In the study of electoral behavior, as in other arenas of social science inquiry, the consequences of these technological advances have been significant. Much larger volumes of voting data, offering greater geographic variety, and extended longitudinal coverage, can now be processed in far less time and with far greater accuracy than ever before. But, unlike many other arenas of social science inquiry, in the study of electoral behavior, this information and technology explosion has not come at the expense of

theoretical development. Conceptual and theoretical advances have virtually kept pace with technological developments. But the pace of theoretical advances has not been uniform across all arenas of social science inquiry. The primary impetus for the continued development of theory relating to voting behavior has come from political scientists; their counterparts in voting behavior inquiry in sociology and geography have provided less substance to general theory of voting behavior. Yet, the dominance of one discipline does not, as a consequence, make the search for understanding voting behavior any less an interdisciplinary endeavor. On the one hand, tangential disciplines cannot strike forth to develop complementary bodies of theory revolving about individual disciplinary foci. Such a path leads only to compartmentalization and duplication. Obviously, cross disciplinary cooperation and coordination serve well the cause of substantive theoretical development in voting behavior research. On the other hand, care must be taken so as not to carry the spirit of such cooperation and uniformity of interest and scientific pursuit so far as to ignore the merits of academic divisions. Each discipline certainly has its own unique focus which can contribute fresh new ideas and approaches simply by asking questions and stressing research areas that other disciplines fail to do. The inherent danger of academic uniformity is the potentially stifling effect it might have on such unique directions and foci of inquiry. It is obvious that as scientists we cannot afford to neglect any relevant aspect of voting behavior if we are to obtain our goal of better understanding of human behavior in an electoral context.

any interests of this inquiry which are not only theoretical but also operative in the voting decision; however, the only way to achieve this



Of course, the apparent dichotomy between the uniqueness of division and the uniformity of cooperation is contrived. In working to the strength of a particular disciplinary focus or mode of inquiry, a researcher does not necessarily dilute the impact of the results on general electoral theory. It is usually the design or the implementation of a research design that accomplishes this. On the contrary, as Robert Sack (1972) suggests, a unique mode of inquiry well founded in general literature can serve to advance general theory by asking questions that might not have been asked otherwise.

It is this line of thought that has guided the inception of this research effort. The problem approached in this inquiry is certainly not unique. The problem centers on accounting for changing patterns of electoral support for a political party and the results are intended

to provide additional insight into the nature of electoral change.

The primary objectives, goals, hypotheses and research outlook do reflect a distinct disciplinary bias. The electoral process is viewed through a geographic or spatial perspective. The primary emphasis is upon empirical investigation of the nature of spatial structure of the voting response surface and upon the spatial process that is reflected in the creation and change of patterns of support for a political party. Special attention is given to accurate description of the voting response structure, but only as a means of providing a foundation for the principal investigation which centers upon the processes that created the structure. It is in these processes that we can expect to find the key that unlocks the complexities of the voting decision itself. Thus, the primary interests of this inquiry centers on the spatial mechanisms operative in the voting decision; however, the end results are intended

to provide insight into the decision-making process itself. This is the goal of all social science inquiry devoted to explanations of voting behavior.

Although the question will never be addressed directly, an underlying issue throughout this inquiry is the role that the political geographer can play in the continuing theoretical development in voting behavior research. Elaboration on the nature of this role is not seen as a central objective. That has been accomplished by others (Cox, 1969; Reynolds, 1969; Reynolds and Archer, 1969; Prescott, 1959, 1969), and although some limited discussion of the geographer's place in electoral research follows, it is only by way of elaboration on the conceptual foundation for the problem.

#### The Geographer's Place in the Study of Electoral Behavior

The electoral geographer brings to the study of voting behavior a unique focus of inquiry--a spatial focus. And to the degree that the literature is relatively "devoid of models for evaluating the impact of space upon political process" (Reynolds, 1969, 12), the need for such a focus becomes apparent. For too long geographic studies of voting behavior have concentrated on non-spatial explanations. Geographers interested in the explanation of voting behavior have relied upon what Cox has described as the "aspatial treatment" where voting behavior is viewed as a function of within-area unit economic and social characteristics (Cox, 1969, 113). Such an approach does not operate from the strength of the discipline of geography since the political unit is removed from the space in which it is operative. Thus, by separating the political unit from the space in which it rests,

geographers are seen to minimize the strength of their potential contributions to electoral research. The geographer's greatest potential strength lies in the examination of electoral behavior within its spatial milieu. Any other approach makes the geographer virtually indistinguishable from any social scientist who does comparative analyses of areal units. Until the geographer's consideration of electoral behavior makes contributions to electoral theory, electoral geography's independent existence will not have been demonstrated. Cox summarizes this well when he suggests that:

As the definition which suggests, the dynamics of space has to do with the space in which areal units or voters are embedded and the relationships of these units across space, not only provides electoral geography with a justification for an existence independent of comparative studies in political science; it also places the systematic field in the spatial mainstream of current geographical methodology and makes available the accumulating body of ideas relating to the geometry and the duality of spatial structure and spatial interaction (Cox, 1969, 112).

If such contributions are to be forthcoming, then we must return to asking the type of questions that make us geographers. And these are questions about space and location.

The above is not an implication that geography should set about developing a set of theory exclusive to electoral geography; nor does this imply that geography should establish a segment of electoral behavior research quite apart from the remainder of social science. Rather the argument simply calls for the geographer to do what he does best. Geographers are best equipped to consider the spatial dynamics of behavioral phenomena. And in this lies their greatest potential contribution to voting behavior research. Always the primary goal of



the electoral geographer is the most thorough understanding of electoral behavior possible. And always the realization must be present that the body of theory and research findings that will eventually enable scientists to obtain that goal will be multi-disciplinary in character.

#### Electoral Change As a Conceptual Framework

**DYNAMICS**---The physical or moral forces that produce motion or change in any field or system (American Heritage Dictionary, 1971).

As the definition above suggests, the dynamics of space has to do with the processes that induce movement or motion across space. While inquiry into the nature of change is a significant part of any consideration of the spatial dynamics of a phenomena. In electoral behavior a change in the spatial pattern of voting response is an inherently dynamic process. Thus, for the geographer wishing to focus on the spatial dynamics of voting behavior, one possible avenue is an inquiry into the nature of electoral change. However, even a most casual perusal of geographic inquiry will reveal very little research emphasis on the "physical or moral forces" that induce spatial change or spatial motion in the voting response system. Geographers have been too much occupied in analysis of static dependencies. But, in the long run, patterns to delve into the processes that created the patterns. They have utilized "spatial coincidence" models to depict the areal covariation of social, economic and electoral behavior. They have also relied heavily on pattern analysis of voting response maps to locate spatial consistency. And such research has proven rewarding by providing knowledge of spatial regularity in state and national level electoral

behavior patterns. Hence, we are aware of distinctive regional regularity in voting response patterns such as the protracted allegiance of the American South to a single party. But, as a consequence of the failure of researchers to focus on the more dynamic spatial components of the electoral response, we know little about the processes that induce such regional homogeneity in voting response. And we know even less about the processes that induce changes in patterns of regional homogeneity in voting response or about the mechanics of that change. But it is just such areas of inquiry that form the core of geography's potential contributions to electoral theory.

While inquiry into the nature of electoral change is a potentially useful method of probing spatial dynamics of electoral behavior, it only becomes so if the inquiry proceeds beyond mere description. As Kevin Cox (1969) suggests, it is one task to identify spatial regularity in voting response surfaces,<sup>1</sup> and quite another to connect these regularities with relevant elements of the spatial process that lie at the roots of their inception. A description of the electoral response patterns of southern voters for Republican candidates may demonstrate that striking regularity exists in the character of this response. Such regularities, once delimited, may even suggest possible spatial dependencies. But, in the long run, it is still necessary to pose the question of the usefulness or utility of the regularities. To paraphrase

---

<sup>1</sup>Throughout this text the South will be defined as the region of the old Confederacy: Alabama, Arkansas, Georgia, Mississippi, Florida, Louisiana, North Carolina, South Carolina, Virginia, West Virginia, and Texas.

<sup>1</sup>In this inquiry several terms are used interchangeably in addressing the patterns created when election results are depicted graphically. Among these are voting response surface (or patterns) and electoral response surfaces (or patterns). It may be useful to remember that response is used interchangeably with result and surface interchangeably with patterns.

Cox, what utility does the recognition of the regularity of the voting response patterns for Republican candidates in southern elections have in terms of isolating a possible spatial process? Its utility may lie in the knowledge gained of the spatial dynamics of the process of change in these patterns. Describing the patterns of electoral response may provide clues to the spatial process inherent in electoral change. Describing the process of change itself provides insight into the machinery of that process. If by definition, change implies process, then it is difficult to imagine an environment more conducive to the examination of the spatial dynamics of voting response surfaces than one in which constituencies have had rather recent exposure to rapid electoral change. A situation in which such change is occurring within a spatial context, previously characterized by a historic and rather distinctive degree of spatial regularity and homogeneity, would appear to afford excellent conditions for the examination of the spatial dynamics of electoral change. Rarely does a social scientist encounter such laboratory-like conditions; but, in terms of the elements necessary for probing the spatial dynamics of voting response surfaces, few better laboratories are to be found at a macro-level than the post-World War II American South.<sup>1</sup> This inquiry will use this "laboratory" to examine the spatial dynamics of electoral change.

<sup>1</sup>Throughout this text the South will be defined as the states of the old Confederacy: Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas and Virginia.

## The South As a Regional Laboratory

Southerners and Non-Southerners alike have become accustomed to the image of the Southerner as a bigoted, uneducated, rural boob.

spread urban growth has replaced the (Mack, 1970, 2). Concomitant with the economic and social change is a very real political change.

It is usually the case that stereotypes ignore reality. But, unfortunately even those stereotypes born of honest representation often so has it now become a vital part of the South's image. Consider the arch stereotype of the South, which has changed but little from the turn of the century. Until quite recently it would not be too far amiss to describe a typical image of the South as a languid, agricultural society, dominated by

the very rich, inhabited by the very poor, ruled by a phalanx of bigots, yet characterized by a distinct arcadian and rustic simplicity. If any electoral allegiance to the National Democratic Party in the 19 presidential elections from 1860 to 1960, it was the legendary political cohesiveness of the former Confederacy deviated from their Democratic allegiance, out of a total of 187 potential times, or 2.2 percent of the time (see Table 1).

But, in view of the fact that the Democrats are a party of the South . . . ; the Republicans a party of the North, . . . (Rossiter, 1960, 105).

In political context, the terms "Democratic" and "South" became inseparably molded in an image of solid electoral support that served to protect the political hegemony of the white southerner against encroachment by the Black southerner and his northern political allies. Of course, this image itself ignores the reality of internal complexity and political dissent within the southern Democratic party (Grantham, 1963; Woodward, 1951; Key, 1949), but it has been, nonetheless, the dominant stereotype of the political South.



The South is now in an accelerated state of change. Economic development in the form of expanding trade and commerce and industry have diminished agriculture's economic pre-eminence and spawning widespread urban growth has replaced southern rusticity. Concomitant with the economic and social change is a very real political change. And just as politics once contributed to a distinctive southern stereotype so has it now become a vital part of the "new" image of the South--the changing South. When one examines the gross statistics, it is not hard to understand why since the elements of political erosion appear to have played havoc with Democratic solidity.

From the end of Reconstruction until World War II, the South remained an American political constant by giving almost unswerving electoral allegiance to the national Democratic party. In the 17 presidential elections from 1880 to 1944 the 11 states of the old Confederacy deviated from their Democratic allegiance only 6 out of a total of 187 potential times, or 3.2 percent of the time (see Table 1). But, in view of what has transpired since 1948, the once-solid Democratic southern wall can certainly be said to have been cracked, if not splintered asunder. In the seven presidential elections since 1948, Republican presidential candidates alone have cracked Democratic solidarity 33 out of a total 77 potential times, or 42.9 percent of the time (Table 1). Republican candidates, Eisenhower, Nixon and Goldwater, enjoyed a fair measure of success if compared to their pre-1948 predecessors. Certainly the candidacies of successive Republican and independent party presidential hopefuls as well as others at lower levels of electoral competition, are all phenomena that contribute to a new southern stereotype--the changing South. And they are all



TABLE 1  
THE SOUTH IN PRESIDENTIAL COMPETITION  
1880-1972

State	Total Elections 1880-1944	Total GOP Victories	48	52	56	60	64	68	72	Total Elections 1948-1972	Total GOP Victories
Alabama	17	0	T				R	T	R	7	2
Arkansas	17	0						T	R	7	1
Florida	17	1						T	R	7	5
Georgia	17	0		R			R	T	R	7	2
Louisiana	17	0						T	R	7	3
Mississippi	17	0	T					T	R	7	2
North Carolina	17	1	T					T	R	7	2
South Carolina	17	0						T	R	7	3
Tennessee	17	2	T				R	R	R	7	5
Texas	17	1		R		R		R	R	7	3
Virginia	17	1		R		R		R	R	7	5
TOTALS:	187	6								77	33

R Republican presidential candidate victory.

T Third party presidential candidate victory.

Blank Democratic presidential candidate victory.

SOURCE: Congressional Quarterly Special Report, Presidential Candidates from 1788 to 1964 (Washington, D. C.: Congressional Quarterly Service, 1964), p. 26, and compilation by author.

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illustrative of successful electoral challenges to Democratic hegemony in the South. In terms of electoral politics the South may still be essentially "Democratic" but it is no longer "solid." At present, the authenticity of either the "solid" or "changing" stereotype<sup>1</sup> of the politics of the South may certainly be brought to question. But authenticity of stereotypes is not the issue here; the central issue is the changing southern electoral response patterns.

More specifically the concern is with the "emergence" of the Republican party as a serious contender for southern votes. And the very coincidence of strong resistance to change and the existence of strong social, economic and technological pressures to institute this change make the South an attractive choice for examining the spatial processes involved in changing traditional patterns of regional electoral behavior. Thus, competition but the establishment of Republican party responsiveness at lower levels of electoral competition among southern voters is now becoming increasingly apparent. The delimitation of spatial and statistical regularities and modes of electoral change is the primary goal.

The Problem

Specific Statement of the Problem

The problem entails: 1) the spatial and numerical delimitation and measurement of electoral support for the Republican party in the

<sup>1</sup> In some circles the "changing" South is in as much danger of becoming a stereotype as the "old" or "solid" South ever was. Two well-known books, I'll Take My Stand by Twelve Southerners (1930) and You Can't Eat Magnolias edited by H. Brandt Ayers and Thomas H. Naylor (1972) are prime examples of a healthy literary and academic concern with "change" in the South. But I do not wish to dwell long on the issue of stereotype and their authenticity of life cycle. The stereotype is only a grammatical vehicle for introducing the conceptual vehicle used in this analysis.

American South during the period 1948-1972; 2) the association of such spatial regularities with the continued growth of that electoral support; 3) the description and accurate measurement of the processes that underlie the change in patterns of electoral support with particular emphasis on the relationship between urban size and hierarchy on the growth of Republicanism; and 4) the anticipation of future patterns of electoral response in the South.

#### Elaboration on the Problem

This study begins with the premise that the politically solid South--the Democratic South--which existed in American electoral politics for more than a half a century, is now changing. The initial signs of this electoral change were first notable at the presidential level of competition but the manifestation of Republican party competitiveness at lower levels of electoral competition, such as the senatorial level, is now becoming increasingly apparent. The problem becomes one of identifying and accurately delimiting the specific regions of significant Republican electoral support and the measurement of changes which can be labeled Republican growth. Having identified the areas of salient changes in electoral support, the next problem is to search out and identify the elements of spatial regularity that are independently associated with this change. If such relationships can be accurately identified then perhaps areas of future growth may be anticipated. The principal focus in such a quest would lead to the spatial processes associated with electoral change. And in this inquiry particular attention will be given to the influence of urban size upon electoral change.

to the mechanisms inherent in changing voting response patterns in a subnational or regional context. The primary focus is on literature that relates to the influence of urban size upon changing regional patterns of voting response.

## CHAPTER II

contains the specific objectives of the study which guide the subsequent course of this research.

### A LITERATURE FOUNDATION FOR THE RESEARCH PROBLEM

As is frequently the case in geographic inquiry, the literature which serves as the conceptual and theoretical foundation for this research problem can be divided into two parts: 1) that literature pertaining to the geographic setting; and 2) that literature relating to the theory upon which the problem itself depends. Naturally, the two parts have no distinct line of demarcation and it is frequently impossible to decide from which specific objectives or hypotheses are derived. But, in terms of conceptual and literary organization, it was found particularly useful in this inquiry to divide the discussion of the literature into two major categories--the literature pertaining to the South, and the conceptual literature relating to the general body of theory of electoral behavior that is applicable.

In the first section of this chapter, the literature pertaining to the southern political experience is discussed. Specific attention is devoted to the establishment of the atmosphere for electoral and political change in the post-World War II South, and to the elements of the spatial structure linked to this change. The second section then is devoted to the literature that served as a conceptual foundation for the research problem. Specific attention is given to the literature relating to changing locational bases of party support and



to the mechanisms inherent in changing voting response patterns in a subnational or regional context. The primary focus is on literature that relates to the influence of urban size upon changing regional patterns of voting response. Following this review a final section contains the specific objectives and the working hypotheses which guide the subsequent course of this research.

#### The South in Voting Literature

The Republican party is aiming an arrow straight at the heart of the white men's civilization in the South, and it is distressing to know that we have in our midst good men and women who are apparently lending aid and comfort to a common enemy (The Watchman, 1928 and Strong, 1963).

#### The Question of Electoral Change in the South

The legend of the old South--the romantic cult of the "Lost Cause"--vague memories, family tales, and grim stories of human suffering in the era of Reconstruction are all elements of an ancient prejudice against the Republican party in the South. Although the Civil War gave the GOP a dominant position in American politics that prevailed until the 1930's, its status in the South after Reconstruction proved shortlived. After the removal of federal forces, the slow evolution of the distinctly unique southern character so directly tied to the "Lost Cause" legend began. The fortunes of the Republican party in the South are closely intertwined with the evolution of this distinct brand of regional character--this southern sectionalism.

In his treatment of southern political sectionalism, Dewey Grantham (1967) divides its evolution into three major phases. Using his general outline, it is also possible to trace the evolution of an

"electoral" sectionalism, even though the concern was certainly less specific. In the first phase, from 1870 to the turn of the century, regional unity was still in the process of formation. Negro disenfranchisement had not yet been accomplished and Republicanism was still significant in many areas. In the second phase, from 1900 to 1930, southern political unity reached its peak and the Democratic party ruled supreme. Democrats cemented their dominance by controlling voting procedures, apportionment of legislative districts, and by gerrymandering the Republican party out of contention. The threat of outside intervention was slight and there was little danger to the one party system which emerged from the resolve of the white southerner to hold Negroes to a well-defined economic, social and political place. The one party--the Democratic party--system was the weapon used to accomplish this resolve (Heard, 1952, 145-146). As V. O. Key (1949) demonstrated, the race issue dominated southern politics and served to suppress any meaningful political division among southerners. Threats to Democratic party superiority came not from the GOP, but from internal dissension, and fragmentation, such as the movements of the Populists and various agrarian reform groups. With the exception of historical hard core centers of Republican support, such as the isolated mountain areas of Virginia, North Carolina and Tennessee, the South was solid one party during this phase. The New Deal ushered in the third phase of the evolution of sectionalism. The developments of the 1930's and 1940's encouraged fragmentation in the South. The changing nature of the Democratic party and the lessened importance of the South in it had their effects

upon Democratic party domination. Increased federal aid, and with it increased federal intervention, revived the threat of a renewed invasion from without, and white southerners rallied to the age-old magic of the defense of the "southern way of life." But unlike before, this sectional dynamism was couched in defeat--the southerner did not expect to win. The changes wrought by encroaching industrialism and urbanism had taken their toll of sectional fervor. The South was reacting to historical stimuli as it was simply "playing a role to which it had long been accustomed" (Grantham, 1967, 49-50).

By then the southerner's political weapon--the one party system--had begun to disintegrate. The social and economic context in which the system had operated had undergone rapid change and the political system began to follow suit. The Truman civil rights program and the civil rights platform of the Democratic national convention in 1948 split the party. The proponents of status quo and southern political unity found little reassurance in the Democratic party and they set an example of disruption of the system with the 1948 Dixiecrat movement. The national Democratic party increasingly disassociated itself with the southern wing on the question of race. Once the power of the weapon was gone and the system could no longer accomplish its goal--the subjugation of the southern Black--then a major obstacle to change was removed. As Donald Strong argues, "Once the sharpness of the racial issue was dulled, then the southerner was free to vote his economic interests." In Strong's opinion, this interest lay with the Republican party (Strong, 1963).

Given southern dissatisfaction with the Democratic party, is the only alternative the Republican party? To reason so is to dismiss the



feasibility of a third-party South. But then in the national political arena third party movements have proven neither durable nor productive as a means of effective long-term protest.<sup>1</sup> Perhaps it is as Kevin Phillips suggests:

... third parties are not likely to persist long, they are inevitable casualties of realignment (Phillips, 1970, 287).

But in a southern context it is more likely that, as Phillip Converse suggests, they are casualties of adjustments in major party philosophies and strategies that come about as a consequence of attending to the messages of short-term protest.

Thus while these may be spates of Dixiecrat protest, there seems to be little stomach among southern politicians for developing a truly independent third party, there are many forces which are operative in American politics to counter such a development in the long run (Converse, 1967, 214).

With remarkable measure of insight Alexander Heard (1952) summed up the prospects of third party movements in the South thus:

... in the long run Southern conservatives will find neither in a separatist group nor in the Democratic party, an adequate vehicle of political expression. If this is true, they must turn to the Republican party (Heard, 1952, 247).

Using the advantage of almost two decades, Kevin Phillips (1970) suggested a number of circumstances which would push the South toward

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<sup>1</sup>For example, consider the agrarian reform movements such as the Grange and the Southern Farmers Alliance, the Populists, the Dixiecrats, and the most recent manifestation of the American Independent party of George Wallace.

the Republican party. Among these are the political activity of blacks within the southern Democratic party, the alien nature of the national Democratic party to the white South, the failure of the Wallace balance of power strategy, and the precedent of an "opinion molding upper middle class of the urban South which is apparently trending Republican."

Phillips concluded:

The gathering Republicanism of the Outer South virtually dictates the coming alignment of the Deep South. For national political reasons, the Republican party cannot go to the Deep South, but for all of the above mentioned reasons, the Deep South must soon go to the national GOP (Phillips, 1970, 287).

Thus, when one considers the question of electoral change in the South, an inevitable consequence is attendance to the prophecies of growing Republicanism. And, perhaps the evidence of electoral successes warrants such attendance. Consider the southern successes of Eisenhower in 1952 and 1956 and Nixon in 1960, 1968 and 1972. These are indicative of a change in the patterns of presidential competition. But perhaps the most spectacular evidence of this change came with the Republican success in the presidential election of 1964. Of the overwhelming success of candidate Barry Goldwater in the Deep South, Bernard Cosman writes:

... there is now the real possibility that an enduring grassroots Republicanism may emerge among the white voters who live in rural areas . . . In short, from the 1964 presidential election "pockets of realignment" may emerge within sectors of the Deep South (Cosman, 1966a, 131).

In Cosman's opinion the success of Barry Goldwater in the South, and the increasingly active role of southern delegates in the Republican

party conventions suggest that 1964 could have been the beginning of competitive politics in the Deep South (Cosman, 1966b, 1968).

All of this may, of course, be a manifestation of what V. O. Key (1949) labeled as presidential Republicanism. Under this concept life-long southern Democrats, due to disaffection with the policies of the national Democratic party offer support for Republican presidential candidates while continuing to support Democratic candidates at lower levels of electoral competition. Yet as Havard (1972) has indicated, "presidential Republicanism, even where it may have gone beyond the point of mere protest against the national Democratic party, is no final indication that the South has abandoned its one partyism in favor of organized oppositional politics" (Havard, 1972, 721). Havard points out that the Republican gains, although significant at the level of national or statewide electoral competition, have been somewhat sporadic at the level of state legislative competition and below. As Table 2 indicates, the Republican party has indeed made noteworthy and rather consistent inroads at other levels of electoral competition than the presidential level. Perhaps successes at lower levels of electoral competition will prove just as dramatic in the immediate future.

Thus, the evidence suggests rather extensive Republican party gains in the South in comparatively recent times. Republicans are gaining political offices that 20 years ago were unavailable to, and in many instances even uncontested by, Republican candidates. This evidence has for some (Heard, 1952; Phillips, 1970) been suggestive of a fundamental realignment of party affiliations in the American South. This question was discussed at length by Phillip Converse



TABLE 2

ELECTED SOUTHERN REPUBLICANS<sup>1</sup>  
1950-1968

	1950	1952	1954	1956	1958	1960	1962	1964	1966	1968	1970	1972
Governors									2	2	2	3
National Representatives	2	6	7	7	7	7	11	16	23	24	25	34
National Senators							1	1	2	4	5	7

<sup>1</sup>These figures are based upon the total number of Republicans elected to each of the three offices from the 11 southern states in each two year period.

SOURCE: U.S. Bureau of the Census. Statistical Abstract of the United States, 1950-1972 (72nd-93rd editions), Washington, D. C.



(1963, 1967), who concluded that, while the South had indeed undergone extensive political change in the early 1960's, there was no drastic realignment of party identification. Rather Converse suggests that a convergence trend, in which the South will swing more into line with national patterns of party competition, is a more plausible explanation.

The question of partisan realignment is introduced as a means of demonstrating the extent to which social scientists have carried their thinking on the electoral change that has taken place in the South over the last two decades. The question of realignment of individual partisan attitudes is, at least for this inquiry, a moot issue, since the research efforts of this study will focus upon the aggregate level of analysis. Obviously to deal effectively with party identification, it becomes necessary to delve into the attitudinal framework of the individual voters and thus into areas that would entail extensive survey level analysis. In this inquiry the concern is with changes in the total or aggregate voting responses surfaces over time. To discern such changes it is not necessary to have complete knowledge of the political party with which a voter identifies. At this point the concern is with the aggregate manifestations of the individual voting decision on election day and the spatial mechanisms operative in the changing character of the resulting voting response surface. And these arguments have been presented in support of the thesis of changing patterns of electoral support in the South; for, in order to examine the spatial dynamics of electoral change, it must first be established that change is occurring. In this vein from the literature presented there is the overwhelming agreement on the existence of electoral change, if not on the extent of it.

# The Components of Southern Electoral Change

The last time the Republicans were in Atlanta was 100 years ago. They burned it down (Jimmy Carter, Democratic Governor of Georgia, as quoted in Murphey and Gulliver, 1971, 173).

Given the general consensus on the existence of electoral change in the South, and upon the beneficiary of electoral indecision, viz., the Republican party, what then are the components of the process of electoral change? Can the medium of electoral change be isolated? More specifically can the spatial mechanisms inherent in the change be identified? Again the literature provides useful direction.

A considerable portion of the literature devoted to the growth of Republican electoral support in the South concentrates on the influence of the urban and industrial sectors of southern life as particularly conducive elements in the Republican party growth. As early as 1949, V. O. Key was suggesting that the future of Republicanism in the South would be closely tied to industrial and urban growth. Key's prophecies have since been echoed by others but more importantly the particular influence of the urban sector likewise has been demonstrated in several empirical investigations.

In assessing the results of the 1952 presidential election, Donald Strong (1955a, 1955b) demonstrated the greater electoral strength of candidate Eisenhower in larger cities. Strong suggested that the apparent defection of wealthier city dwellers to Republican ranks could mean that future GOP successes in the South could prove greater in areas with larger urban populations. In a comparative study of the 1952 and 1956 results, in which he traced the existence of urban

Republicanism from the late 1930's, Strong suggested that an enduring brand of urban-centered presidential Republicanism had indeed been cemented in the 1952 and 1956 contests (Strong, 1960). This brand of Republicanism was centered upon an "ever increasing number of prosperous southern urbanites who are reacting as unfavorably to the economic policies of the Democratic party as do their counterparts in northern cities" (Strong, 1960, 49).

In a similar analysis of the 1960 presidential election results for southern states, Bernard Cosman found that Richard Nixon came close to Ike's showing in the cities of the non-Deep South, and improved upon Ike's showing in the Deep South cities, "which have large nonwhite populations, small percentages of Negro registrants, and few Catholics" (Cosman, 1962, 320). To Cosman, Nixon's 1960 showing indicated that, "enduring presidential Republicanism has developed more rapidly in the metropolitan South" (Cosman, 1962, 321), while no comparable development could be pinpointed elsewhere. Although Cosman suggested that GOP success below the presidential level was also an urban centered phenomenon, he could see no large scale Republican successes beyond the presidential level of competition in the immediate future.

Since neither Strong nor Cosman found comparable development of Republican support outside of the urban South, indications were that this was a metropolitan Republicanism. This conclusion was reinforced by Cosman's examination of the 1964 election results in which he found continuing development of non-Deep South Republicanism along urban-industrial lines, and possible development of grass roots rural Republicanism in the Deep South (Cosman, 1966a).



In an analysis of the Republican vote in 57 urban counties for six presidential elections, Stanley Brunn and Gerald Ingalls (1972) addressed the question of the relationship between urban size and support for GOP presidential candidates. It was discovered that larger urban counties throughout the South gave heavier support to Republican candidates, while urban counties of the Rim South generally offered greater electoral support for GOP candidates than did their counterparts in Deep South states.

In concentrating upon the relationship between urban structure and the growth of electoral support for a political party, the impact of additional components of the electoral change occurring in the South is thus overshadowed. This by no means is meant to deny the existence nor the impact of factors such as socioeconomic class (SEC) in the development of support for the Republican party in the South. The role that SEC plays in changing electoral allegiances was demonstrated by Strong (1955a; 1955b; 1960) and Cosman (1962; 1966a; 1966b). In addition one need only consider such findings as those of Prothro, Campbell and Gregg (1958), Matthews and Prothro (1964; 1966) and Orum and McCranie (1970) to verify the impact of social class on attitudinal change. But such components are best left to inquiry based on survey design. As previously argued, explanation of such components from the realm of aggregate data analysis involves a considerable degree of risk in transferring inferences made on basis of aggregate data to individual attitudes or behavior. To examine the impact of social economic class on electoral behavior as represented by the aggregate level voting response surface, it would be necessary to resort to a spatial from the space around it. It becomes then examining the relationship between the area



coincidence model.<sup>1</sup> Space is not the crucial element in such an examination. It is only an area defined by definite boundaries (usually county) where a given level of electoral support coincides with some given level of socioeconomic class. It would appear more within the geographers' domain to examine behavior within its spatial milieu. Thus, the focus of this study is on the process of change in successive electoral response surfaces and how that change is influenced by a distinct spatial structure--the urban hierarchy.

Already there exists abundant empirical evidence on the existence of a strong relationship between the urban spatial structure in the South and the spatial structure of the Republican voting response surfaces. While such evidence lends credence to the notion of an urban centered concentration for the development of Republican electoral support, it fails to depict accurately the exact nature of this relationship. For example, Brunn and Ingalls (1972) have demonstrated that the support given to GOP candidates at the presidential level is greater in larger cities than in smaller; but does this relationship hold true at other levels of electoral competition? Is the support given to GOP candidates subject to a time differential or time lag between levels of the urban hierarchy? Is the support for Republican candidates confined to more urban areas or does such support diffuse outward from these centers to less urban areas? Questions such as these relate to the spatial process of changing electoral response patterns. As such they form the primary focus of this inquiry. Before we answer

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<sup>1</sup> In such a model the political unit is essentially abstracted from the space around it. It becomes only a convenient devise for examining the relationship between the level of the vote and SEC.

these queries, we must first examine the second major section of literature upon which this examination is based.

### The Problem in the General Theoretical Literature

Thus far an attempt has been made to provide a foundation from which the research problem can be examined in light of the uniqueness that is inherent in any empirical inquiry. Thus, the South as a unique portion of political space has been examined in terms of previous research efforts which have focused on the southern political experience. However, while the South may possess certain unique qualities that set it apart, this does not preclude utilization of the southern political example to expand the general body of electoral theory. Thus, while it is important to remain alert to the more unique qualities of the South as one example of electoral change, it is essential that the research problem focus on the aspects of this inquiry which affords the best opportunity to expand the general theoretical base. Thus, we now turn to that portion of the literature which provides the conceptual or theoretical foundation. Since this inquiry has a spatial focus, this literature is concerned primarily with the spatial approach to voting analysis. However, the literature which concerns the relationship between urban structure and the spatial dynamics of changing party preferences is also discussed.

### The Spatial Approach to Voting Analysis

For the most part, students of electoral behavior have examined the areal covariation of socio-economic characteristics of constituencies and their voting behavior, but have contributed little to a further understanding of the spatial dynamics of changing voting preferences (Barnett, 1972, 9).

The examination of the spatial dynamics of voting preferences is a comparatively recent phenomenon in electoral geography. It is only the decades of the 1960's and 1970's that have witnessed a concern for the less static aspects of the voting response. In the decades that preceded 1960, geographers tended to rely heavily on maps of voting response patterns and upon verbal description of these patterns. In fact, until comparatively recently, the processes that produced these voting responses were often only alluded to via subjective implication of possible causal linkages. Under such a framework the basic model of geographic inquiry into electoral behavior normally took the form of:

- 1) the preparation of maps of election responses; 2) the description of the resulting map patterns; and 3) "a search for areally covariant constituency attributes" (Reynolds and Archer, 1971, 1).

Consider one of the earliest efforts of geographers to probe the behavior of an electorate. In a search for national factors that contribute to the shaping of regional-territorial political opinion, E. Krehbiel (1916) analyzed British parliamentary election returns between 1885 and 1910. Krehbiel's work is significant not so much for his results--he discovered that liberal representatives were elected from industrial and poor farming areas, while conservative representatives were elected from the more fertile agriculture areas--as for his approach to and conceptualization of the problem. His use of maps as a basis for description of voting response structures and for subjective determination of social and economic causal linkages, and his concentration on national elections are indicative of the pattern of inquiry used by electoral geographers for five decades. Under this pattern of inquiry the dominant interest was in justification or verification



of national, regional or state level cultural or political boundaries, and not necessarily in the elections of distinctly spatial processes that influenced the resulting response patterns.

This concept of electoral analysis and this approach proved to be quite long-lived. So much so that a half of century later a French geographer, J. Billet (1958) could suggest that indeed the formulation of laws in the cataloging or the explanation of election results was not the milieu of the geographer. Rather the geographer's role was to assess the "economic, historical, sociological, political, psychological, and demographic factors, which together shape public opinion" (Prescott, 1969, 297). Thus, the basic requirement of an electoral study, if it was to provide a profitable flow of ideas back to geography, was that the "election issues should concern the raison d'être of the state" (Prescott, 1969, 300). Elections not fulfilling this basic requirement were, at best, useful only as a means of crosschecking other methods of delimiting the integral political regions of the state. Of course, such assessments placed severe restrictions on electoral studies done by geographers since if electoral research did not benefit geography, it was not really a profitable venture. Such an introverted attitude, while highly restrictive of the role that geography could play in electoral research, represents an accurate estimation of the approach to electoral research in geography from Krehbiel to the 1960's.

The latter part of the 1960's brought to geography the revolution of method and technology characteristic of social science in the past two decades. Social scientists began to discover the value of computers and mathematical and statistical techniques to research, particularly in electoral research with its virtually unlimited quantities of election data.



Coincident with this revolution of technology and method in geography was a reconsideration of the concept of the geographer's role in electoral inquiry and of his approach to electoral analysis. Geographers broke with the tradition of limiting their inquiry to state, regional or national elections and began to probe the complexities of lower levels of analysis. Particular attention was given to electoral behavior within the urban environment (Lewis, 1965; Kasperson, 1969a, 1969b) and to sub-sectors of the urban scene (Cox, 1968, 1970, 1971). Although geographic inquiry was still predominately descriptive, the description became increasingly more numeric (Haring, 1959; Roberts and Rumage, 1965; Lewis and Skipworth, 1966). Geographers also began to explore other areas of electoral inquiry, as witnessed by the examination of non-partisan elections (Brunn, Hoffman and Romsa, 1969a, 1969b; Hoffman, 1970).

All of these "new" directions in electoral research were indicative of the changed attitude towards geographic research of election responses. Geographers began to question their approach to electoral inquiry and their role in electoral research. As discussed in Chapter I, the conventional areal analysis of elections that had so long dominated geography came under criticism as "aspatial." Under the areal analysis approach, geographers were seen as not working from the strength of their training in spatial analysis since the system can be limited since the literature observed a distinction between . . . areal units under consideration are abstracted from the "space" in which they are imbedded . . . (Reynolds and Archer, 1969, 2).

The importance of such criticism is that it introduced the notion that the explanation of voting behavior lay not in description of structure

and static patterns of voting response but rather in description of processes that create the structure. But perhaps more importantly such criticism served to expand the limited research horizons of electoral geography. By stressing the facets of electoral inquiry with which they are most qualified to deal, geographers are at once retaining their identification while offering up a potentially significant new dimension to electoral research.

It is apparent that in the pursuit of understanding electoral behavior, geographers have chosen to concentrate on the static and speculate on the dynamic, map the response and imply the existence of process linkages, and describe the pattern and conjecture cause. While such inquiry has provided a wealth of empirical evidence of state, regional and national response habits, it has given little indication of processes behind the more dynamic aspects of the voting response. Such inquiry does, however, provide a means of conceptualizing the problem under consideration in this study. From the development of electoral geography described above, it becomes important that electoral inquiry seek a balance between description of pattern and description of process. Thus, patterns of voting response in the South must be accurately described numerically, cartographically and verbally; however, this description must be rooted in an awareness of the spatial system in which the voting responses occur. In this case the spatial system can be limited since the literature suggests a distinct urban bias in the changing patterns of electoral support for the Republican party.

### Urban Size and Electoral Change

Support for a political party has distinct spatial as well as social and economic dimensions. Hence, changes in the spatial patterns of electoral response are indicative of the movement of a new political idea across space. With its strong tradition of diffusion research one might expect geography to have made substantial contributions to the understanding of the spatial dynamics of changing patterns of electoral response. Yet surprisingly few examples exist in the geographic literature where consideration is given to the spatial dynamics of electoral change and even less where the relationship of change to urban structure is examined.

The geographical research that does exist on the diffusion of support for political movements has focused on the concept of spatial contagion or the interpersonal transfer of political information over space (Gould, 1961; Cox, 1968; Reynolds, 1969; Reynolds and Archer, 1969; Barnett, 1972, 1973). For the most part contagion research has concentrated on the processes pertaining to the transfer of political information and the influence of this information on the electoral decision. For example, Reynolds and Archer (1969) discovered that the spatial form of the voting response surface in Indianapolis mayoral elections could not be explained solely on the basis of socioeconomic indicators. Apparently the "within-precinct" flow of political information was also an active factor. In subsequent attempts to model this transfer or flow of information, Reynolds (1969) examined the significance of relative candidate locations, while Cox turned to the influence of within constituency interaction or "neighborhood" effect (Cox, 1971) and to residential location (Cox, 1970). And in two examples of

inquiry into the diffusion of political support for a new political movement, J. R. Barnett examined the electoral change associated with the growth of the Social Credit League in New Zealand (1972) and the spatial growth and subsidence of the Danish communist party between 1920 and 1964 (1973).

Such inquiries into the spatial dynamics of electoral change provide a basis for grasping the significance of the contagion or transfer effect on the decision-making process. But what of the effect that specific components of the spatial structure have on electoral response patterns? Consider one such component--the urban structure. What is the nature of the relationship between urban structure and changing patterns of electoral response? In the example of the Social Credit League in New Zealand, Barnett (1972) discovered that as urban size increased the support for the party decreased, a factor he attributed to the mobilizing and communication effects of small town social systems and to the contagion effect. Cox (1971) has suggested that the interpersonal transfer of political information is accentuated in smaller urban places since the transfer of information and the identification with the community is heightened in smaller towns. In a larger community the neighborhood effect is accentuated and interpersonal contact suffers a corresponding overall decrease due to the constraints of residential segregation on personal mobility. These findings appear to indicate that urban size is inversely related to the flow of political information.

Additional support for this hypothesis can be derived from the findings of two additional inquiries into southern electoral



behavior.<sup>1</sup> In an analysis of the electoral support given third party candidate George Wallace in the 1968 presidential election, S. Birdsall (1969) identified a pattern of "lower level(s) of Wallace vote given by counties with large cities." In an analysis which concentrated on the Wallace vote in cities of the southeast, S. D. Brunn (1970) pointed out that although the Wallace vote was generally lower in larger cities, there was a great deal of variation depending on whether the city was in the "core" or peripheral region of the southeast. Thus, in each instance we note a general negative relationship between size and level of support for Wallace. If we view the Wallace movement as a form of change or at least as a significant deviation from established (two party) behavior, we gain additional support for our thesis that a negative relationship exists between change and urban size at a regional level.

In an earlier discussion of the growth of Republican electoral support in the South, it was demonstrated that the medium of Republican growth was the urban or metropolitan structure of the South. Yet the examples of the Social Credit League in New Zealand (Barnett, 1973), Democratic voters in Ohio (Cox, 1971) and even the two examples of Wallace support in the southeast (Birdsall, 1969; Brunn, 1970) suggest the opposite--a negative relationship. If the two sets of literature appear at odds, they are not. As Barnett discovered in the example

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<sup>1</sup> Obviously these two studies are not indicative of electoral change in a longitudinal connotation since only one election is considered. However, even though the focus is not on electoral change, such studies nonetheless offer valuable insight into the nature of the relationship between urban size and patterns of electoral response.

of the social credit League in New Zealand (1972) and again in the example of the Communist party in Denmark:

. . . political forces, operating at a number of levels, influenced the spatial pattern of adoptions in the diffusion of a new political movement (Barnett, 1973, 42).

In the case of the Danish Communist party a

within-constituency effect, possibly a manifestation of the hierarchical diffusion and spatial concentration of Communist support in larger urban areas "accounted for" most of the variation in the early election series (Barnett, 1973, 42).

Thus, the pattern of electoral change must be viewed as a function of the level and spatial context in which the political movement occurs. Once we consider the nature of the South as the spatial context in which we are to assess changes in the structure of regional patterns of partisan alignment, more of the apparent dichotomy can be resolved.

In terms of the relationship between partisan alignment and urban structure, the preponderance of Republican sentiment in villages, towns and smaller cities outside the South is certainly a well-documented phenomenon in voting statistics and literature. Consider two specific inquiries into the nature of this relationship. In an examination of the relationship between the size of a place and partisan alignment, L. D. Epstein (1956) noted that Democratic strength in Wisconsin gubernatorial elections diminished sharply as the size of the city declined. After a failure to substantiate this pattern in Michigan (Masters and Wright, 1958), Epstein's analysis was duplicated by D. Adamany (1964) using subsequent Wisconsin elections. Adamany discovered that "urbanized areas continued to vote strongly

Democratic . . ." while ". . . small cities and villages provided overwhelming Republican margins . . ." (Adamany, 1964, 486). As in Epstein's analysis, Adamany discovered the major breaking point between Republican and Democratic support was at the 50,000 population size level. But most importantly, at least in terms of its value to this inquiry, Adamany discovered no apparent change in the relationship between size of place and vote response. Thus, despite a number of significant Democratic party victories at both the senatorial and gubernatorial level during the 1958-1962 period, the relationship had remained the same as in the 1948-1954 period of Republican dominance.

These two studies serve as an empirical verification of the nature of the relationship between partisan alignment and urban structure in an American political context. In Wisconsin at least the Republican proportion of the two party vote diminished as city size increased. Such a relationship coincides with established precepts of partisan alignment in the United States.

Quite obviously it is not possible to transfer the notion of partisan alignment derived in these two Wisconsin studies to a southern electoral inquiry today. The South does not fit the national pattern of partisan alignment. It may eventually achieve a national "norm," but at present it is predominately Democratic in partisan alignment at any level of the urban spectrum. But despite the inappropriateness of national partisan alignment concepts, it is still possible to compare the patterns of changing electoral response to the urban structure in both Wisconsin and in our southern example. In the South the Republican party is gaining electoral support and is apparently doing so more rapidly in larger urban places than in smaller. In Wisconsin

the Republican party dominated electoral politics. The medium of electoral change was also the urban structure and greater success comes in larger urban places. It can be argued that this is a natural environment for the Democratic party and that the Republican party in the South is operating in an unnatural environment. Electoral change should be rural centered in the South since it is there that Republicans are traditionally strongest and it is also there that the interpersonal transfer of information is accentuated. But the South does not fit the national norm. And it might be argued equally well that small towns and villages are also the more recalcitrant when it comes to non-agrarian political change. If the presence of Republican support in an urban environment still seems at odds with the accepted impressions of locational bases of support for the Republican party, perhaps it would be well to recall that the Republican party is seen as a logical alternative to the traditional southern Democratic conservatism (Heard, 1952; Strong, 1963; Cosman, 1966b; Phillips, 1970). In light of the failure of third party movements, it is the only alternative just as was the case in Wisconsin. Wallace's successes in the rural environment and his diminished support in cities can be interpreted as both a last gasp at a third party conservative alternative and also as a portent of future partisan alignment in urban areas. Finally, it is possible to argue that the metropolitan environment is a natural focus of new ideas and new information. Although it may not be transmitted as quickly, the natural anonymity of the neighborhood and the greater diversity and sophistication of urban life make new ideas more readily acceptable.



Thus, although one set of literature may speak of urban related change, while another links such change to more rural environments, the two do not appear in reality to be at odds. The political levels and environments vary; thus, the results must be interpreted in different context. And finally, in dealing with the southern political experience, it would be well to remember that if the South does not conform to an established theoretical norm, the norm need not necessarily be brought to question. For the South has failed to conform to any norm but its own for over a century.

#### Objectives and Hypotheses<sup>1</sup> Derived from the Literature

The literature has provided a foundation from which the problem might be more concisely defined. Several possible avenues of inquiry are suggested by inconsistencies, omissions or simply from questions left unanswered in previous research. But, before any avenue of inquiry can be pursued, we must first precisely and carefully delimit the nature of the electoral support for the Republican party. Thus, the overall objective of this study becomes:

Objective 1: The spatial and numerical delimitation and measurement of the electoral support for the Republican party at the presidential and senatorial levels of competition in a sample

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<sup>1</sup>Although the term hypotheses is used throughout this section, no specific connotation of statistical testing can be assigned to most of these hypotheses. They are more akin to "expectations" than hypotheses. Although descriptive statistics are utilized in Objectives 1 and 2 and some nonparametric statistical tests are applied in Objective 3, the general nature of the data and research design did not dictate, nor in some cases permit, the implementation of strict probabilistic criteria for acceptance or rejection of "hypotheses."

region of counties in the American South  
from 1948 to 1972.

**Rationale:** In order to treat changing patterns of electoral support, it is first essential that both the location and the intensity of that support be accurately delimited for all elections under consideration. Only by accomplishing this can we hope to describe the pattern of support and the nature of the change that occurs. Two levels of electoral competition are considered since the literature suggests ticket splitting may be operative within the electorate. It is expected that there will be a time lag evident between the level of electoral support for the GOP at the presidential level and the level of support at the senatorial level. Thus, it is hypothesized that:

**Hypothesis 1:** For each set of elections under consideration--1948 presidential and senatorial; 1952 and 1956 presidential and 1954 senatorial; 1960 presidential and senatorial; 1964 and 1968 presidential and 1966 senatorial; and the 1972 presidential and senatorial--the electoral support for the Republican party will be greater at the presidential level of competition. Although the level of electoral

support for the Republican party will be consistently higher at the presidential level, the senatorial support will demonstrate more stable patterns of response. Thus, it is further hypothesized that:

**Hypothesis 2:** The senatorial level of competition will produce more stable electoral response patterns than the presidential level of competition.

Having described as precisely as is feasible the spatial and numerical character of electoral support, it is then possible to turn to the identification of such spatial and numerical regularities as exist in the voting response surfaces under consideration. Thus, a second objective becomes:

**Objective 2:** The determination of such spatial regularities as are associated with the increase in electoral support for the Republican party.

**Rationale:** Accurate description of the structure of voting response surfaces provides a foundation for consideration of shifts in locational bases of support for the Republican party. And in describing the change that occurs in patterns of support the regularity in these shifts can be explored for process linkages. Through the use of specific computer programs which summarize the spatial properties of areal data, the distributional characteristics

of the electoral support for the Republican party will be traced from one election to the next.

It is expected that the numerical, statistical and spatial description of successive electoral response patterns will reveal a strong indication of less areal concentration in patterns of electoral support in each succeeding election. Thus, it is hypothesized that:

Hypothesis 3: The numerical description of the spatial distribution of electoral support will reveal a strong tendency toward more evenly distributed spatial patterns of support, i.e., less geographical concentration in areas such as Appalachia and more widespread locational bases of electoral support.

Again it is expected that such a widening of geographical bases of electoral support for the Republican party will vary by level of electoral competition. Thus, it is hypothesized that:

Hypothesis 4: The tendency toward a more widespread distribution of electoral support will vary by level of electoral competition with the broadening base of locational support becoming more apparent at the presidential level of competition at an earlier date than at the senatorial level.

Having accomplished the first two objectives, it is then possible to turn now to the principal objective of this inquiry:



Objective 3: The description and accurate measurement of the nature of the relationship between urban size and the growth of support for a political party.

Rationale: Once we have described the structure of the voting response surfaces (Objectives 1 and 2), it becomes possible to attempt a description of the process by which change is occurring. Since the literature strongly suggests that this change is an urban centered phenomenon, this is the thesis that will be examined. In doing so, specific comments on the nature of the relationship between urban size and changing patterns of voting response can be made. It is expected that the higher levels of Republican support will be found first in counties with larger urban populations. Thus, it is hypothesized:

Hypothesis 5: A strong positive relationship exists between the level or percent of urban population and intensity of Republican support.

In connection with Objective 3, the notion of a cutoff level or breaking point in the size of population of a county that supports the Republican party will be examined. Specifically the following questions will be explored:

- 1) Can a breaking point in the level of Republican support be identified?

- 2) If so, is the breaking point consistent at both levels of electoral competition?
- 3) With more recent elections does the breaking point move down the scale of population size?

## CHAPTER III

### THE APPROACH TO THE RESEARCH PROBLEM

In the first two chapters the problem has been discussed in terms of its conceptual and literature foundations. These chapters have provided the limits, goals and specific expectations and directions of the problem. It remains now to chart the manner in which these objectives can be accomplished. For, as in any research effort, certain fundamental decisions concerning the nature, scope and level of analysis are made, which will affect the end product. Understanding why and how these decisions are affected is crucial to grasping the nature of the results. This is the focus of this chapter. Specific attention is given to the role of aggregate analysis in electoral research, to the rationale and procedure employed in limiting the electoral and spatial context of the problem, to the nature and form of the data, and to the specific statistical, numerical, cartographic and spatial techniques employed in the analysis.

#### Aggregate Analysis in Electoral Research

Aggregative analysis has severe limitations. . . . and those who attempt to explain the flow of the vote solely on the basis of the statistics which the election apparatus makes available labor at a great disadvantage (Campbell, Converse, Miller and Stokes, 1967, 1).

The question of survey versus aggregate level analysis in research is one of the more enduring debates in social science. And, as the quotation above indicates, electoral research is not exempt from such discourse. The question is introduced here primarily because the level of analysis in this inquiry would appear to be resisting the tide of survey research so much in increasing evidence in electoral research.

The arguments against aggregate level analysis are well known and appreciated. Campbell, Converse, Miller and Stokes (1967) have summarized some of the disadvantages succinctly: aggregative analysis permits only an indirect approach to analysis; the data cannot be related directly to individual electors; surrogate measures must be utilized to relate explanation to behavior; alternative hypotheses often are not testable since additional data sets are not readily available; and finally perhaps the most severe criticism, that being the temptation to misinterpret aggregate level behavior as an indication of individual behavior.

The arguments in favor of aggregate analysis generally assume a position somewhat akin to one an efficiency analyst might take--aggregate data cost less to collect, are more plentiful and are thus more readily accessible. Even though such arguments were important to this study, aggregate level analysis is employed more for reasons of disciplinary orientation and context of the problem. That is, the problem involves the spatial analytic approach, and as such, requires the use of a spatially or locationally referenced data set. Such data are infrequent and difficult to obtain especially if the inquiry involves longitudinal rather than temporally specific analysis. For the geographer one limitation on individual level analysis is the virtual absence



of longitudinal data sets for purposes of cross-temporal comparison. With regards survey data, geographers are in much the same position as political scientists in the pre-Survey Research Center era. There exists no substantive body of survey data which provides adequate spatial information for longitudinal analysis.

The argument of non-availability does not deny the need for survey level analyses of spatial electoral behavior. For as Cox has suggested, it is possible to relate the voting decision of an individual to a location in an information flow network by:

- 1) the identification of spatial regularities in voting response surfaces, or
- 2) the verification of spatio-temporal processes which will one day be synthesized into a spatial simulation model (Cox, 1969, 113).

If spatial elements, such as distance, direction, relative locations and density functions, are components of the overall model of the voting decision in its spatial milieu, then it is certainly feasible that one might identify the dynamic elements of the voting decision in its spatial context. This can be accomplished by working at the level of individual voting decisions and the relation to the flow of information within a spatial information network. But Cox also suggests that the aggregate level of analysis should not be ignored in our search for spatial regularity in voting response. As long as we remain satisfied with general statements of spatial regularity in voting patterns and no attempt is made to transfer the results to explanations of individual behavior, aggregate level analysis can prove very productive. For example, statements pertaining to the nature of voting responses of the

overall study area lie within the constraints of the aggregate level data employed in this inquiry; yet statements relating to individual voter responses exceed these data constraints. Thus, in dealing with data pertaining to aggregates, any attempt to transfer relationships between those aggregates to the individual level invites misinterpretation. But in light of the theoretical and developmental status of electoral research in geography, perhaps at this point it is not necessarily the individual who need be our primary focus. Attitudinal changes are important in the explanation of individual voting responses. To explain change at the aggregate level and to deal with changes in the spatial regularity of voting response surfaces, we need not cope with individual attitudinal change so long as the generalizations made are confined to aggregates. For geographers there may come a time when knowledge of individual attitudinal change of southern voters may become essential to the continued development of electoral theory but in terms of addressing the question of spatial dynamics of voting responses, that time has not arrived. We know little of the spatial dynamic elements of voting response and additional empirical evidence at the aggregate level can well provide the foundation for continued inquiry at the individual level.

#### The Scope of the Problem

Consideration of electoral change in the South does not necessarily imply that the entire region serves as the spatial context, nor that all levels of electoral competition be represented. Quite the contrary, the procedural nightmare that would ensue from attempting to manage such volumes of data would offset any advantages that might

accrue. Through the implementation of sound sampling procedure, it is quite possible to limit the spatial and electoral context, and still accomplish an effective description of the regional patterns of electoral behavior, and an elaboration on the nature of electoral change and the attendant spatial mechanisms inherent in such change. In limiting the size of the study area and the number of elections, the scope of the research problem is being tailored to meet meaningful expectations and goals. The rationale for limiting the scope of the problem is provided below.

### The Spatial Context

#### Units of analysis

The basic unit of analysis employed in this study is the county. For purposes of spatial analysis covering several contiguous states the county represents the most logical selection. The state is unacceptable since the degree of aggregation usually masks significant internal variations. Congressional districts are inadequate for longitudinal analysis since their boundaries fluctuate with reapportionment. Smaller political divisions, such as wards, or precincts, are far too cumbersome for use in regional level analysis. Thus, in terms of the cost involved in both time and effort, the county level of analysis represents an adequate compromise since there is more electoral detail than at the state level and far less data manipulation than at the lower levels of analysis.

The county does offer one important advantage--the availability of census information, economic indicators and a host of other types of data. While such information may be available for more detailed units

than county, the collection units employed at lower levels often do not correspond to the ward and precinct boundaries employed in election administration. Thus, in county level analysis no problems of data comparability are encountered should additional social or economic data be needed.

#### Delimitation of the study area

In the 11 states of the former Confederacy<sup>1</sup> there were 1,139 county or county equivalents in 1970.<sup>2</sup> If all the counties in the South were employed in this analysis, there would be an enormous, and unnecessary, expenditure of time, effort and money in sheer data manipulation involved in satisfying the objectives of this study. Given the detailed level of analysis intended for the inquiry, such volume would prove vastly restrictive since it would effectively preclude the incorporation of some numerical and spatial techniques deemed useful. Additional problems would also arise in the case of Virginia where independent cities have a tendency to appear and disappear in the course of the 24 year study period.

With such restrictions in mind, it was decided to employ only a portion or a representative study area in the actual analysis. Although a sample study area may limit the comments which can be directed toward regional electoral behavior, the corresponding advantages accrued in analysis of the spatial dynamics of electoral change more than compensates. The larger the number of observations the greater the

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<sup>1</sup>The definition of the South employed in this analysis.

<sup>2</sup>Virginia has independent cities which are the equivalent of counties.



effort necessary to describe the resulting electoral response patterns. By curtailing the number of observations, more effort can be devoted to detailed analysis and less to manipulation of data.

In order to assure that the areal sample of counties utilized was a valid representation of the entire region, specific selection criteria were established. In order of their importance, these criteria are:

- 1) The size of the sample must be such that adequate coverage of the region (the South) is possible yet of sufficient size that the volume of data can be managed. Although no specific areal size is necessary, a minimum of 25 percent, or 285 counties, is employed.
- 2) The sample must be drawn from at least six of the eleven states of the South.
- 3) The sample must present a reasonable balance between Deep South and Rim South states.<sup>1</sup>
- 4) The sample counties must be contiguous.
- 5) The shape of resulting study area must be as regular<sup>2</sup> as feasible.

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<sup>1</sup>The Deep South states--Louisiana, Mississippi, Alabama, Georgia and South Carolina--have been found to have a slightly different political and social base than the Rim South counterparts (Cosman, 1966b; Birdsall, 1969; Phillips, 1969; Brunn, 1970; Brunn and Ingalls, 1972) of Virginia, Tennessee, North Carolina, Texas, Arkansas and Florida.

<sup>2</sup>Regular implies that the study area contains no outstanding profusions, such as the peninsular of Florida might create if the entire South were employed.

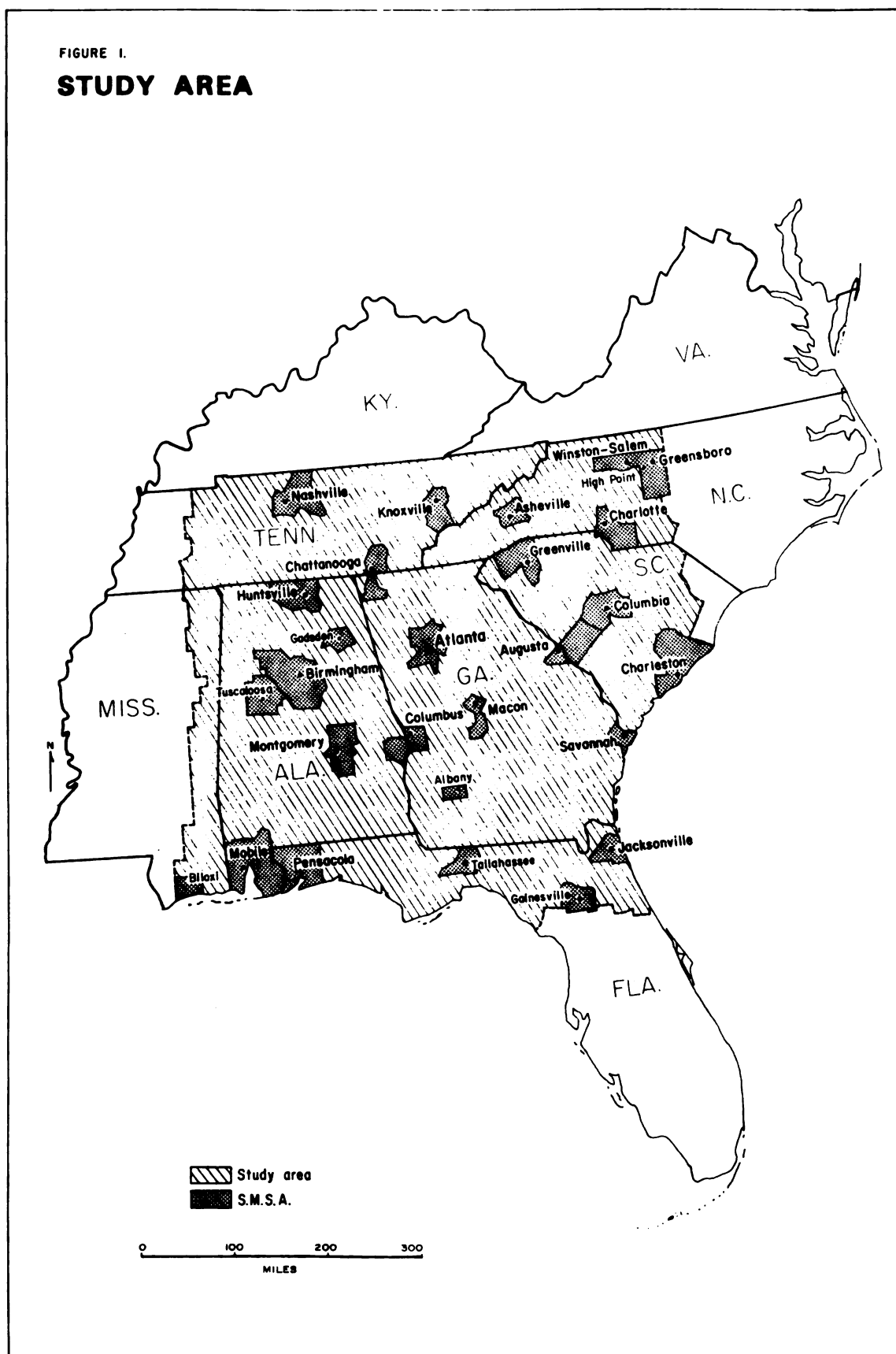
The first three criteria have to do with reducing the size of the study area to a manageable areal sample while maintaining its regional validity. The last two criteria are incorporated for use of specific spatial analytical techniques that will extend the descriptive capacity beyond mere visual interpretation of voting patterns. In these techniques, described in the following section, contiguity and an approximately rectangular study area are beneficial. By using such techniques, it is possible to pinpoint more specifically the spatial variation in electoral response patterns over time.

It was found that a sample size of 448 counties (approximately 40 percent) satisfied all five criteria. The outline of the study area is shown in Figure 1 and the 448 counties are listed in Appendix 1. The study area includes counties from three Rim South states and four Deep South states. It provides valid representation of the South since it includes: the historical core of Republican support--Appalachia; ample diversity of county population size; cultural and economic differences--Black belt agricultural area to industrial zones; and finally a reasonable number of various sized cities. Thus, the sample appears to offer a viable compromise of adequate coverage, adequate size and the desired shape and contiguity.

#### The Electoral Context

Having established the size and areal extent of the study area, we can now turn to the variables employed in the analysis of electoral change. The nature of this inquiry dictates that most of the variables will be data depicting the outcome of elections, or more accurately the figures representing voting response for Republican party candidates.

FIGURE 1.

**STUDY AREA**

Hence, decisions on the specific variables employed involve delimiting the electoral context of the research problem.

#### The levels of analysis

Since this study is concerned with an entire region, it is necessary to limit the analysis to those elections which involve at the very minimum statewide electoral response patterns. Electoral patterns derived from competition for non-statewide political offices are likely to be subject to increased interference from very localized influences. These influences represent "noise" in the overall patterns of electoral response, and as such, increase the number of explanatory factors which must be considered. As Reynolds (1969) and V. O. Key (1949) discovered, such factors as candidate location, home town and distance to nearest competing candidate can play important roles even in state level elections and their effect at lower levels of competition is likely to increase. Even though statewide elections are by no means immune to such "localized noise" they are at least less subject to significant variation. In statewide elections, we are dealing with only one response surface not several. Thus, in order to reduce the number of extraneous or uncontrollable factors involved in the regional level analysis, it was decided to employ only those elections which involve statewide voting. Of course elected offices such as states attorney and secretary of state involve statewide voting response. But such offices do not reflect very well the feeling of regional identity with which we are concerned, since they can and often do involve candidates of little regional, much less national prominence. Thus, in this analysis we shall consider only those levels of electoral competition which retain a

measure of regional and national identity. Given this additional restriction the selection of elections for analysis must be made from presidential, senatorial and gubernatorial levels of competition.

Why not all three levels? First, because of the very nature of gubernatorial elections in the South, there are far more "no data"<sup>1</sup> elections than at the other two levels. Second, senatorial candidates are in a sense national as well as state level candidates. With gubernatorial candidates the element of national appeal is reduced.

But then why consider presidential elections at all? Why not consider only senatorial elections? One reason lies in the references that can be made to the literature. The literature on Republican electoral inroads in the South has focused at the presidential level. By employing presidential elections, the results can be cross checked with past research efforts even though they are non-geographic in orientation. In addition, the presidential level is the only competitive office where one is assured of a Republican candidate being on the ballot in every election. Thus, it is possible to obtain excellent longitudinal data coverage.

But the overriding reason for including two levels of elections lies in the nature of presidential election response patterns in both a

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<sup>1</sup>In a southern electoral context one becomes readily familiar with the limitation of an absence of electoral statistics. Such absence comes less as a consequence of non-availability than of non-competition since in a one party system, such as existed in the South until comparatively recently, second party challenges were, and still are, not always a certainty. Georgia, for example, had no Republican candidate for senator or governor from 1948 to 1966. It proves exceedingly difficult to analyze voting response when there is no stimulus.



southern and national context. If we accept the theory of a normal partisan alignment in the United States, in any presidential election there is likely to be a healthy Democrat proportion of 53 percent of the total two party vote. Thus, any normal election should be a Democratic victory (Campbell, Converse, Miller and Stokes, 1966). Consider the last seven presidential elections. In two, 1948 and 1968, there were three significant parties. In four of these elections there were Republican not Democratic victories. And in two, 1964 and 1972, there were such landslide victories as to set aside any notion of a "normal" election. The important point here is the recent volatility of the presidential level of competition as far as the voting analyst is concerned. The results are so fluid that extreme caution must be exercised in analysis conducted at this level.

To such criticism of presidential election data one must also add the particularly southern phenomenon of recent presidential Republicanism. This refers to the practice of ticket-splitting practiced by southern Democrats in which a voter may choose to support the GOP at only one level, the presidential level. At all other levels the voter may, and often does, remain Democratic (V. O. Key, 1949; Cosman, 1962). Although the recent inroads made by Republicans at lower levels of electoral competition suggest this phenomenon may be ebbing, it is still necessary to provide a means of testing for its presence.

Given both the volatility and ticket-splitting aspects inherent in recent presidential elections, consider the ramifications of not using additional levels of analysis. It is feasible that the successes of Republican party candidates at the presidential level may give an

inflated assessment of the true status of the party at other levels of competition. Conversely, a poor showing at the presidential level, or a third party candidate siphoning off potential voters may mask more successful competition at lower levels.<sup>1</sup> Thus, by expanding the analysis from presidential level competition to lower levels of competition the impact of such volatility is reduced. And perhaps a truer assessment of partisan preference is made possible.

#### The longitudinal extent of the analysis

Once the decision on the level of analysis is made, it only remains to determine which actual elections will be used. To accomplish this task a tentative time period was first established with 1948 as the beginning of the period of analysis and 1972 as the closing date. The beginning date, 1948, is based on the literature as the generally acknowledged beginning of the erosion of Democratic solidarity. It marks the first major break of the South with the Democratic party, this coming as a result of the walkout of southern delegates from the 1948 convention due to a dissatisfaction with Truman and his civil rights legislation. In addition this date marks the first major third party movement in the South since the populists. For these reasons, 1948 is taken as the beginning of electoral change in the South, and hence as the beginning date for analysis of the study area.

Deciding which elections to use at the presidential level presents no problem since all elections between and including 1948 and 1972

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<sup>1</sup> Throughout this inquiry senatorial elections will be referred to as lower levels of electoral competition.

are used. Simplicity is not the rule for the senatorial level, however, since not all states elect senators in the same six-year sequence. If all senatorial elections held between 1948 and 1972 are used, the result is a two-year interval sequence which creates a number of "no data" situations. For example, in 1952 only one of the seven states under consideration had a senatorial election; while in 1968 five of seven had senatorial elections. Thus, an attempt was made to find the time span interval which was most efficient in eliminating "no data" situations. It was discovered that if six year intervals were used between the years for which data would be collected, the "no data" situations were minimized. Thus, if we begin at 1948, the dates for which senatorial data would be collected would be 1948, 1954, 1960, 1966 and 1972. But even this interval still produces situations in which no elections were held in some states. In an effort to further reduce the "no data" situations, it was decided that data from elections held within two years of an analysis date (1948, 1954, 1960, 1966 and 1972) could be substituted where a state had held no election during one of the five years chosen. Thus, if South Carolina had no Republican candidate or held no election in 1960, but did have a GOP candidate in the 1962 senatorial election, then the results of the 1962 election would be substituted for the "no data" situation in 1960. The result of employing this procedure was that in only 5 of 35 times<sup>1</sup> were no data available. In these five cases, no data are treated as zero level of support for the Republican party. Table 3 provides a listing of the elections employed

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<sup>1</sup>Three of these five no data situations develop in Georgia elections, 1948-1964, and the two others develop in Florida (1954) and Mississippi (1948) elections.

TABLE 3

## ELECTIONS USED IN ANALYSES

Time Interval for Presidential Level	Election Returns Used in Analysis--at 2 Levels														Time Interval Employed in Analysis at Senatorial Level
	Presidential							Senatorial							
	AL	FA	GA	MS	NC	SC	TN	AL	FA	GA	MS	NC	SC	TN	
1948			Use	1948				48	<u>50</u>	--	--	48	48	48	1948
1952			Use	1952				54	--	--	54	54	<u>56</u>	<u>54</u>	1954
1956			Use	1956				60	<u>62</u>	--	60	60	<u>62</u>	<u>60</u>	1960
1960			Use	1960				66	<u>68</u>	<u>68</u>	66	66	66	66	1966
1964			Use	1964				72	<u>70</u>	72	72	72	72	72	1972
1968			Use	1968											
1972			Use	1972											

--No Republican candidate.

50 Use nearest election in which there is GOP candidate.

SOURCE: Compilation by author.

in this analysis. Appendix 2 provides a list of the candidates in each of these elections.

Such a procedure creates some problems of comparability, since all senatorial voting response surfaces are composed of state level elections, some of which were held two years apart. And in the case of the 1948, 1960 and 1972 dates, additional difficulties arise since the effects of presidential candidacies must be allowed for some, but not all, parts of the voting response surface. But any attempt at regional or national level electoral analysis, at any level except presidential competition, encounters similar difficulties. The alternative--no analysis--is too high a price to pay. Rather this procedure is adopted and special care is taken to note any variation which might result from bandwagon influences or from the short time lag.

## The Data

### Data sources

Once the spatial and electoral context of the inquiry were delimited, the data were collected. Data for elections held from 1952 to 1970 were obtained from two sources: 1) Richard Scammon's America at the Polls (1956-1972), a nine volume set of county election statistics, and 2) the Institute of Social Research in Ann Arbor, Michigan. Data for the periods 1948 to 1952 and 1970 to 1972 were obtained from a variety of sources including the two mentioned above, various state Republican committees, the national Republican committee, and various secretaries of state. Wherever possible data were gathered from two sources and selectively cross checked for validity and reliability. Data pertaining to urban population were taken from the



County and City Data Book (1956 and 1962) and from the 1970 Census of Population for respective states.

#### Characteristics of the data

The election data used in the analysis were coded in the form of a percentage of the total vote for the Republican candidate in each election under consideration and in each county in the study area. The percentages values are rounded to the nearest one-tenth percentage point. Data for population size were coded by county for both the absolute population size and the percentage of the total population that is classified as urban by the Bureau of Census.<sup>1</sup> Absolute figures are given to the nearest whole number; percentage urban data are rounded to the nearest one-tenth percent.

The frequency distribution of each variable employed was tested for correspondence with a normal distribution via the Kolmogorov-Smirnov test for normality.<sup>2</sup> Of the 15 variables (the percentage of Republican vote in 12 elections and the percentage of urban population in 1950, 1960 and 1970) employed in this analysis in only two cases, the 1964 presidential and the 1972 senatorial results, were the distributions normal at the .15 level of significance. For each variable not found to be normally distributed, two transformations, squaring the data and log transformation, were performed on each variable in an

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<sup>1</sup>Any population grouping larger than 2,500 is considered urban by the Bureau of Census.

<sup>2</sup>A program entitled NORM (Wittick, 1971) written by Theodore Miller, Department of Geography, University of Iowa, was employed in these tests. The program employs a Kolmogorov-Smirnov Test, two tailed, to test for normality.

attempt to render it normal. But in only two cases, the 1952 and 1968 presidential election returns, did such transformation produce a normal distribution. The data were thus left in the original percentage form and the only revision made was the computation of Z scores for map pattern comparisons. Thus, for all numerical and statistical purposes the data must be considered as deviating from a normal distribution.

### The Method of Analysis

Basically the analysis of the data involves devising a procedure for testing the validity of the hypothesis (or expectations) established in Chapter II. The procedure used in this inquiry can be divided into two stages--analysis of structure and analysis of process. The first stage--structural analysis--consists mainly of a description of the structure of successive voting response surfaces. In this case both numerical and visual forms of description are employed. Numerical description, that is means and standard deviations, is employed since it permits a more precise delimitation of the nature and spatial extent of electoral support for the Republican party. Such accuracy is extremely useful in the second phase of the analysis--the description of the process of electoral change. Since, in this case, process is hypothesized to be linked to urban structure, the analytical procedure employs techniques which test this thesis.

### Analysis of Structure

Describing the spatial structure of voting response surfaces traditionally has consisted of verbal description and visual impressions of electoral response surfaces. While such descriptions are

unavoidable in structural analysis, there are some serious limitations involved. Descriptions thus derived are essentially personal impressions of the analyst, and, as such, they may be subject to as many varying interpretations as there are analysts. In addition, the patterns of the voting responses themselves can vary depending on the choice of map scale, style and, most importantly, the data intervals used to prepare maps. Such deficiencies dictate the necessity of incorporating additional descriptive aids in the structural analysis.

#### Numerical description of the data set

In this inquiry visual pattern analysis is employed. However, it is supplemented wherever feasible with numerical description of the data. Such evidence lends additional support to structural analysis since the interpretation of voting response patterns is based not only on visual impression and personal expertise of the analyst, but also on evidence derived from consideration of the numerical and statistical characteristics of the data set. For example, consider two such statistics which are derived from the distribution of the data and which permit the analyst to assess the performance of individual constituencies or counties against others. These statistics--the mean and the standard deviation--measure the average (mean) performance and the extent to which each constituency deviates from the average (standard deviation). Thus, if we wish to assess the performance of the Republican party over successive elections, we can obtain a convenient summary of the statistical distribution of votes by deriving these two statistics for each election. As Lewis and Skipworth (1966) indicated in their analysis of British parliamentary elections, the mean vote and the standard

deviation provide a measure of compactness in the distribution of the vote over successive elections. The more uniform the distribution, i.e., the less the tendency toward high or low percentages, the smaller the standard deviation and interestingly enough the more successful the party (Lewis and Skipworth, 1966, 3).

Adapting this notion of uniformity in distribution to the electoral performance of the Republican party, it might thus be applied as an indication of growth of support. Since the data represent the proportion of the total vote that went to Republican candidates, increases in these percentages with increasingly more recent elections would point to greater success. Furthermore, a corresponding decrease in the standard deviation of each election with the passage of time would indicate more uniform or compact distributions of vote. Such uniformity would indicate that the areas of very high and very low support indicative of earlier electoral competition were disappearing as the party became increasingly more competitive and more successful. In other words, the distribution of the vote is expected to become more compact from 1948 to 1972; and as indication of this increasing uniformity the standard deviation computed for each election will decrease. Of course, as hypothesized in Chapter II, the means and standard deviations of senatorial vote distributions are expected to demonstrate greater stability than those of presidential vote distribution.

Just as such statistics readily provide a means of describing numerical distribution, they can be employed in spatial descriptions as well. Consider a pattern of voting response represented through the use of the percentage of the total vote gained by the Republican candidate in each county or constituency in each election. If we were to

transfer these figures (percentages) to maps of the study area, we would obtain a series of maps of the spatial distribution of voting responses. However, these percentage maps do not provide any indication of how the performance of an individual constituency measures up to the overall performance or the performance of all others. But, if the standard deviation of each constituency was the basis of the map patterns, the map would demonstrate the performance of each unit based on the mean of the total. Maps based on standard deviation units would thus show the relative strength of the Republican party in each county based upon the showing of the party in the total sample study area. As such, the maps would not reflect constituencies won or lost (though this may be computed rapidly from the mean) but they would allow statements to be made about the strength or allegiance of individual constituencies to the party. Those counties nearest the mean would be considered "typical" in their response patterns for that election. Those furthest from the mean would be either heavy supporters of the Republican party (positive standard deviations) or greatest opposition (negative standard deviations).

Often when choropleth maps<sup>1</sup> are drawn from such data as percentage votes cast for one party or another, the categories used to portray

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<sup>1</sup>An alternative form of map presentation would have been isarithmic mapping. But isarithmic mapping involves a considerable degree of interpolation and generalization of data. Consequently, this form of presentation would restrict comparison of maps to general areas of the voting surface rather than specific political units. The advantages gained in comparability and cross-constituency comparison via the use of central tendency measures would be lost to generalization. Choropleth mapping permits full utilization of individual performances, if so desired.

patterns of response are chosen quite arbitrarily. Standard deviation units can be used to define map categories (intervals) more objectively. For example, a middle or average category can be established by one-half standard deviation units above and below the mean (average) value of the distribution. Subsequent categories can be defined in one standard deviation unit on either side of the mean value. Categories thus derived are based upon parameters that accurately and meaningfully describe the statistical data to be mapped.

But even standard deviation units can be improved upon as a basis for mapping statistical data. By using the mean as an origin and the standard deviation as a means of standardization, it is possible to calculate another descriptive statistic for each observation called a Z score. The Z score is simply another method of comparing how far the various observations deviate from the mean; yet the Z score possesses the advantages of locating the observation by taking into account the total variability of the distribution, as well as being a standardized measure. Hence, it was decided to employ Z score values in mapping the county results of each election. The same criteria for selection of interval or category size can be applied to Z score values as were applied to standard deviation units. With Z score values the mean is 0 and a standard deviation is measured as +1.0 or -1.0. Allowing for a mean range of 1.0 Z scores ( $\pm 0.5$  Z scores on each side of 0) about the mean of 0 and increments of 1.0 Z scores the interval for mapping becomes:



	Heavy	<-2.500
REPUBLICAN OPPOSITION	Moderate	-2.500 to -1.501
	Light	-1.500 to -0.501
Mean Range		-0.500 to +0.500
	Light	+0.501 to +1.500
REPUBLICAN SUPPORT	Moderate	+1.501 to +2.500
	Heavy	>+2.500

To facilitate discussion of map patterns negative Z score values will be discussed as opposition and positive values as support, with degrees of each as represented above.<sup>1</sup>

Numerical description of the spatial characteristics of the data set

Maps prepared from statistics descriptive of the total distribution of the data set permit the analyst to make visual assessment of the location and distribution of electoral support for a political party. But interpretation of such maps involves both visual perusal and subjective assessment. As previously argued this procedure is highly variable and rather imprecise. Greater accuracy, reproducibility and objectivity can be achieved through the utilization of numerical

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<sup>1</sup>Since the data, except for one variable, do not conform to a normal distribution, probabilistic statements and assumptions cannot be applied in the use of these statistics. Thus, it cannot be assumed that 68 percent of the observations fall within  $\pm 1$  standard deviation range of the  $\bar{X}$  (mean), 95.5 percent in  $\pm 2$  standard deviation of the  $\bar{X}$  range and so forth. It is possible to make use of  $\bar{X}$ , standard deviations and Z scores in spite of deviation of the distribution from normality. If the mean is 10.0 and the standard deviation is 20.0 and the Republican party receives +50 percent of the two party vote in a county then that performance lies  $\pm 2$  standard deviations from the mean. However, because of the normalcy question, it cannot be assured that 95 percent of the other counties do as well.

description of the spatial characteristics of a data set. Such numerical description of voting response surfaces can be achieved by attending to the spatial and locational network in which the response is generated.

The intensity of Republican electoral support in each county in each election is measured by one value--a percentage of the two party vote. This percentage is an average for the entire constituency. If the constituency is viewed as a single point in space with this same percentage value assigned to this point, it is possible to visualize a distribution of  $n$  points in space, where  $n$  equals the total number of counties. In order to distinguish between these  $n$  points a grid referencing system of  $X$  and  $Y$  axes might be utilized to determine where each county (constituency) point is located in space. Each county is defined in terms of an  $X$  coordinate, a  $Y$  coordinate and a weighted  $Z$  value (percentage). Once each point is so defined, it becomes possible to derive a set of descriptive statistics similar to those utilized to describe the numerical distribution of the data set; only in this case these statistics describe the distribution of points in space weighted by the voting response at those points. For example, a central location or geographic mean can be calculated and as before the deviation of all other points in space from this mean location can be derived. In addition, once the nature of the dispersion of points about the mean location is known, the overall distributional orientation can be described. If these statistics were calculated by weighting each with the percentage of Republican vote, they would effectively describe a voting response surface spatially as well as numerically. By continuing such measurement over successive elections, it is possible to utilize these

statistics to trace the nature of spatial changes in these point distributions or voting surfaces.

To enable such analysis of spatial distribution to be performed, the distribution of county centers was described via a three digit set of X and Y grid coordinates. Using this location grid system and the percentage value for each election a set of descriptive statistics which numerically describe the spatial characteristics of the data was calculated for each election. The spatial characteristics of the point distributions were described in terms of their dispersion, shape and density.

The dispersion of the weighted points was described using a system of concentric rings, defined in reference to a stationary base point, to describe distance from that point. Direction from the center is defined by dividing the study area into sectors using lines radiating outward from the base point. By counting the points in each ring and sector and summing the value of the weights in each, the average weighted value for each ring and sector can be derived for an election. In this fashion intensity of support can be pinpointed and change over successive elections is traced, by direction and distance from a point common to all voting response surfaces. This procedure used in conjunction with the Z-score maps presents a more accurate measure of the variation in the levels of Republican electoral support than simple visual description and inspection.

Fortunately, this ring and sector count need not be attempted by hand drafting and hand calculation procedures. The speed and accuracy of a high speed digital computer can be utilized. A computer program

entitled LOCATE<sup>1</sup> (Wittick, 1973, 16-17) was utilized which employs user-defined rings and sectors to describe geographic data.

In addition to describing the dispersion in the weighted point distribution, it would also be useful to obtain a measure numerically describing the shape of the distribution. To accomplish this a computer program entitled CENTRO<sup>2</sup> (Wittick, 1973, 18-19) was employed to calculate centrophoric measures which describes: 1) the point distribution in terms of its relationship to a linear or circular pattern; 2) the mean and deviation from that mean; and 3) the dispersion in terms of standard reference axis calculated from the mean and standard distance. The descriptive measures calculated by CENTRO that are of specific use are:

- 1) the Mean Center . . . which is the equivalent of an arithmetic mean of a univariate distribution.
- 2) the Standard distance . . . which describes the dispersion along a line passing through the mean center.
- 3) the Principal axes (major and minor) of the distribution . . . describe the points at which the standard distance is at a minimum and maximum respectively.
- 4) the Angle of Rotation . . . the degree of rotation necessary to minimize the standard distance.

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<sup>1</sup>The original programmer of LOCATE was Duane F. Marble, Department of Geography, Northwestern University. The LOCATE program used in this analysis has been modified by Robert I. Wittick, Department of Geography, Michigan State University for inclusion in GEOSYS, an information system for the description and analysis of spatial data (Wittick, 1973, 16-17).

<sup>2</sup>The original programmer of CENTRO was John F. Hultquist, Department of Geography, University of Iowa. The CENTRO program used in this analysis was modified by Robert I. Wittick (1973, 18-19).

- 5) the Coefficient of Circularity . . . which measures the degree of roundness of the distribution (Hultquist, Holmes and Brown, n.d., 2-7).

The first four are useful in plotting a standard ellipse which describes the path of standard distance--one standard distance from the mean--values as the axes are rotated  $360^{\circ}$  about the mean center. The coefficient of circularity describes the shape from linear (0.0) to circular (1.0) values.

The coefficient of circularity, mean center and the values which describe the standard ellipse are all centrographic measures which are employed to describe electoral change. Since these values describe the shape of a distribution of points and since the distributions of points depict voting response patterns, the results of successive measurement by CENTRO are employed to chart change in voting response surfaces over time. If, for example, the shape of the distribution of weighted points which depicts the voting response surface for 1948 is described using the centrographic measures produced by CENTRO, it is expected the mean center would be situated in the Appalachian region of western North Carolina and eastern Tennessee. In addition, the coefficient of circularity likely would approximate a more linear pattern and the standard ellipse would be highly elongated in a northeast to southwest direction. This pattern is to be expected since in the earlier years of the examination period the Republican party core (locational base of electoral support) was centered almost entirely in the Appalachian area of Tennessee and North Carolina. However, with more recent elections, if as hypothesized, the GOP becomes increasingly more successful at the polls, its locational base of support should demonstrate

less regional concentration. The traditional core should diminish in relative importance as electoral support increases in traditional Democratic bases of support to the south and west of the traditional core. Thus, it is expected that the mean center computed for successively more recent elections will advance generally south and west. Correspondingly it is expected that the coefficients of circularity would demonstrate increasingly less linearity and will begin to approach circularity. Finally, the ellipses describing each election should demonstrate less ellipticity and more compactness since the standard distances along the major and minor axis are expected to approach equality. Of course, for any given date during the period under scrutiny, it is expected that the senatorial parameters will demonstrate less indication of change than their presidential level counterparts. Thus, in 1964 for example, the mean centers of the senatorial elections should be situated further north and east, the ellipses should be less circular and the coefficients of circularity should be nearer 0.0 than the presidential level counterparts.

These expected results, if verified, are indicative of changing patterns of electoral response in the study area. This change involves a gradual spread of electoral support for the Republican party from an early concentration in Appalachia in the late 1940's and virtual absence of support elsewhere in the study area, to a more uniform pattern of support throughout the South.

However, even though the numerical measures of spatial distribution described thus far may hint at a trend toward more uniform patterns of voting response, these measures cannot provide reliable indices of either concentration or uniformity. To accomplish these types of



measurement we must turn to another type of measure. We must describe the density of the point distribution.

Density is most commonly measured by dividing the number of occurrences of any given phenomenon by the area in which the phenomenon occurs. For the purposes of this inquiry, this is insufficient since simple density provides no indication of the relative position of the individual points. If, for example, 50 contiguous counties vote heavily in favor of a Republican presidential candidate, the relative compactness or clustering of this support can be overwhelmed by the total area of all the counties where support may be relatively low. In order to account for such interval variation nearest neighbor analysis is employed. This technique provides a measure of the degree to which a pattern of points departs from randomness. This is accomplished by comparing the actual straight line distance between each point and its nearest neighbor with the expected distance if the nearest neighbor were distributed randomly. Thus, the observed mean distance between each point and its nearest neighbor is divided by the expected mean distance to achieve a statistic  $R$  which can vary from 0.000 to 2.1491. This  $R$  statistic provides a measure of clustering, randomness, or uniformity since:

when  $R = 0$ , maximum clustering exists;

when  $R = 1$ , randomness exists; and

when  $R = 2.1491$ , maximum uniformity exists.

In this inquiry a  $R$  statistic will be computed for each of the 12 elections or distribution of points. The size of the point distribution will be limited to only those counties that provide greater than 45.0 percent of the total vote to Republican candidates in each

election.<sup>1</sup> Computation of the R values will be accomplished by utilizing a computer program entitled NABOR (Rhynsburger and Wittick, 1973, 21-22).

Since in earlier election years (1948-1956) Republican electoral support was highly concentrated in specific geographic locales, it is expected that these point distributions will produce R statistics which approach clustering (R nearer 0.0). In the middle election years these R values should approach randomness (R approximating 1.0) as support develops in areas outside the traditional cores of Republican support. Finally, in later years, as support becomes rather evenly spread across the study area, the R statistic should approach uniformity (R approaching 2.1491). Again in each case the R values of senatorial level elections should lag behind (be nearer 0.0) their presidential level counterparts.

#### Analysis of Process

Although it has been suggested that the changes in the locational base of support for the Republican party occur uniformly over the surface of the study area, this is not meant to infer that the change is spatially random. Quite the contrary, a great deal of evidence has been introduced earlier to support the thesis of a spatially specific pattern of change centered on cities.

The second stage of this analysis is devoted to testing the thesis of an urban related pattern of electoral change. Where the first stage centered on detailed description of the structure of electoral response surfaces, the second stage involves detailed description of the process

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<sup>1</sup>Forty-five percent is taken as a measure of at least a competitive range of electoral support.

underlying changes in those electoral response surfaces. The analysis does not attempt to describe all those processes linked to change; rather the analysis focuses on one particular element of the spatial structure which the literature has strongly indicated facilitates this process of change, viz., the urban structure. Thus, the thesis that the growth of electoral support for the Republican party occurs in larger urban population centers is tested. To expedite this testing procedure, an analysis routine was devised involving map comparison, non-parametric tests of statistical relationship and comparison of mean levels of support at varying categories of population size.

One method of comparing voting surfaces to urban structure is by simple visual perusal of maps depicting each phenomena. Since maps of voting surfaces will have been prepared previously for the description of the voting structure, there is no difficulty in preparing maps using the same county units, map intervals and Z score base, for the urban structure. Three such maps were prepared from data for the three census periods used. Thus, the original variables (before computation of central tendency measures) were percentage of urban population by county in 1950, 1960 and 1970. Visual inspection of these election and urban sets of maps was accomplished in a search for such coincidence of spatial regularities as might exist.

To explore the relationship between urban structure and voting structure in greater detail, it was determined that a more precise measure of association was needed. Unfortunately, the nature of the data employed in this analysis restricts somewhat the possibilities for determining the exact nature of this relationship. It would be useful, for example, to turn to the traditional tests of significance, such

as the t-test, the F-test and correlation coefficients, to test the relationship between urban size and change. But these tests require certain assumptions about the statistical characteristics of the population under study if the results are to be valid. One of the principal assumptions is normality. But, as discussed earlier, the data in this analysis deviate from a normal distribution. Thus to explore the urban/vote response relationship we must rely on tests which require fewer assumptions about the population parameters than the traditional inferential tests. We must turn to non-parametric statistical tests of association.

The specific test chosen for this analysis is Spearman's  $r_s$  which is derived from a group of routines that employ rankings of data to measure association. The measure utilizes rankings of two variables to achieve a statistic ( $\rho$ ) which is somewhat analogous to a product-moment correlation. Thus, the  $\rho$  statistic will vary between -1.0, where the ranks are in perfect disagreement, and +1.0, where the ranks are in perfect agreement. A  $\rho$  of 0 indicates no relationship at all. Again principal computations will be made by employing the high speed digital computer and a program for deriving  $\rho$  correlation coefficients.<sup>1</sup>

Since this program computes exact probability levels in testing for the level of significance of  $\rho$ , it is possible to test the hypothesis that urban structure and voting structure are related. To accomplish this, it is assumed that there is no significant relationship between percentage of urban population by county and the percentage of

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<sup>1</sup>The program used in the computation of Spearman's  $r_s$  was written by John Morris of Michigan State University (Morris, 1967a and 1967b).

Republican vote. This reverse approach is adopted since we cannot actually "prove" that the two are related. We can only demonstrate that the observed distributions could or could not have occurred by chance. The reverse hypothesis (the null hypothesis,  $H_0$ ) is thus that the observed data are the results of random variations. Thus, the level of significance is the probability that the data might have been generated by a random process. If this probability is low, the  $H_0$  may be safely rejected; if this probability is high, the null is accepted and the research hypothesis--that urban structure and voting structure are related--is rejected. By eliminating the false hypothesis the research hypothesis can be accepted since we know the distributions actually could not have occurred by chance.

Therefore, we hypothesize that there is no relationship between percentage of urban population by county and percentage of Republican vote. Since there are 12 elections (7 presidential and 5 senatorial level elections) and 3 separate measures of urban population (1950, 1960 and 1970) we must devise numerous null hypotheses (one for each possible comparison of urban structure and vote structure ranks).

But generally all null hypotheses ( $H_0$ ) will assume the following form:

$H_0$  there is no significant difference between the level of support for the Republican party in the 1948 presidential election and the level of urban population in 1950.

Testing will be accomplished at the .05 level significance. Thus, if the probability figures are less than the .05 level, the values of rho can be said to be significant at that level. The rho values will be computed for the rank order of each of the following variables:

<u>urban population by county in:</u>	<u>Percent</u> <u>Republican vote by county in the:</u>
	1948 presidential election
	1952
1950	1948 senatorial election
	1954
<hr/>	
	1956 presidential election
	1960
1960	1964
	1960 senatorial election
<hr/>	
	1968 presidential election
	1972
1970	1966 senatorial election
	1972

While the visual and statistical correlation procedures provide a means of gauging the overall relationship between urban structure and voting structure, these methods cannot accurately depict the variation in voting preference that occurs within the urban hierarchy. It is difficult for example to measure the effect of population size on voting response. To satisfy this goal, tables depicting the relationship between urban population size and level of electoral support were prepared. The level of electoral support is depicted by the mean level of support in each election for each category of population size. Population size categories were computed by relying on census figures for total population by county. Seven categories were utilized as follows:



>250,000  
 100,000 - 250,000  
 50,000 - 99,999  
 25,000 - 49,999  
 10,000 - 24,999  
 < 10,000

In every case the population data from the census year nearest an election year was employed to determine population size of a constituency (county). For example, in the case of the presidential election of 1948 the 1950 census figures were used; and for 1956 presidential returns, the 1960 census figures were employed.

In addition to exploring the relationship between population size and level of electoral support for the Republican party, these tables will also facilitate examination of the breaking point concept (Epstein, 1956; Adamany, 1964) discussed in Chapter II. Variation of electoral support due to population size should be reflected in a variation of the mean values for each category of population size.<sup>1</sup> Any marked variation in the pattern of these mean values will identify the breaking point or perhaps points.

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<sup>1</sup> Although the difference of means tests or some other appropriate test of significant difference in computed means would be useful in this particular section of the analysis, the data do not fit the assumptions of normality. However, visual inspection of the computed tables suffices.

## CHAPTER IV

### DESCRIPTION OF STRUCTURE

Although the context within which geographers work and view the world has changed recently, we have not abandoned traditional questions; "Where?" and "What is where?" are basic in any geography and they still occupy much of our time (Abler, Adams, and Gould, 1971, 82).

Geography has long been a discipline inclined toward asking "Where?" And understanding just "what" existed at "where" has always seemed a natural order of circumstance. Though these questions have assumed a new dimension with the change of context in which they are considered from the absolute space of miles and kilometers to the relative space of times and costs, they are nonetheless an essential part of geographic inquiry. It is hardly conceivable, at least at an empirical level of inquiry, to move to questions of "Why where?" and "How?" without first having established "Where?" Thus, it is a principal goal of this study and the primary objective of this chapter to describe as accurately and comprehensively as is feasible the structure of the voting response patterns of GOP support from 1948 to 1972.

The description will consist of a general analysis of overall patterns of electoral response as well as an examination of more detailed or specific patterns at the subregional level. The section devoted to general patterns of electoral response considers first the nature of the elections under scrutiny and then places these elections

into the proper spatial framework. In both the electoral context and the spatial context the discussion centers on the numerical parameters which describe the vote distributions. In the discussion of specific areas of Republican growth, the primary objective is the identification of spatial consistencies in the changing patterns of electoral response.

#### General Patterns of Electoral Response

Electoral theory has demonstrated the stability of partisan alignment of a constituency or individual voter. But the presence of electoral change presupposes the existence of disruptions or fluctuations in the normally stable patterns of electoral response. Thus, we can move forward in this analysis in the expectation of encountering a measure of volatility in voting response patterns. But how then do we distinguish between the long term disruption of electoral response patterns that comes as a consequence of electoral change, and the relatively more volatile short term fluctuations that may occur due to deviant elections or special nature of a particular election? For example, we may discover that the South has indeed changed from the solid Democratic position of pre-1948 to heavier Republican electoral support in 1972. But how then do we distinguish between this 24 year or long term change and the temporary disruptions in voting response that Barry Goldwater's strategy or a third party candidacy of obvious southern appeal may have wrought? We cannot unless we understand the character of each election under consideration. Thus, initial consideration is given to the electoral context and to the specific characteristics and the spatial properties of the elections under scrutiny.

## Electoral Parameters

In this section the goal is simply to outline the main features of the elections under scrutiny in terms of the numerical distribution of votes. This is accomplished by discussing these elections in terms of the numerical parameters of the vote distribution, such as the mean and the standard deviation. A summary of these parameters for each of the 12 elections is presented in Table 4.

### Numerical means

In general the patterns of the mean levels of support suggest that in the 448 counties of the study area the electoral fortunes of the Republican party are improving with each election. Although it has been a rather volatile rise, the mean level of support has increased considerably from 1948 to 1972 at both levels of competition. Considering now only 1948 and 1972, the mean level of Republican vote increased over three fold from 13.83 percent to 44.63 percent at the senatorial level and from 20.08 percent to 73.71 percent at the presidential level. For the most part, this increase has demonstrated a greater measure of stability at the senatorial level, with only one deviation from a pattern of steady increase in the mean--the 1954 senatorial elections. But even at the presidential level, the pattern of a steady increase in the mean level of support is broken only twice. In his second attempt at the presidency, the appeal of candidate Eisenhower to voters in the study area seems to have decreased slightly; and not unexpectedly, in 1968 the appeal of third party candidate George Wallace sent the mean level of support for the GOP plummeting back down to near the 1948 levels (26.85 percent level).

TABLE 4  
ELECTION PARAMETERS

Level of Electoral Competition <sup>1</sup>					
Presidential			Senatorial		Year
Year	Mean	Standard Deviation	Mean	Standard Deviation	
1948	20.08	18.78	13.83	19.22	1948
1952	36.72	17.37			
			13.12	17.47	1954
1956	34.36	17.97			
1960	38.98	17.04	18.99	19.15	1960
1964	56.01	16.62			
			36.89	21.28	1966
1968	26.85 <sup>2</sup>	16.45 <sup>2</sup>			
1972	73.71	10.72	44.63	14.24	1972

<sup>1</sup>Figures based on percentage of total vote that went to Republican candidate.

<sup>2</sup>If the Wallace percentage of the total vote is added to the percentage voting for Richard Nixon, the mean value is 75.88 and the standard deviation is 9.81.

SOURCE: Computed by author.

One of the more notable patterns in these mean levels of support is the sharp difference between the means of elections before and after 1960. At the presidential level, despite the popularity of Dwight Eisenhower, the mean never rises above 40 percent until 1964 when it increases 150 percent over the 1960 level! Only the effects of a three-way split in the vote disrupts the pattern of generally higher levels in post-1960 elections. And at the senatorial level this pattern is duplicated with 100 percent increase in the mean level of support from 1960 to 1966. Indeed up until the 1966 senatorial level elections, there was general support for presidential Republicanism. The discrepancy between the magnitudes of the means at the two levels of electoral competition in the pre-1960 period suggests that Republicans were indeed faring considerably better at the presidential level of competition. Thus, the relative successes<sup>1</sup> of the Republican party at the presidential level in 1952, 1956 and 1960 might well have come as a consequence of the appeal of presidential candidates or the disenchantment with Democratic presidential candidates, and not as a result of overall party gains; especially since this success was not duplicated at the senatorial level in 1948, 1954 and 1960. But the argument of strictly presidential Republicanism begins to lose validity once the results of the post-1960 elections are introduced. For although the major differences in levels of support between levels still remain after 1960, there is a dramatic increase in the mean level of support in the senatorial competition which matches or surpasses that of the presidential

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<sup>1</sup>Relative to the near vacuum of pre-1948 times.

level from 1960 to 1964. This increase, coming as it does at both levels, offers evidence that the inroads made by the Republican party beginning with 1964 were far more than simply a form of single level (presidential) Republicanism. The occurrence of this break at both levels of competition introduces the possibility that the dramatic increase may have come as a consequence of something more than simple candidate appeal. Some of the senatorial level gains in the post-1960 period can be attributed to the fact that the Republican party began offering candidates for competition in Georgia after 1960.<sup>1</sup> But the mere fact that Georgia Republicans felt they had progressed far enough to offer competition to the Democrats is noteworthy in itself. At any rate the influence of the 1960-1964 period in the fortunes of the southern GOP is one point to bear in mind as the analysis unfolds.

#### Standard deviations

Although the mean value represents one avenue of describing electoral support for the Republican party in the sample of counties under consideration, the standard deviation is perhaps a more accurate measure of party performance. Standard deviations provide a reliable measure of compactness in the distribution of votes. In short, the lower the standard deviation the more uniform the distribution. Thus, in 1948 and 1952 when some counties of eastern Tennessee and western North Carolina were providing Republican candidates from 50 to 70 percent of their vote, while Deep South counties were giving less than

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<sup>1</sup>Since Georgia accounts for 159 of the 448 counties in the sample, any increase from the 0.0 level of support of a no candidate election would most significantly alter the mean values.



1 percent to these same candidates, one might logically expect the distribution to become more compact as electoral support becomes more uniformly distributed. That is, as the distribution becomes more compact, the standard deviation should decrease. Since to a large degree more uniform distributions reflect an improvement in Republican fortunes, the standard deviations should provide a valuable measure of their success.

The standard deviations for the 12 elections under scrutiny are provided in Table 4. In general these values provide a measure of support for the thesis of electoral change characterized by a growth of electoral support for the Republican party. Consider first the presidential level of competition. Except for the election of 1956, the standard deviations demonstrate a remarkably stable and continuous decline. Even in 1968 when three parties split the vote, the standard deviation is below the value for 1964.<sup>1</sup> The values of the standard deviations at the presidential level of competition indicate considerable improvement in the competitive position of the GOP in the study area.

Republican fortunes at the senatorial level are somewhat less promising. Over the entire period the standard deviation values decline

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<sup>1</sup>One common assumption is that the vote for George Wallace would have gone primarily to the Republican candidate, Richard Nixon, in a normal two party contest. At the very least Wallace, so the argument goes, cut into Nixon potential support (Converse, Miller, Rusk, Wolfe, 1969). To examine this notion the Wallace vote and the Nixon vote were summed and considered as one total. Wherever statistics for the 1968 election are provided, this two party summation will also be given as a means of comparing the actual results with the theoretical potential. It is interesting that the mean values at the presidential level lose some of that characteristic volatility if the mean of 75 percent for this total two party vote is considered in lieu of the 27 percent for Nixon alone.

to a point where the 1972 value of 14.24, approximates the 1972 presidential value of 10.72. But the pattern of standard deviations at the senatorial level is far less stable than those at the presidential level. In fact, from 1954 to 1966, the Republican party fortunes appear to decline rather than improve as the standard deviations actually rise! One likely explanation for the volatility of this parameter may lie in the manner of measurement used at the senatorial level. Since this parameter is highly susceptible to the range of the distribution values and since it measures deviation for the entire sample area, the influence of individual state contests would be considerable. For example, the very high value in 1966 (21.28) could be a function of considerable variation in level of support across state lines. In South Carolina in 1966 the Republican candidate Strom E. Thurmond was rolling up a mean level of 62.2 percent of the total vote against his hapless Democratic opponent, Bradley Morrah; while in Georgia, Earl E. Patten, the first Republican candidate for senator since reconstruction, could hardly be expected to beat unsurmountable psychological odds, historical precedent, and two term incumbent Herman Talmadge.<sup>1</sup> Such a wide divergence in the level of support is expected to produce large standard deviation values; and these larger values are directly attributable to a voting surface composed of seven different electoral situations instead of one as in the years of presidential competition. Such internal variation may dilute the value of the standard deviation in the

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<sup>1</sup>These candidates were actually involved in an election taking place in 1968, but the 1968 senatorial election in Georgia was substituted for a no data year in 1966.

consideration of senatorial election responses since this parameter may not be as reliable as the presidential level. At any rate the low standard deviation for 1972 senatorial (14.24) and the steady (and stable) increase of mean level of support at this level, do provide a degree of support for the notion of improved Republican fortunes at the senatorial level of electoral competition.

The hypotheses in light of the results

In summary the expectations of general improvement in the competitive position of the Republican party vis à vis its pre-1948 electoral situation is fulfilled. In light of the increase in mean levels of support at both the senatorial and gubernatorial levels of competition and in light of the overall decrease in standard deviation values at both levels, the political fortunes of the GOP appear on the rise. The hypothesis of time lag in the level and intensity of support between the presidential and senatorial levels of competition is also fulfilled. Republican candidates have achieved greater overall success in the study area at the presidential level. Indications of improved competitive position at the senatorial level in the post-1960 period do not, however, support the notions of presidential Republicanism. From 1960 on, electoral change appears to be prominent at both levels. In addition, the hypothesis of greater stability in the patterns at the senatorial level of competition is supported by the values of the mean levels of support. However, the need for caution in the interpretation of senatorial patterns is made apparent by the highly irregular nature of standard deviation values. Particular caution is called for in the interpretation of patterns of response for the following elections:

presidential, 1956 and 1968; and senatorial, 1954 and 1966. It is these elections that deviate most from the overall patterns.

### Spatial Parameters

Given these words of caution on the nature of the elections under consideration, and the insights into the overall electoral context, we may now proceed to place the election in a more spatial framework. This is accomplished by utilizing the same numerical description given for the elections, i.e., by providing parameters such as the mean and the standard deviation of each election. But in this phase of the analysis these parameters provide descriptions of point distributions. Thus, the level of Republican electoral support is considered only as a value assigned to a particular point in space. And the total of these weighted points is characterized by the shape, density, and dispersion of the distribution. These parameters thus provide a measure of the spatial variation in voting response over time.

### Shape of the distribution

Three parameters which provide a measure of the shape of a distribution of points are the mean center, the coefficient of circularity, and ellipses computed from measures calculated to represent one standard deviation from the mean center. Usually these parameters provide reliable indices of variation in the shape of a point distribution over time. However, in this instance it was discovered that these parameters were subject to marked influence by comparatively small portions of the total point distribution, especially if extreme values of either weights or locations were involved. Thus, the shape of the ellipses and the value of the coefficients of circularity would fluctuate considerably

if peripheral counties<sup>1</sup> in the areal sample were eliminated from the analysis. Consider the values of the coefficients of circularity provided in Table 5. The coefficients on the left represent the values obtained by utilizing the entire (448 observation) sample. The values on the right are the coefficients obtained if 10 percent of the extreme points are cleaned from the distribution.<sup>2</sup> Although the difference is slight in some cases, for example, the 1952 presidential election, the cleaning operation has the potential of markedly affecting the coefficient derived such as in the case of the 1948 senatorial election. Thus, caution must be employed when discussing the values for the coefficient of circularity or when examining the structure of the ellipses, since it is difficult to account for the influence of such highly deviant values.

It was, however, noted that the mean centers of the distributions considered in this inquiry were apparently subject to less influence by extreme values. For example, altering the composition of the distribution by eliminating the most extreme 10 percent of the points from the analysis actually caused little variation in the location of the mean centers. The only noticeable affect was a slight shift of the mean location to the north. This northward shift appeared to be rather consistent for all elections. Since the mean centers appear to

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<sup>1</sup>Peripheral is used in terms of both extreme locational values and extreme data or weighted values.

<sup>2</sup>Data cleaning or elimination of the most extreme data or location values is an option provided with the CENTRO program. It is a commonly employed procedure and in this case proved a useful method of detecting the reliability of the spatial parameters employed in this analysis.

TABLE 5  
COEFFICIENTS OF CIRCULARITY

Level of Electoral Competition					
Presidential			Senatorial		
Year	Total Distribution	Distribution Minus 10% <sup>1</sup>	Total Distribution	Distribution Minus 10% <sup>1</sup>	Year
1948	.931	.836	.723	.481	1948
1952	.903	.898			
			.553	.543	1954
1956	.891	.899			
1960	.937	.917	.707	.623	1960
1964	.858	.939			
			.927	.899	1966
1968	.983 <sup>2</sup>	.906			
1972	.953	.958	.941	.988	1972

UNWEIGHTED POINT DISTRIBUTION COEFFICIENT = .962

<sup>1</sup>Distribution after elimination of 10 percent of data extremes.

<sup>2</sup>The coefficient derived by using point distribution weighted with sum of Wallace and Nixon vote was .957.

SOURCE: Calculated by author.

be subject to less fluctuation than coefficients of circularity, the primary discussion of the shapes of these 12 elections or point distributions will focus on this parameter.

Neither the coefficients of circularity nor the ellipses computed from standard distance measures in themselves offer much support to the thesis of gradual electoral change. The results of computations for both parameters suggest high values approaching circularity. For example, the expected low values for the coefficients of circularity in earlier elections were not confirmed (Table 5). The coefficients of .931 and .723 for the 1948 presidential and senatorial elections respectively reveal a nearly circular distribution of points, not the linear pattern expected. The high values are consistent throughout the study period, although, as postulated, somewhat lower coefficients are obtained for senatorial elections. This tendency toward a gradual increase in this parameter does not permit confirmation of the hypothesis of gradual improvement in the competitive position of the GOP in the study area. The coefficients of circularity are subject to too great an influence from extreme cases.

The nearly circular structure of the ellipses for these elections (Figure 2) confirms the circular shape suggested by the coefficients of circularity. Thus, again the expected gradual increase from low coefficients and elongated ellipses to high coefficients and less elliptical shapes is marred by almost circular patterns throughout the period. And, again, on the basis of the configuration of the standard ellipses, the hypothesis of gradual regularity in the shape of the point distributions cannot be confirmed.

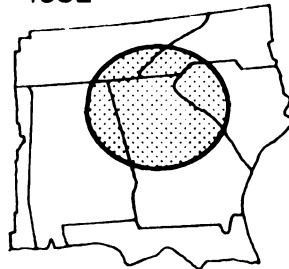


**FIGURE 2.**  
**STANDARD ELLIPSES DESCRIBING THE SPATIAL DISTRIBUTION**  
**OF THE REPUBLICAN VOTE FROM 1948 TO 1972**

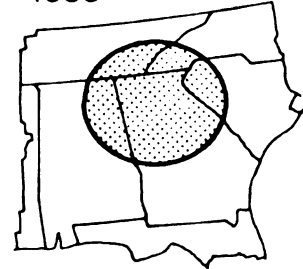
**PRESIDENTIAL**  
**1948**



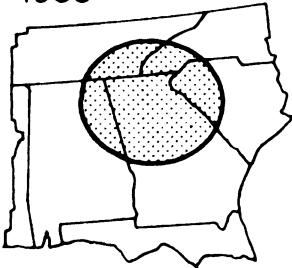
**1952**



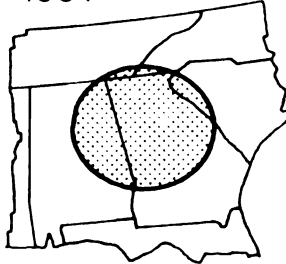
**1956**



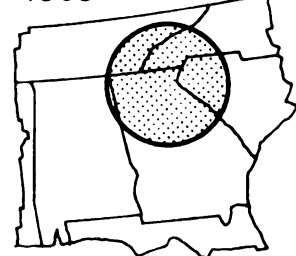
**1960**



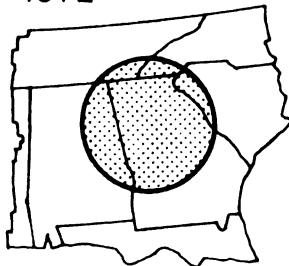
**1964**



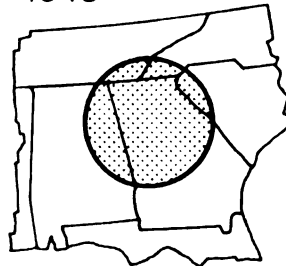
**1968**



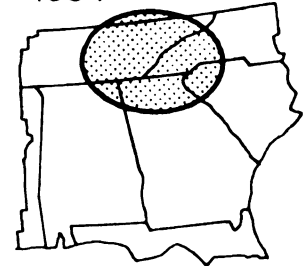
**1972**



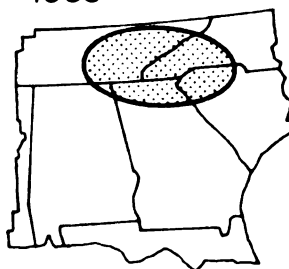
**SENATORIAL**  
**1948**



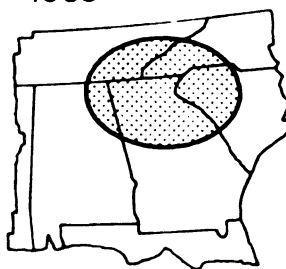
**1954**



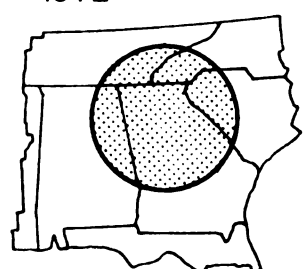
**1960**



**1966**



**1972**



0 200 Mi.

N

If the extreme data elimination option is employed in computing these parameters the progression from low to high coefficients and from ellipticity to circularity is more closely approximated. However, no logical justification can be advanced for such data cleaning at this point in the analysis. In the analysis of the relationship between electoral change and urban structure such elimination is utilized since the core counties are not involved in any electoral change. Thus, eliminating them from an analysis of electoral change over the entire study area can be justified. But at this point a description of the total structure of electoral support is under consideration. Thus, no part of the spatial structure can be eliminated since this would result in altering the structure itself. Thus, the uncleaned data are employed in the analysis. However, an examination of the relative position of the ellipses (Figure 2) reveals some hint of changing patterns of support. The gradual, if somewhat irregular shift, of the ellipses southward with reference to the outlines of the study area is suggestive of a movement of the locational base of party support to more southerly locations. But this phenomenon is best approached by considering another parameter, the mean center of Republican support.

The mean center is somewhat akin to an arithmetic mean, and is frequently employed in the computation of the geographic center of population for the United States. In this study the mean center becomes a geographic center of Republican support. The mean centers represent the geographic center of the electoral support for the Republican party in the study area for each of the presidential and senatorial elections. The mean centers for each of these 12 elections are

plotted in Figure 3. To facilitate interpretation, presidential elections are plotted separately from senatorial elections.

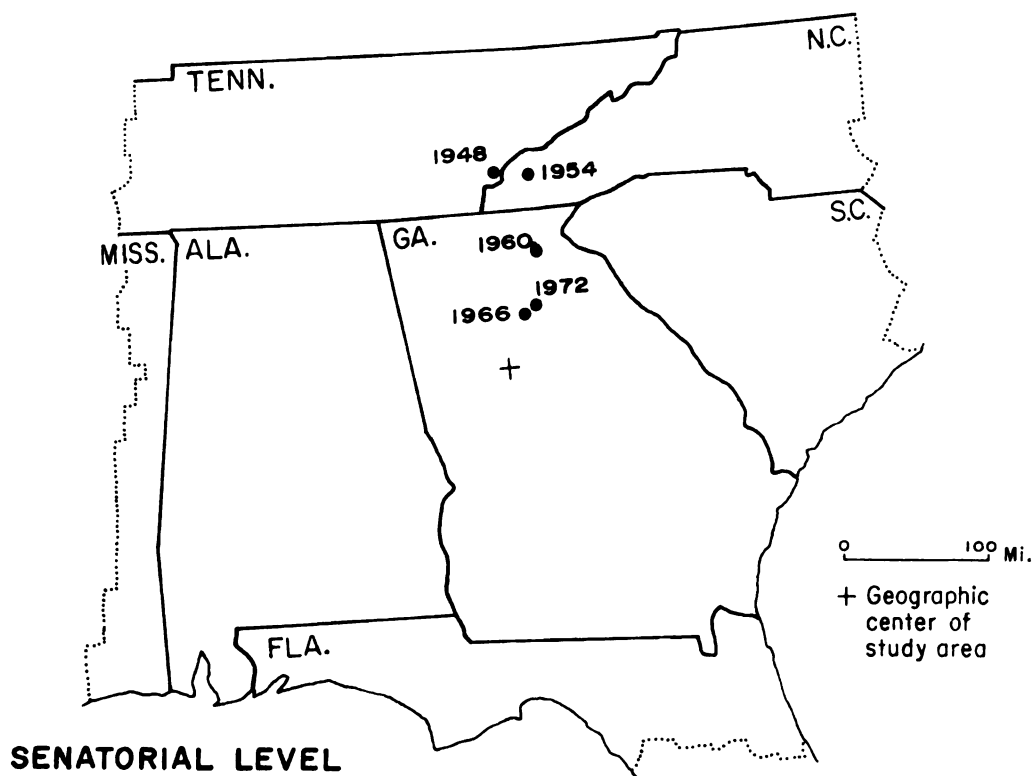
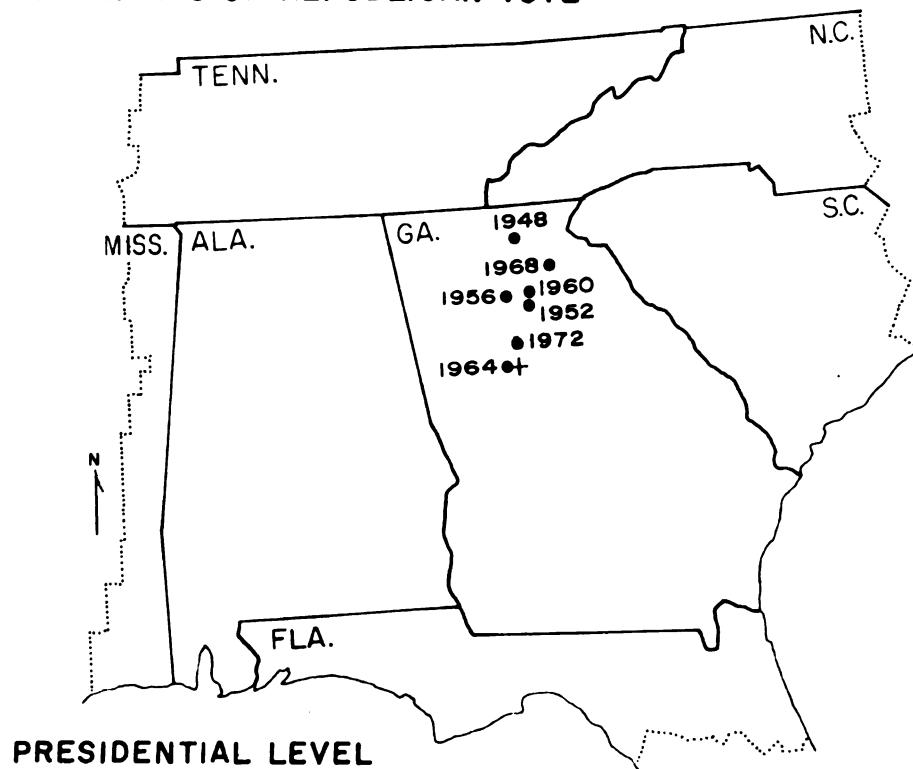
These centers are viewed as indicative of the geographical locations of electoral strength and weakness. For example, consider the mean centers of the 1948 elections. As expected the center of support in 1948 lies in the traditional Appalachian core of Republicanism with the senatorial mean in a slightly more northern position than the presidential mean which lies at the southern edge of the core. The strength of electoral support for the GOP in 1948 was Appalachia; its weakness lay almost everywhere outside that core<sup>1</sup> but in particular electoral support for Republican candidates diminished as one moved south from this core. However, as electoral response patterns in the study area changed, the support for Republican candidates in the Deep South increased. Since a large number of the sample points lay in this area, and since their weighted values (percentages) increased, the mean center was expected to move southward in subsequent elections. Applying this interpretation to the mean centers of our electoral sample, we might thus expect a north to south migration of mean centers much as the population centers of the United States have steadily moved from east to west.

In general the performance of the Republican party that is manifested in the mean locations for these 12-point distributions conforms to expectations. As expected, the general pattern for the means is a north to south alignment with earlier elections situated in more

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<sup>1</sup>As will be noted later in the analysis, in 1948 a measure of support for the GOP could also be found in western Tennessee, the Piedmont region of North Carolina and in the area surrounding Winston county, Alabama.

**FIGURE 3.**  
**MEAN CENTERS OF REPUBLICAN VOTE**



northerly locations and the later elections farther south. In general this pattern holds for both levels of competition but the expected lag of senatorial elections is confirmed since their mean centers are situated in more northerly locations than the presidential counterparts. The pattern of progressive southern advancement of means is especially noticeable if the means for each of the elections at both levels are referenced to the unweighted mean center (depicted by a + on each map). In general the early elections (1948-1954) are furthestest away from the unweighted mean center, the latest elections (1964-1972) tend to be closest;<sup>1</sup> and the middle elections (1955-1963) somewhere in between. The early elections demonstrate the locational characteristics attributable to traditional patterns of GOP support since the mean centers of these elections are situated virtually in the Appalachian core. The latest elections demonstrate the type of response patterns expected if a competitive electoral situation existed in the study area. Although there are specific areas of concentration of Republican electoral support (and non-support), there exists little of the virtual non-competitiveness or zero level support that so characterized earlier electoral periods. This is not meant to imply that the electoral support patterns of 1964 and 1972 were spatially consistent or equally intensive throughout the study area; rather it suggests that the electoral support was coming from virtually all sectors of the study area.

Thus, it is possible to utilize the relative position of these three groups of presidential elections to characterize the nature of

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<sup>1</sup>The presidential election of 1968, of course, deviates from this pattern. But if the total vote for Wallace and Nixon is used the mean center for 1968 would be almost directly over the 1972 presidential election mean center.

the electoral change occurring in the study area. Consider the character of this change in terms of the periods of growth of Republican competitiveness. In the earlier elections, such as 1948, there was a distinct absence of electoral support for the GOP outside of the traditional cores of Republicanism. With succeeding elections, 1952-1960, the party gained some electoral strength in other sectors of the study area and the mean center is drawn southward from the mountain stronghold. Finally, in the later elections, 1964 and 1972 in particular, the Republicans gained enough strength to become competitive. Thus, except for the presidential election of 1968, the positions of geographic means for both presidential and senatorial elections from 1948-1972 indicate a steady increase of electoral support for the Republican party in portions of the study area where little or no support existed before. This would suggest that the electoral support is gradually becoming less geographically concentrated in traditional core areas as support has developed in more southern areas. Apparently the overall distribution of support is gradually approaching a situation in which no sector of the study area is lacking some measure of support. Electoral support is gradually becoming more uniformly distributed throughout the study area. But to examine this conclusion further, we must turn to a description of the density of the point distributions.

#### Density of the distribution

Descriptions of the density of the point distributions were obtained by isolating those counties that returned over 45 percent of their total vote to Republican candidates in each election under consideration. The total number of counties in this category in each

election are provided in Table 6. These distributions were subjected to nearest neighbor analysis to derive an R statistic descriptive of the density of each distribution. The results of the 12 nearest neighbor computations are provided in Table 7.

Given the R values obtained there can be little doubt that the pattern of electoral support (over 45%) is moving from a more clustered to a more uniform distribution. Since the highest possible R value in this case is the 1.328 value obtained for the total study area, the point distributions of later elections are approaching uniformity. The R values move from .525 and .514 for presidential and senatorial, 1948, respectively, to 1.321 and 1.156 values in the 1972 presidential and senatorial elections. And only the presidential 1956 and 1968 and the senatorial 1954 break a pattern of steady increase.

The pattern of these R values offers strong evidence of a tendency toward more uniformity in the distribution of Republican electoral support.<sup>1</sup> If these statistics are used in combination with the shift in the location of mean centers, the notion of electoral change receives additional support. The low R values for early elections combined with mean centers in Appalachia depict concentration of electoral support in the traditional cores. Progressively higher R statistics combined with progressively more southerly locations for mean centers are indicative of the gradual increase of electoral support in more southern parts of the study area. Electoral support for the GOP is indeed becoming more uniformly distributed and apparently it is occurring at both levels

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<sup>1</sup>Support, in this instance, is defined as more than 45 percent of the total vote.



TABLE 6  
 NUMBER OF COUNTIES RETURNING GREATER  
 THAN 45.0 OF THE TOTAL VOTE FOR  
 A REPUBLICAN CANDIDATE  
 (Total Number of Counties is 448)

Year	<u>Level of Electoral Competition</u>		Year
	Presidential	Senatorial	
1948	62	41	1948
1952	138		
		35	1954
1956	130		
1960	158	56	1960
1964	340		
		248	1966
1968	76 (445) <sup>1</sup>		
1972	443	252	1972

<sup>1</sup>Wallace vote plus Nixon vote.

SOURCE: Calculated by author.

TABLE 7  
NEAREST NEIGHBOR STATISTICS

Year	Level of Competition		Year
	Presidential	Senatorial	
1948	.525	.514	1948
1952	.826		
		.491	1954
1956	.819		
1960	.908	.685	1960
1964	1.214		
		1.136	1966
1968	.578 (1.324) <sup>1</sup>		
1972	1.321	1.156	1972

TOTAL STUDY AREA R STATISTIC = 1.328

<sup>1</sup>The R statistic derived by using the Wallace vote plus Nixon vote as a percentage of the total vote.

SOURCE: Calculated by author.

of competition. However, the relative location of the mean centers and the comparatively lower values of  $R$  at the senatorial levels suggests again that the senatorial level of competition is lagging behind the presidential level.

The hypotheses in light of the results

If taken together the evidence of electoral change favoring the Republican party is certainly worthy of note. The migration of the mean centers of location suggests a change in the locational base of party support from the Appalachian core to a point approaching the unweighted geographic center of the study area. This suggests that support for the party has significantly increased in former Democratic strongholds of southern and central Georgia, Alabama and Mississippi. These results offer strong evidence in favor of accepting the hypothesis of decreasing geographical concentration of electoral support. For, as hypothesized, electoral support does appear to become more uniformly distributed throughout the study. And, as hypothesized, this tendency toward less geographic concentration is not occurring in equal proportions at both levels of electoral competition. Presidential candidates apparently invoke more spatially uniform response patterns than senatorial candidates, if the entire study area is employed.

Determination of specific locations for electoral support and for change in patterns of electoral response is the goal of the final stage of the description of point distributions, an analysis of the dispersion of the points. In this case the dispersion is described by ring and sector counts of the intensity of electoral support. As a supplement to this means of description, the maps of electoral response are

utilized to determine intensity at specific locations. In describing such dispersion and relating support to specific locations, the scale of analysis moves from general electoral response to subregional patterns.

#### Subregional Patterns of Electoral Response

The electoral response patterns in the seven presidential and five senatorial elections under consideration are summarized in Figures 4 through 10. These maps reflect the pattern of electoral support for the Republican party based on the mean level of support in each election. In interpreting the resulting patterns care must be taken to avoid assuming that high positive patterns depict high levels of support. This can be true but only in reference to the mean level of support. Thus, in the 1948 senatorial election (Figure 4) a county with a relatively high Z score value of +0.5 to +1.5 might still be lost to the Democratic party since the mean level of support in this election was in the study area only 13.83 percent. Even a +1.5 Z score may indicate the Republican gained only approximately 42 percent of the total vote. If the mean value is low even heavy support ( $>+2.5$  Z scores) may be relatively low in relationship to Democratic percentage of the two party vote. Thus, the term support must be interpreted relative to the mean given at the base of each map.

To aid in the interpretation of these maps, a ring and sector analysis breakdown for each election is provided in Table 8. The values given in this table represent the mean value of electoral support in each ring and sector for each of the 12 elections under consideration. The location of each ring and sector is shown in Figure 11.

FIGURE 4.

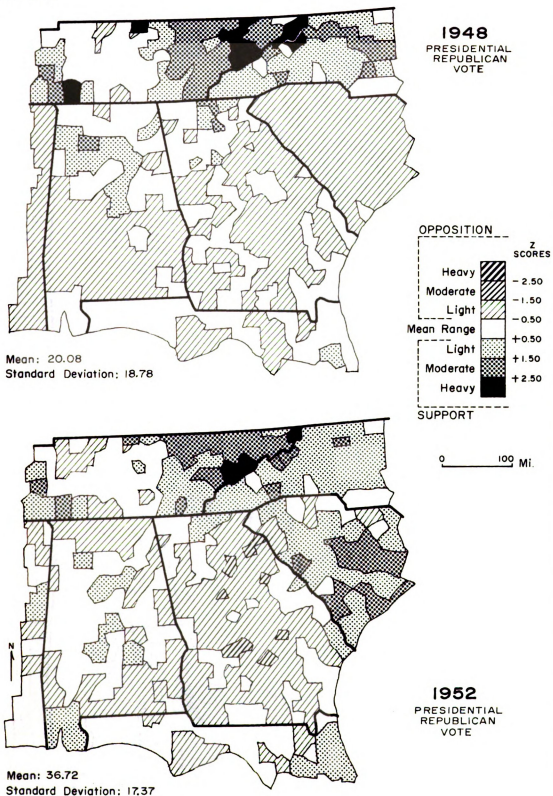


FIGURE 5.

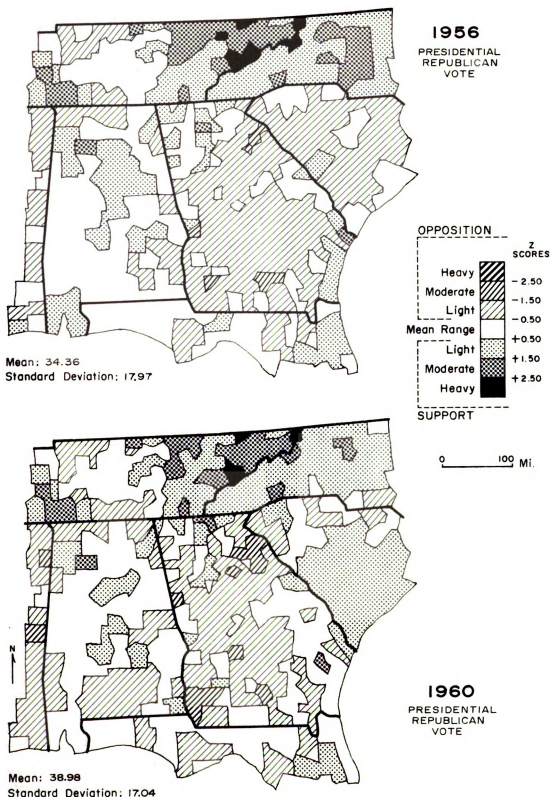


FIGURE 6.

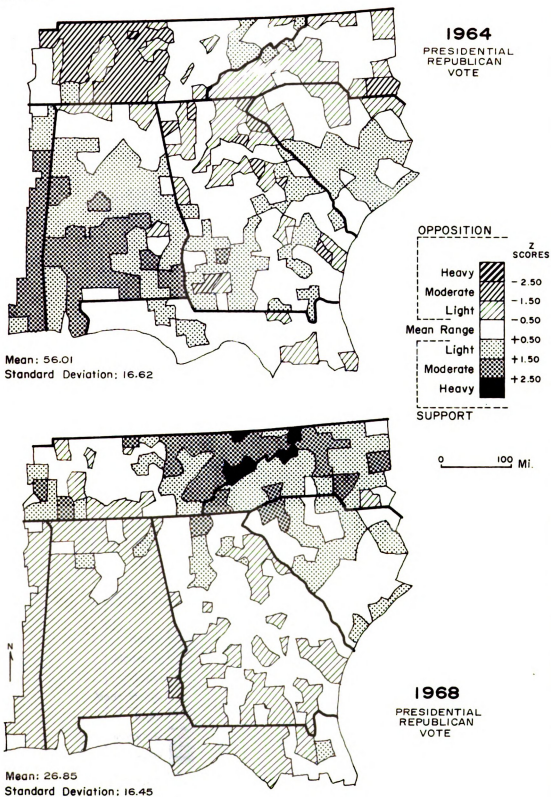
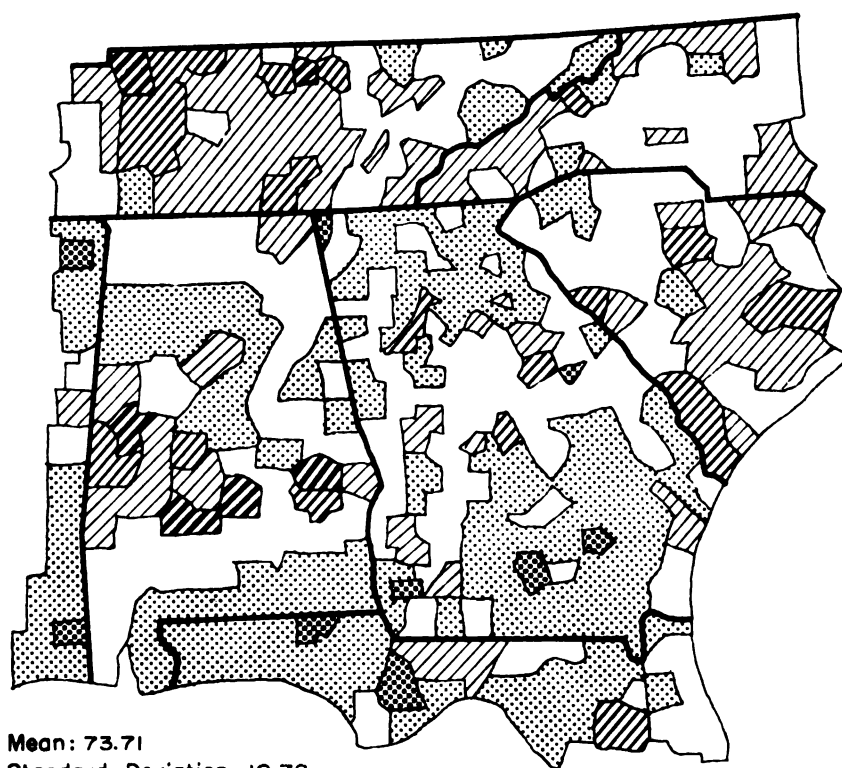
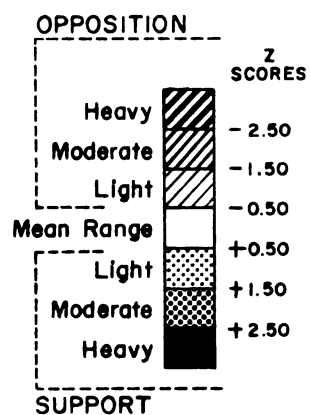




FIGURE 7.

**1972** PRESIDENTIAL REPUBLICAN VOTE

Mean: 73.71  
Standard Deviation: 10.72



0 100 Mi.

FIGURE 8.

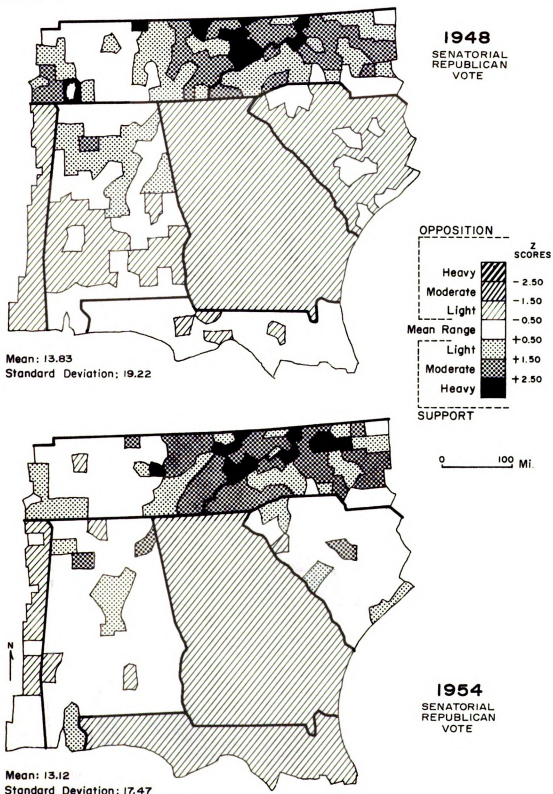


FIGURE 9.

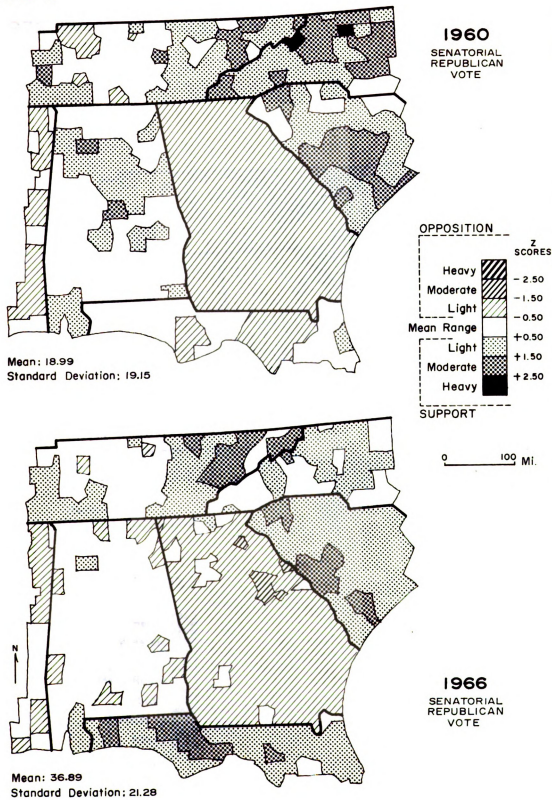
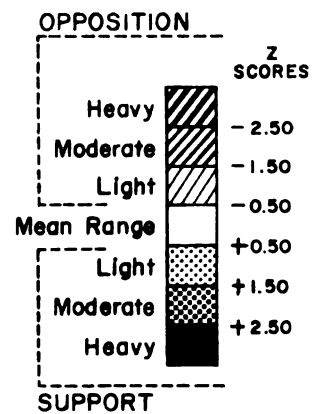
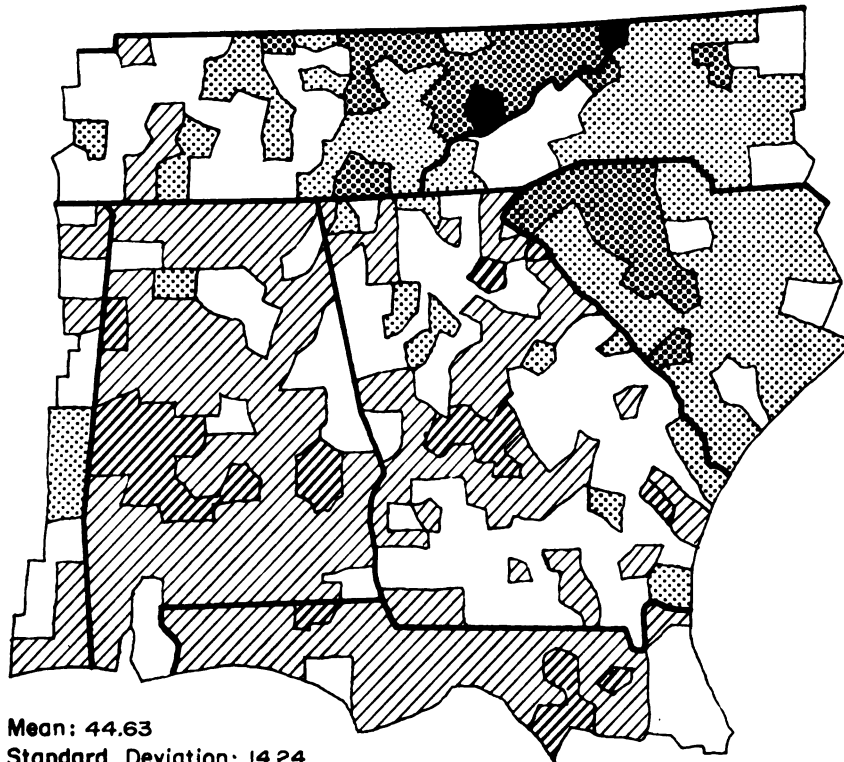


FIGURE 10.

**1972 SENATORIAL REPUBLICAN VOTE**

0 100 Mi.

TABLE 8  
MEAN LEVEL OF ELECTORAL SUPPORT BY RING AND SECTOR<sup>1</sup>

	President							Senator				
	48	52	56	60	64	68	72	48	54	60	66	72
R151	9.8	15.9	20.6	21.2	42.2	26.1	78.8	0	0	0	11.4	42.8
R152	0.1	17.8	18.9	23.5	52.5	18.5	72.5	0	0	0	7.1	37.3
R153	11.8	18.9	21.0	29.2	59.3	22.5	74.6	0	0	0	13.2	34.6
R154	9.5	17.3	17.1	23.5	58.3	19.2	74.7	0	0	0	14.9	27.8
R155	11.4	25.5	24.2	27.8	63.0	17.0	76.1	0.2	0.8	2.3	14.1	38.7
R156	13.6	14.6	26.8	29.1	60.9	15.8	79.0	9.3	6.3	17.9	26.5	36.9
R157	16.5	23.1	30.1	30.1	56.9	22.4	80.8	5.8	3.6	7.6	19.1	47.0
R158	26.1	33.1	39.6	37.9	48.3	34.1	78.4	0	0	0	19.2	44.8
R251*	30.5	42.2	42.2	45.6	42.8	41.9	74.6	22.7	24.7	28.7	41.9	52.2
R252	2.8	44.8	23.7	45.2	60.8	31.7	70.4	0.7	7.1	28.1	49.1	56.5
R253	7.7	26.6	11.5	33.1	59.5	19.1	79.4	0.1	1.0	3.5	15.6	41.7
R254	10.5	23.9	20.0	24.8	64.4	16.8	80.1	0.4	0	0.8	18.1	39.6
R255	8.3	23.7	22.0	24.1	73.9	5.3	76.6	3.6	2.8	11.0	28.0	32.3
R256	12.3	38.1	40.4	40.9	76.5	8.7	66.5	9.9	15.3	28.8	38.0	29.1
R257	23.4	30.5	34.5	35.8	51.9	17.8	72.8	21.4	16.5	26.1	37.6	35.7
R258*	38.8	47.3	50.5	52.1	44.4	39.4	71.2	27.2	28.0	22.0	45.7	55.0
R351	51.7	60.6	62.6	61.5	52.1	54.1	72.7	48.1	45.4	47.1	58.1	63.8
R352	10.0	53.3	27.8	47.9	54.7	34.4	65.6	8.8	19.0	40.3	53.4	56.4
R353	17.7	46.4	44.1	44.9	54.6	26.6	70.9	3.3	3.7	13.4	35.7	50.7
R354	13.8	34.8	32.4	34.3	53.1	17.9	77.3	7.6	0	10.7	61.6	30.3
R355	12.2	30.0	32.2	32.1	62.8	14.5	83.7	7.6	2.1	16.7	62.9	29.9
R356	3.2	35.3	28.3	29.6	83.2	5.9	68.8	2.6	6.2	15.3	29.7	32.8
R357	23.4	35.1	33.8	37.7	46.1	23.1	69.5	21.8	14.3	20.3	39.2	40.5
R358*	35.1	45.7	44.3	49.1	36.1	37.2	63.7	33.7	24.9	21.4	47.5	55.0
R451*	36.6	46.4	56.4	53.4	46.2	44.2	68.0	29.8	33.8	46.2	46.2	50.4

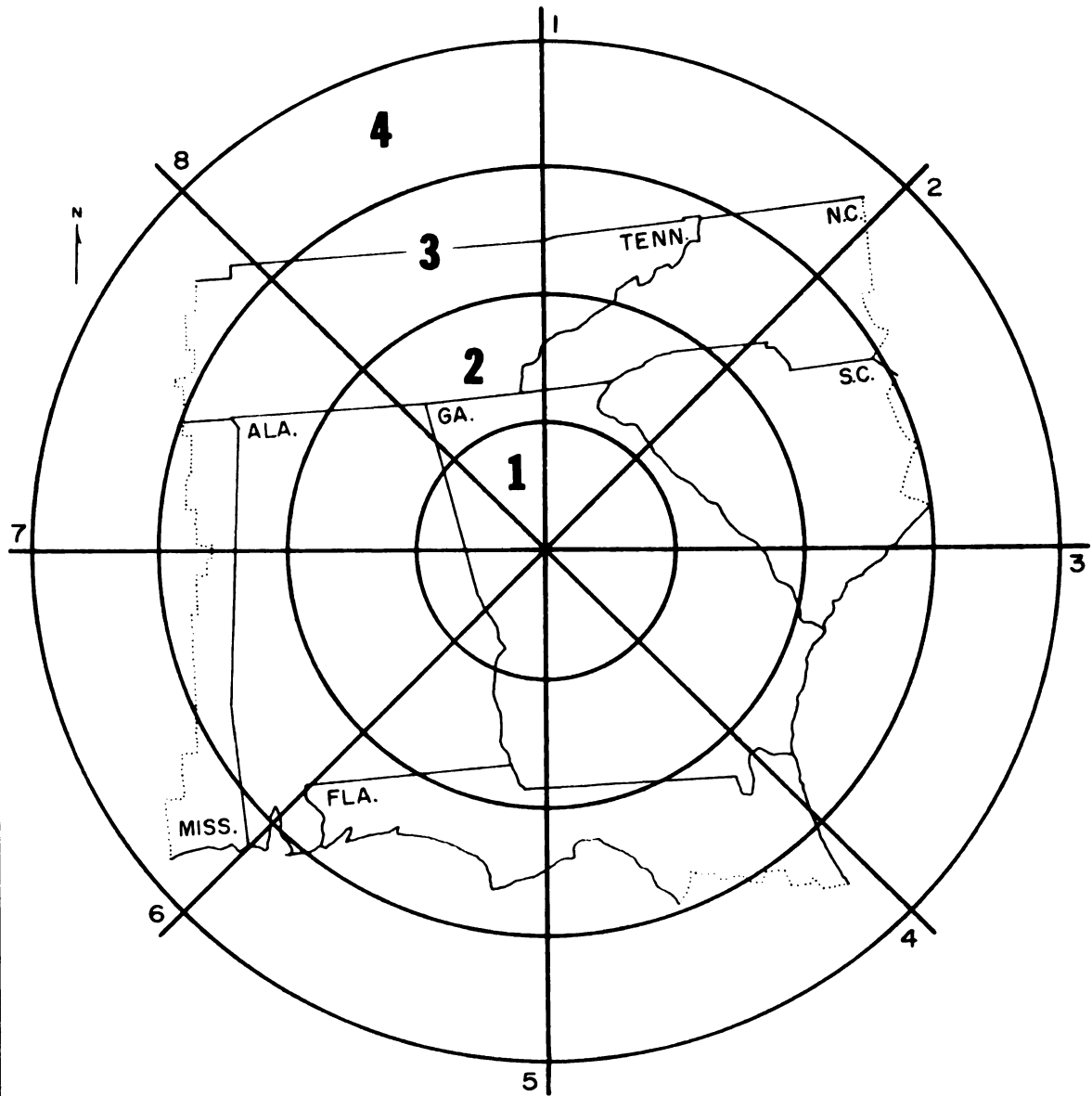
TABLE 8 (Cont'd.)

	President						Senator					
	48	52	56	60	64	68	72	48	54	60	66	72
R456	3.2	37.0	32.6	21.8	85.0	11.0	87.2	0	6.8	11.4	28.0	33.2
R457	23.0	35.7	34.7	39.0	29.7	27.0	56.3	22.7	15.0	19.0	47.3	43.0

<sup>1</sup> Ring 4, Sectors 2-5 and 8 are not provided since the frequency counts were 1 or less.

\*Traditional Core.

FIGURE II.  
**RING AND SECTOR LOCATIONS**  
IN THE STUDY AREA



3 Sector numbers

**4** Ring numbers

0 100 200 Mi.



Interpretation of the mean values presented in Table 8 proves to be exceedingly tedious since the interpretation procedure involves digesting a 27 x 12 or 324 item table of mean values (one for each ring and sector combination). In order to simplify this procedure it was decided to eliminate the necessity of dealing with actual mean values and rely on a surrogate indicator of change. Since the main focus of this inquiry is electoral change and the improvement of Republican electoral fortunes,<sup>1</sup> the surrogate measure will be the percentage of change between each of the seven presidential and five senatorial elections for each of the 27 ring and sector combinations. To further simplify the interpretation procedure, these percent change values are then categorized by intensity of change as measured by the following interval scale:

	X = No change or negative change
positive change	1 = 0.1 to 5.0%
	2 = 5.1 to 10.0%
	3 = 10.1 to 15.0%
	4 = 15.1 to 20.0%
	5 = >20.0%

The results of this simplification procedure for presidential level elections are provided in Table 9 and for senatorial level elections in Table 10.

Possibly the most consistent pattern of voting response depicted in these 12 maps and 3 tables is the traditional Appalachian core of Republicanism. The only deviation from a consistent pattern of heavy

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<sup>1</sup>Erosion of Republican electoral position would entail preservation of status quo, i.e., continued Democratic party electoral dominance.

TABLE 9

## PERCENT CHANGE IN PRESIDENTIAL ELECTIONS BY RING AND SECTOR

	48 to 52	52 to 56	56 to 60	60 to 64	64 to 68	68 to 72
<hr/>						
Ring 1						
S1	2	1	1	5	X	5
S2	4	1	1	5	X	5
S3	2	1	2	5	X	5
S4	2	X	2	5	X	5
S5	3	X	1	5	X	5
S6	1	3	1	5	X	5
S7	2	2	X	5	X	5
S8	2	2	1	3	X	5
Ring 2						
S1*	3	X	1	X	X	5
S2	5	X	5	4	X	5
S3	4	X	3	5	X	5
S4	3	X	1	5	X	5
S5	4	X	1	5	X	5
S6	5	1	1	5	X	5
S7	2	1	1	4	X	5
S8*	2	1	1	X	X	5
Ring 3						
S1*	2	1	X	X	1	4
S2	5	X	5	2	X	5
S3	5	X	1	2	X	5
S4	5	X	1	4	X	5
S5	4	1	X	5	X	5
S6	5	X	1	5	X	5
S7	3	X	1	2	X	5
S8*	3	X	1	X	1	5
Ring 4						
S1*	2	2	X	X	X	5
S6	5	X	X	5	X	5
S7	3	X	1	X	X	5
<hr/>						

\*Traditional Core.

LEGEND

X = No change or negative change

Positive Change { 1 = 0.1 to 5.0%  
                   2 = 5.1 to 10.0%  
                   3 = 10.1 to 15.0%  
                   4 = 15.1 to 20.0%  
                   5 = >20.0%

SOURCE: Calculated by author.

TABLE 10

## PERCENT CHANGE IN SENATORIAL ELECTIONS BY RING AND SECTOR

	48 to 54	54 to 60	60 to 66	66 to 72
<b>Ring 1</b>				
S1	X	X	3	5
S2	X	X	2	5
S3	X	X	3	5
S4	X	X	3	3
S5	1	1	3	5
S6	X	3	2	3
S7	X	1	3	5
S8	X	X	4	5
<b>Ring 2</b>				
S1*	1	1	3	3
S2	2	5	5	2
S3	1	1	3	5
S4	X	1	4	5
S5	X	2	4	1
S6	2	3	2	X
S7	X	2	3	X
S8*	1	X	5	2
<b>Ring 3</b>				
S1*	X	1	3	2
S2	3	5	3	1
S3	1	2	5	3
S4	X	3	5	X
S5	X	3	5	X
S6	1	2	3	1
S7	X	2	4	1
S8*	X	X	5	2
<b>Ring 4</b>				
S1*	1	3	X	1
S6	2	1	4	2
S7	X	1	5	X

\*Traditional Core.

LEGEND

X = No change or negative change

Positive Change { 1 = 0.1 to 5.0%  
2 = 5.1 to 10.0%  
3 = 10.1 to 15.0%  
4 = 15.1 to 20.0%  
5 = >20.0%

SOURCE: Calculated by author.

Republican electoral support in this area is the 1964 presidential election (Figure 10).<sup>1</sup> This core is equally apparent on both map and ring and sector analysis. In the ring and sector analysis the relatively heavy support became apparent from the regularly reoccurring high mean values (Table 8, R2, S1; R2, S8; R3, S8; and R4, S1).<sup>2</sup> These five areas have been identified on all ring and sector tables by an asterisk (\*). Since these five ring and sector combinations enter the analysis period (in 1948) with relatively high mean levels of support and maintain consistently high (at least relative to the remainder of the study area) levels, the amount of change involved is often slight. Thus, in the case of these core counties the summation of percent change by ring and sector can be rather misleading, since the pattern would appear to be one of erosion of support rather than positive change. But reference to Table 8 verifies the negative change generally involves rather small drops in mean levels. For example, R2, S1 has 42.2 percent in 1952 and the same value in 1956.

Closer scrutiny of the ring and sector count offers one additional center of traditional Republican electoral support. Situated in southwestern Tennessee, this lesser core of electoral support offers mean levels of support somewhat below the levels of the Appalachian core (Table 8, R3, S7). Yet reference to V. O. Key (1949, 76-78) confirms the historical pattern of support offered by this area. From

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<sup>1</sup>Although the 1972 electoral response patterns (Figure 7) would appear to be lower than normal, the dominant pattern lies within the mean range category. The mean for 1972 is 73.7 percent.

<sup>2</sup>These notations are read as Ring 2, Sector 1 (R2, S1) and Ring 2, Sector 8 (R2, S8), etc.

anti-secessionist sentiment in 1861 to Republican majorities in 1896, 1916 and 1944 elections, this area has been a seat of Republican party support.

Closer examination of successive maps of voting response reveals one additional small node of historical Republican electoral support in the area of Winston county, Alabama (Key, 1949, 281). This latter example is not detectable by ring and sector count, but it is identifiable on virtually every map (1964 and 1972 presidential excluded) as an island of GOP support.

The major core of Appalachia, and the lesser "cores" of southwestern Tennessee and Winston county, Alabama appear as consistent areas of light to heavy support on the maps of voting response. These traditional "cores" have consistently offered heavier than average support to Republican party candidates. As such, these areas will hardly be subject to the same degree of electoral change which more traditionally Democratic areas underwent in the same time period. Since the objective of this research is identification of changing patterns of electoral response, these traditional bases of Republican support will receive less attention in subsequent analysis. However, the appearance of these areas in this phase of the analysis does offer a measure of confidence in the analysis procedure. Had these areas not been so readily apparent in the description and the literature, there would have been cause to doubt the reliability of the descriptive procedure employed in the inquiry.

Aside from these cores of Republicanism, few long term consistencies in voting response are readily apparent. The map patterns outside core areas demonstrate a rather high measure of volatility,

with patterns seldom maintaining themselves longer than two elections. In short, dynamics appear to be the dominant feature of the maps and tables.

Close examination does provide some consistency, however. One of the more noteworthy trends is the reoccurrence of a pattern of support for the GOP in the northern fringes of the study area and non-support in the southern areas. Since the behavior of southern counties (Sectors 3-6) generally assumes a pattern virtually opposite that of their northern counterparts (Sectors 1-2 and 7-8), this north-south division is readily distinguishable. For example, in 1964 southern counties offered Goldwater heavy support while northern counties provided only average to light support.<sup>1</sup> Yet, even these regional differences erode in more recent elections. In earlier elections the north-south division coincides with a general Rim versus Border South division, and even some state boundaries can be traced between patterns of support and patterns of non-support; but in the more recent elections the influence of boundaries becomes less apparent and the pattern of support/non-support becomes less concentrated as support becomes more uniformly distributed. In fact by 1972 the pattern displayed on the map of response patterns strongly hints at a random pattern of support (Figures 7 and 10). The ring and sector analysis confirms the uniformly high levels of support throughout the study area in these elections.

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<sup>1</sup>Interestingly enough, it is only the five ring and sector combinations designated as Appalachian core (Table 9) which lost electoral strength from 1960 to 1964.

This north-south division becomes more apparent if comparisons are drawn between the levels of competition. The same general tendencies are present at both levels as electoral support moves from a concentration in northern fringes in 1948 (Figures 4 and 8) to more uniform patterns of support in 1972 (Figures 7 and 10). The major difference, however, is in the patterns of earlier elections. As might be expected given the nature of the senatorial surfaces, the differences between north and south in the elections of 1948, 1954 and 1960 are striking. The pattern of north-south division is far more visible from senatorial maps of the elections (Figures 8 and 9) than for the presidential counterparts (Figures 4 and 5). In addition, the ring and sector analysis demonstrates that the mean values of the southern sectors (Table 8, Sectors 3-6) are generally well below those of the north (Table 8, Sectors 1-2 and 7-8). However, as the north-south division erodes in subsequent elections, the difference in levels of competition becomes less apparent.

Aside from this general north-south division, it is, however, possible to detect more subtle areas of apparent change in electoral response patterns. Less obvious regularities in the response surfaces are also noted in: central Alabama (R2, S6; R2, S7); virtually all of South Carolina (R2, S2; R3, S2); the Atlantic coastline of Georgia and Florida (R3, S3); the panhandle of Florida (R3, S4; R3, S5); and in the area centered on Atlanta, especially those counties to the east towards South Carolina (R1, S1 and S2) and towards the southwest towards Columbus (R1, S5 and S6). In these examples some measure of increased support for the GOP can be isolated by close examination of map patterns in conjunction with ring and sector Tables 9 and 10.

It is interesting that in every case mentioned, except for South Carolina, these consistent growth areas are either urban centered or lie at the fringes of the study area in higher population density coastal zones. The central Alabama example centers on the Birmingham and Montgomery corridor. The Atlanta example contains several of Georgia's larger cities, such as Athens, Mason, Columbus and Augusta. And the coastal Georgia and Florida examples are areas where increased in-migration has resulted in high population density coastal settlement as well as larger cities such as Savannah, Jacksonville and Pensacola. Such coincidence of consistent patterns of growth of GOP support and urban population clusters speaks well for the analysis of process to follow in the succeeding chapter.

Except for the area between Atlanta and Columbus (R1, S5 and R1, S6), there are few areas where growth patterns remain consistent across both levels of competition. The exceptions are the areas of South Carolina (R2, S1 and S2) and coastal Georgia and Florida (R3, S2 and S3). Of course, the South Carolina example is subject to the distortion of candidate orientation since the "Thurmonism" of South Carolina voters may be more widespread than the Republicanism. And the Georgia-Florida example of the presidential level change is broken by distortions such as the Wallace movement in 1968. In fact in every case except the Atlanta-Columbus example the pattern of change is subject to a greater measure of volatility at the presidential level of competition. Such volatility does not merit attaching any partisan labels to the change since the next election may bring a complete 180° change. However, since these areas formerly were Democratic strongholds, perhaps the volatility itself is worthy of note. If such areas cannot be



labeled Republican bases of support at least the volatility is suggestive of electoral change. And the electoral change taking place in these areas would appear to be no single competitive level phenomenon; for although it may be less intense, it is as prevalent and more stable at the senatorial level than at the presidential level of competition.

Relying on the maps of voting response to detect any major differences in the intensity of electoral support for the GOP at the two levels of competition is difficult. Examination of the senatorial maps (Figures 8-10) did, however, reveal major changes in state level support patterns. Consider the change in Georgia patterns from the senatorial 1948 (Figure 8) to the senatorial 1972 (Figure 10). Consider also the change in the response patterns of South Carolina and northern Florida. In each of the cases the dominant pattern in earlier years is opposition. Yet in later elections the states display patterns of support not unlike more traditional areas of Republicanism. But for the most part, the major indications of time lags in levels of support are revealed in the ring and sector analysis. The differences between senatorial and presidential means for the same period conform to expectation. The means of the senatorial elections are lower in earlier years but tend to equalize in later years. This pattern of lower means in earlier years proved useful particularly in identifying areas of change. The examples of electoral change in central Alabama, South Carolina, coastal Georgia and Florida's panhandle, became more obvious when the mean level of support at the senatorial level of competition was considered. In these geographic areas the change appears to be occurring at both senatorial and presidential levels. In the other

areas less intense bi-level support is noted in later elections (1966-1972).

Thus, the map and ring sector analysis in general verifies the impressions of overall electoral change expected and observed earlier. But the identification of specific areas of change is difficult to isolate since the electoral change has apparently not stabilized enough to impart any definite partisan labels to specific areas. And in those areas, such as central Tennessee, where this quite possibly could have occurred, this growth may well be masked by the relative position of ring and sector boundaries versus county boundaries. The pattern analysis, while illustrating traditional areas of support, does not allow strict delimitation of "emergent" supportive areas of Republicanism. However, if the electoral change is focused on nodes, especially urban foci, then there is an explanation for the lack of general and persistent patterns of change. For in such a case the change is characterized as nodal or point (county) centered not areal. This facet is examined in the subsequent analysis on the nature of change.

## CHAPTER V

### DESCRIPTION OF THE PROCESS

Aside from this "tradition . . . Republicanism," found in seven of the southern states, probably the best known feature of presidential Republicanism in the South has been the greater willingness of metropolitan electorates, as compared to voters in the non-metropolitan sector, to support Republican nominees (Cosman, 1966b, 53).

Description of the voting response structure provides three basic prerequisites for analysis of electoral change. We now possess:

1) knowledge of the character of the elections under study; 2) a description of general patterns of electoral support of specific points during years since 1948; and 3) a detailed image of locational bases of support for the Republican party. Given this pattern foundation, it is now possible to continue the investigation of southern electoral change into less static arenas, that is, to investigate the process of electoral change in a spatial context.

In turning to an analysis of process we do not abandon description. Rather the description simply shifts from area-wide voting structure to urban structure, as it is here that the literature intimates the change is first likely to occur. Thus, in attempting to affect an analysis of changing patterns of electoral response not all possible variables or inputs into the electoral change process are considered. In fact this inquiry centers on only one segment of the process, that which relates to the urban environment; for it is the hypothesis of this inquiry that

a strong positive relationship exists between the level of urban population and the level of Republican support. Consequently, the description focuses on the urban structure of the study area or, more accurately, on the hypothesized relationship between the urban structure and the voting structure.

In considering the electoral change it is the Republican vote that is the medium for analysis, since increased Republican vote response is equated to change in the once "Democratic" South. The principal questions then become: Is there a relationship between the vote for Republican candidates and the urban structure or urban population? Does increasing population size or increased urban population facilitate the increase of the GOP vote? Or perhaps more appropriately, does a relationship exist at all? If so, what is the direction and strength of the relationship? Does the relationship vary between competitive electoral levels? The purpose of this chapter is to provide answers to such questions.

The general relationship between the Republican vote and the urban structure is examined through the use of visual correlation and non-parametric statistical correlation techniques. As in the previous chapter, map analysis and ring and sector counts again form the basis for visual interpretations of relationship. Statistical relationship is obtained by rank order correlations. A more detailed examination of the relationship between vote and urban structure is affected by considering the vote levels for varying population size categories.

## General Patterns of Relationship

### Maps and Ring and Sector Analysis

Utilizing the procedure employed in creating the voting response structures described in Chapter IV, similar surfaces depicting the levels of urban population in each of three census periods were devised. These are provided in Figures 12 and 13. These maps depict the distribution of urban population by county in each of three census periods--1950, 1960 and 1970. Urban population is measured by the percentage of the total population of a county living in a city over 2,500 population. To facilitate comparison of these urban structures to their voting response counterparts, the same Z score intervals are employed for both the voting and the urban structure. As a supplement to the visual comparisons made between the urban structure and the voting structure, ring and sector counts were derived for the three urban structures using the same procedure employed above. The results of these ring and sector counts are summarized in Table 11. As a further supplement to analysis, the ring and sector results were once again simplified by calculating the percentage and categories of percent change in urban population. The same procedure was employed as that used for the voting structure. The results are given in Table 12.

Although the maps of urban structure provide useful background on the nature of the urban population, any concrete gains from visual correlation are negated by the imprecision of such an analysis. It is, for example, useful to know the nodes of population growth and stability in that population. Also, it is useful to be able to locate specific areas of high and low urban population. Yet a visual linkage between three individual maps of urban population and 12 voting response surfaces

FIGURE 12.

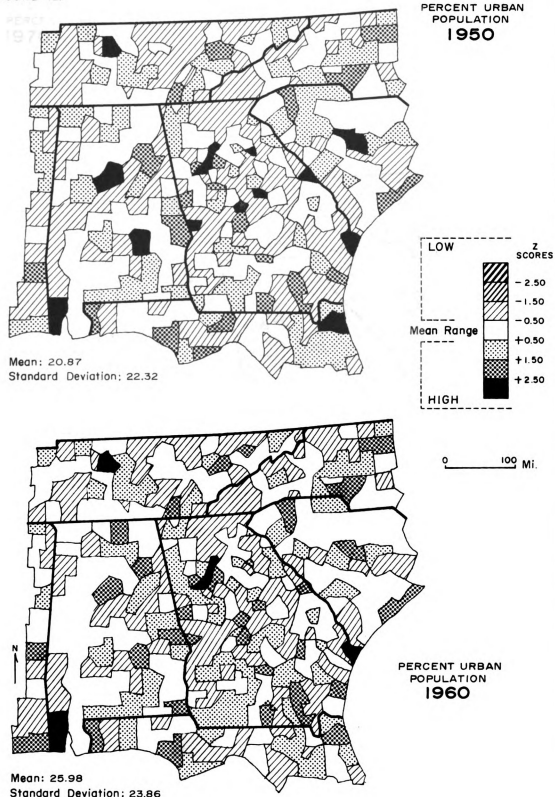
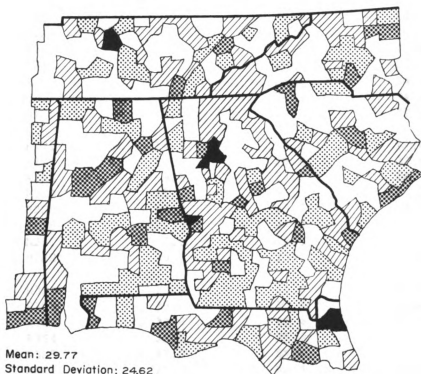
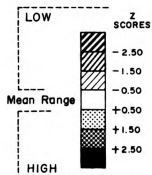


FIGURE 13.  
PERCENT URBAN POPULATION  
1970



Mean: 29.77  
Standard Deviation: 24.62



0 100 Mi.

TABLE 11

## PERCENT URBAN POPULATION BY RING AND SECTOR

	Census Year		
	1950	1960	1970
R1S1	21.4	27.4	26.6
R1S2	7.7	7.7	16.2
R1S3	29.7	29.7	39.9
R1S4	25.8	25.8	30.8
R1S5	18.9	18.9	27.5
R1S6	28.4	28.4	34.8
R1S7	24.1	24.1	34.8
R1S8	27.5	27.5	37.6
R2S1*	14.5	17.8	18.6
R2S2	23.5	29.8	32.6
R2S3	9.8	17.2	25.7
R2S4	28.2	36.0	40.2
R2S5	19.8	27.7	33.4
R2S6	22.3	27.7	32.1
R2S7	22.6	29.5	32.3
R2S8*	20.3	23.5	26.4
R3S1*	19.5	21.0	22.8
R3S2	29.0	30.2	33.4
R3S3	32.6	38.4	41.4
R3S4	20.5	26.3	27.5
R3S5	27.7	35.5	39.2
R3S6	15.3	22.3	26.4
R3S7	15.6	23.0	29.0
R3S8*	13.2	16.1	22.0
R4S1*	39.4	41.2	42.6
R4S6	27.6	27.6	38.2
R4S7	16.7	18.7	24.3

\*Traditional Core

SOURCE: Calculated by author.



TABLE 12  
PERCENT CHANGE IN URBAN POPULATION  
BY RING AND SECTOR

	1950 to 1960	1960 to 1970
Ring 1		
S1	2	X
S2	X	2
S3	X	3
S4	X	1
S5	X	2
S6	X	2
S7	X	3
S8	X	3
Ring 2		
S1	1	1
S2	2	1
S3	2	2
S4	2	1
S5	2	2
S6	2	1
S7	2	1
S8	1	1
Ring 3		
S1	1	1
S2	1	1
S3	2	1
S4	2	1
S5	2	1
S6	2	1
S7	2	2
S8	1	2
Ring 4		
S1	1	1
S6	X	3
S7	1	2

LEGEND

X = No change or negative change

Positive Change {

- 1 = 0.1 to 5.0%
- 2 = 5.1 to 10.0%
- 3 = 10.1 to 15.0%
- 4 = 15.1 to 20.0%
- 5 = >20.0%

SOURCE: Calculated by author.

proves to be a nearly impossible task. Further, the details provided by the ring and sector counts add little to such an analysis.

Interpretation of relationship between urban and vote structures by ring and sector counts involved visual comparison of two tables--one 27 x 12 items and another 27 x 3 items. Thus, only the more readily apparent coincidences of relationship between high vote levels and high urban levels could be isolated. For example, it is comparatively simple to note the coincidence of high urban levels in the coastal areas of the Atlantic and Gulf regions of South Carolina, Georgia and Florida (Table 11, R3, S3 and R3, S4) and the correspondingly high mean levels of GOP support (Table 8, R3, S3 and R3, S4). Also the high urban values of the Atlanta, Georgia area (Table 11, R1, S8) are matched by moderately high levels of GOP support (Table 8, R1, S8). But any attempt at drawing more detailed and well based relationships involves considerable measures of subjectivity.

As earlier criticism indicated, the imprecision of map comparison analysis is to be expected from virtually any map pattern analysis. But the detail of the ring and sector count were designed in part to overcome the imprecision of this method.<sup>1</sup> And the success obtained in isolating Republican strength areas (cores) and areas of consistent change in the description of structure were sufficient cause for high expectations in the analysis of relationship. But in general, the map comparison and ring and sector count procedure is more revealing for its

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<sup>1</sup>Perhaps less detailed ring and sector counts, i.e., 2 rings and 4 sectors, might alleviate the unwieldy nature of the procedure. But the fewer the number of rings and circles the closer to the original surface, and thus to simple map comparison.

omissions rather than its insights into the relationships under scrutiny here. The procedure proved too subjective, too cumbersome, and too imprecise for the detailed analysis needed to ascertain the nature of relationship between urban structure and voting structure, much less more detailed relationships such as the variations that might exist at different levels of competition. Thus, we must proceed with more accurate methods of delimiting this relationship.

#### Rank Order Correlations

To gain insight into the relationship between the urban structure and the level of Republican support, Spearman's  $r_s$  statistics were computed for each possible comparison of electoral and urban population ranks (Table 13). In the initial comparisons the values representing percentage of urban population were ranked and compared to the ranks derived from the level of Republican vote in each election. In only three presidential level elections, 1948, 1952 and 1960, and two senatorial elections, 1948 and 1954, was the null hypothesis of no significant relationship rejected. Apparently if the entire range of sample counties is employed in the rank order comparisons, the existence of a significant relationship between urban structure and voting structure can only be confirmed in earlier elections from 1948 to 1960. This is, however, reason to question the utilization of the entire range of sample counties in such comparisons.

Consider at this juncture the primary thesis of this inquiry as it questions the existence of the process of electoral change in the study area from 1948 to 1972. The thesis here involves the existence of a strong positive relationship between the urban structure of the study area and the change from low levels of Republican electoral

TABLE 13  
SPEARMAN'S RANK ORDER COEFFICIENTS FOR COMPARISONS  
INVOLVING THE PERCENTAGE OF URBAN POPULATION BY COUNTY

A

	Level of Competition											
	Presidential						Senatorial					
	1948	1952	1956	1960	1964	1968	1972	1948	1954	1960	1966	1972
<u>% Urban (Total Sample)</u>												
1950	.195*	.155*						.250*	.381*			
1960		.064	.095*		-.051					-.047		
1970						.071	.056				.063	.042

B

	<u>% Urban (Sample Minus Core)</u>					
1950	.115*	.154*			.060	.072
1960		.137*	.154*	.067		.063
1970			.153*	.072	.124*	.097*

\*Significant at .05 level.

SOURCE: Calculated by author.

support to competitive levels of support. But then it must be realized that not all counties within the study area are changing in this fashion. The question then becomes the logic of including such counties in the study area when they are not involved in electoral change. Some counties are remaining staunchly Democratic. These counties apparently resist the opportunity to alter traditional response patterns. In rejecting change to increased levels of Republican support, these counties present a valuable insight into the character of resistance to change. As such, reason dictates their inclusion in such an analysis.

But what of their opposites? What of the staunch Republican counties? Such counties as identified in Chapter IV are now and have virtually always been Republican "cores." Since we shall focus on only one aspect of the process of change--the relationship to urban structure--there is little apparent merit in including in the analysis, counties that have virtually no opportunity to "change" to competitive Republicanism. These are and have virtually always been at that stage.

Thus, on the basis of their traditionally high levels of electoral support for the GOP at virtually all levels of competition, it was determined that certain "core" counties did not fulfill the basic prerequisite for inclusion in an analysis of electoral change. For this reason, these counties were purged from the sample of 448 previously selected counties. A list of these 24 "core" counties so eliminated is provided in Table 14. Decisions on the authenticity of core counties were made by reference to the literature, and to the analysis done in Chapter IV.

Having thus eliminated the "core" counties from the ranks of both the urban and voting structure, the rho values were recomputed and the

TABLE 14

## CORE COUNTIES ELIMINATED FROM RANK ORDER ANALYSIS

Number of Counties Eliminated	State	County Names	
1	Alabama	Winston	
0	Florida	None	
1	Georgia	Fannin	
0	Mississippi	None	
8	North Carolina	Ashe Avery Cherokee Clay	Graham Mitchell Wilkes Yadkin
0	South Carolina	None	
14	Tennessee	Carter Cocke Grainger Hamblin Hancock Hardin Union	Jefferson Johnson Macon Sevier Scott Unicoi Wayne

Twenty-four total counties eliminated as traditional areas of Republican electoral support.

SOURCE: Compiled by author.

results are given in Table 13B. The elimination of these core counties affected the strengths of the relationship between urban and voting structure. It was now possible to reject the null hypothesis of no significant relationship for five presidential level elections (1948, 1952, 1956, 1960 and 1968) and two most recent senatorial elections (1966 and 1972). Interestingly enough the only two cases of presidential elections where it was necessary to accept the null of no relationship are the examples of the most successful inroads made by the GOP in the study area--1964 and 1972.

It is also interesting to note the effect that elimination of the core counties had upon the relationships between urban structure and senatorial level elections. With the total sample only the 1948 and 1954 null hypotheses could be rejected at the senatorial level. Elimination of the "core" counties allows rejection of only the 1966 and 1972 null hypotheses. Such a complete reversal of the relationship at this level offers some basis for suspicion of the approach used. Thus, an alternative approach is examined.

Given the different results achieved by altering the sample employed in the rho comparisons, the difficulty lies in deciding which of the two sets of rho values is the more valid expression of the nature of the relationship between urban structure and changing voting structure. The rho values computed by eliminating the core counties appear to offer a more valid summation of electoral change and urban structure relationship, and a more accurate reflection of reality. But even in this instance it was necessary to accept the null hypothesis of no significant relationship in 5 of 12 comparisons. It would involve considerable risk to speak of any conclusive relationship based on such

a record. Thus, in order to further clarify the nature of the urban-vote relationship, it was decided additional comparisons of urban structure and vote structure were needed as a means of cross-checking previous results.

In theory the percentage of urban population provides a valid measure of urban structure or amount of the total population residing in an urban environment. But, the level of 2,500 assigned by the Bureau of Census as urban does perhaps stretch the true character of large size associated with urban or, more accurately, metropolitan character. And, although the literature discussed previously related vote change to urban structure, the implication throughout was that urban was synonymous with metropolitan or at least larger size. An urban place of 2,500 certainly does not meet such criteria. Theoretically, at least, it is feasible to have a majority of a county population of 20,000 residing in a few small towns of 2,500 to 5,000 people and still be highly urban according to Census definition. Yet the county itself with only 20,000 population may be essentially non-urban in character. With these shortcomings in mind, it was decided to employ a second measure of urban structure to re-examine the nature of the relationship between urban structure and electoral change. In this case the measure of urban structure was the actual population size of the county.

Another series of Spearman's rank order comparisons were accomplished using the total population of a county as a measure of urban structure. The resulting rho value are given in Table 15. Again rho values for both the total sample (Table 15A) and the total sample minus the core counties (Table 15B) are given. The level of rho



TABLE 15  
SPEARMAN'S RANK ORDER COEFFICIENTS FOR COMPARISONS  
INVOLVING TOTAL POPULATION BY COUNTY

	A											
	Level of Competition											
	Presidential						Senatorial					
	1948	1952	1956	1960	1964	1968	1972	1948	1954	1960	1966	1972
<hr/>												
	<u>Total Population (Total Sample)</u>											
1950	.113*	.331*						.274*	.378*			
1960		.313*	.366*	.021					.395*			
1970					.307*	-.087*			.333*	.298*		
<hr/>												
	B											
	<u>Total Population (Sample Minus Core)</u>											
1950	.149*	.382*						.325*	.439*			
1960		.369*	.427*	.026					.453*			
1970					.365*	-.088*			.381*	.336*		

\*Significant at the .05 level.

SOURCE: Compiled by author.

values for these 24 comparisons (12 elections and 2 samples) was such that in only one instance, that of the 1964 presidential election in both samples, was it necessary to accept the null hypothesis of no significant relationship. And though it is virtually impossible to compare relative strengths in rho values, it is notable in this case that the values of rho increased markedly when the total population ranks were employed.

The relation between urban structure and voting structure in this case is consistent across levels of competition. At the senatorial level in both samples the null hypothesis could be rejected for all five elections. In fact, if the rho values are any indication, the relationship would give every indication of being more intense at the senatorial level since the values of rho are higher at that level of competition.

It would appear from this second round of rank order comparisons that the assertion of an urban centered electoral change in the study area is confirmed. However, care must be taken to note the nature of this relationship may be changing. For example, consider the rho values of the comparisons made at the presidential level of competition (Table 15). The rho values progress from lows of .113 and .148 in 1948 to highs of .366 and .427 in 1960. But by 1964, there is apparently no significant relationship. And by 1972, the relationship apparently becomes negative as the rho values reach -.087 and -.088 (Table 15). Interestingly enough, this progression from weak to strong to no apparent relationship does not hold true for both levels of competition. The negative relationship of the 1972 presidential election is not duplicated at the senatorial level where positive values of .298 and

.336 suggest a significant positive relationship still exists between urban structure and voting structure. This suggests two distinct possibilities. First, that the presidential election of 1972 was an anomaly and the levels of Republican support were abnormally high due to the nature of the candidate choice offered. Given this possibility, it is quite plausible that the same comparisons performed in 1976 would produce rho values as significantly positive as those of 1968 or 1948 through 1960. In other words, the presidential elections of 1964 (no significant relationship exists) and 1972 are aberrant and the relationship between urban structure and voting structure still exists. The significantly high positive values of the 1972 senatorial level elections offer support for this possibility.

On the other hand, a second and equally plausible possibility is that the nature of the relationship between Republican electoral support and urban structure has moved from a weak but significantly positive level in earlier elections to a stronger positive and significant relationship in middle years. And finally in later elections the relationship is ceasing to exist. The high positive values at the senatorial level could be accounted for in terms of the lag between the two levels of competition found to exist in previous analysis.

On the basis of the information we have thus far, it is difficult to determine which of these possibilities is more likely. Has the Republican party increased its competitive stance at the presidential level to the point where it has become electorally viable at all levels of urban structure within the study area? If so, can similar gains be expected at the senatorial level? Or is the suggestion of such electoral gain simply a facet of errant elections in 1964 and 1972 at the

presidential level? Perhaps a more detailed examination of the urban structure and vote level relationship might provide answers to such questions. To gain such detail, we now turn to a more specific analysis of the relationship.

#### Specific Patterns of Relationship

In order to probe more closely the nature of the relationship between urban structure and level of electoral support for the Republican party, it was decided to carry out an analysis based on the size of the areal units. The technique involved is basically the same as that employed by Adamany (1964) and Epstein (1950) in their analyses of Wisconsin electoral responses. Essentially the technique involves finding the average level of electoral support for a party at each given level of population size. Seven population size categories were employed in this inquiry and the number of counties in each category varied depending on the census year in question. The category sizes and the number of counties in size category are provided in Table 16. Two lists of figures are provided for each cell since both the total sample and the total sample minus the core counties are examined.

Examination of Table 16 reveals two salient points. First, the last category of population size, those counties with populations over 500,000 never includes over three total counties in any given census year. Hence, care must be employed in interpretation of an average value computed from such a small number of observations. The mean is more subject to influence by deviant cases. And second, those core counties eliminated from the analysis all fall into the 50,000 or less population categories. In fact, most appear to fall in the

TABLE 16  
NUMBER OF COUNTIES IN EACH POPULATION SIZE CATEGORY

	Census Year					
	1950		1960		1970	
	<u>Total</u> <u>Sample</u>	<u>Sample</u> <u>Core</u>	<u>Total</u> <u>Core</u>	<u>Minus</u> <u>Core</u>	<u>Total</u> <u>Core</u>	<u>Minus</u> <u>Core</u>
< 10,000	101	97	105	101	101	97
10,001- 25,000	180	162	178	161	168	153
25,001- 50,000	110	108	98	95	91	86
50,001-100,000	34	34	39	39	56	56
100,001-250,000	19	19	20	20	22	22
250,001-500,000	3	3	6	6	7	7
>500,000						
TOTAL	448	424	448	424	448	424

SOURCE: Compiled by author.

10,000 to 25,000 category. Thus, even if Republicanism in the period 1948-1972 has been closely associated with larger urban populations, it has not been so in those areas of traditional Republican support. The core areas of southern Republican support are and have been largely rural counties of less than 25,000 population. Interestingly enough, this corresponds to the national norm of rural or small town Republican bases of party support.

#### Size-of-Place Analysis

The results of the detailed breakdown of population size and level of support are provided in Table 17. To facilitate analysis the data are summarized in graphical as well as tabular form and these results are provided in Figure 14.

Examination of these results reveals several distinct patterns of relationship between size of county and level of vote. In general, however, for those counties with population less than 50,000, the relationship is as hypothesized. Counties with larger populations offer higher levels of support. This holds true for both levels of electoral competition and for all elections except the presidential elections of 1964 and 1972. In these years the total variation between the mean levels of support for counties in <10,000 population size category and those in the 50,000 to 100,000 is less than 4 percent. Apparently in these two elections electoral support for Republican candidates was fairly consistent across all population sizes.

Aside from these two elections the general positive relationship between size and level of support is quite distinctive. The pattern of increasing electoral support with increasing size proves remarkably

TABLE 17  
THE RELATIONSHIP BETWEEN POPULATION SIZE AND LEVEL OF REPUBLICAN VOTE

A

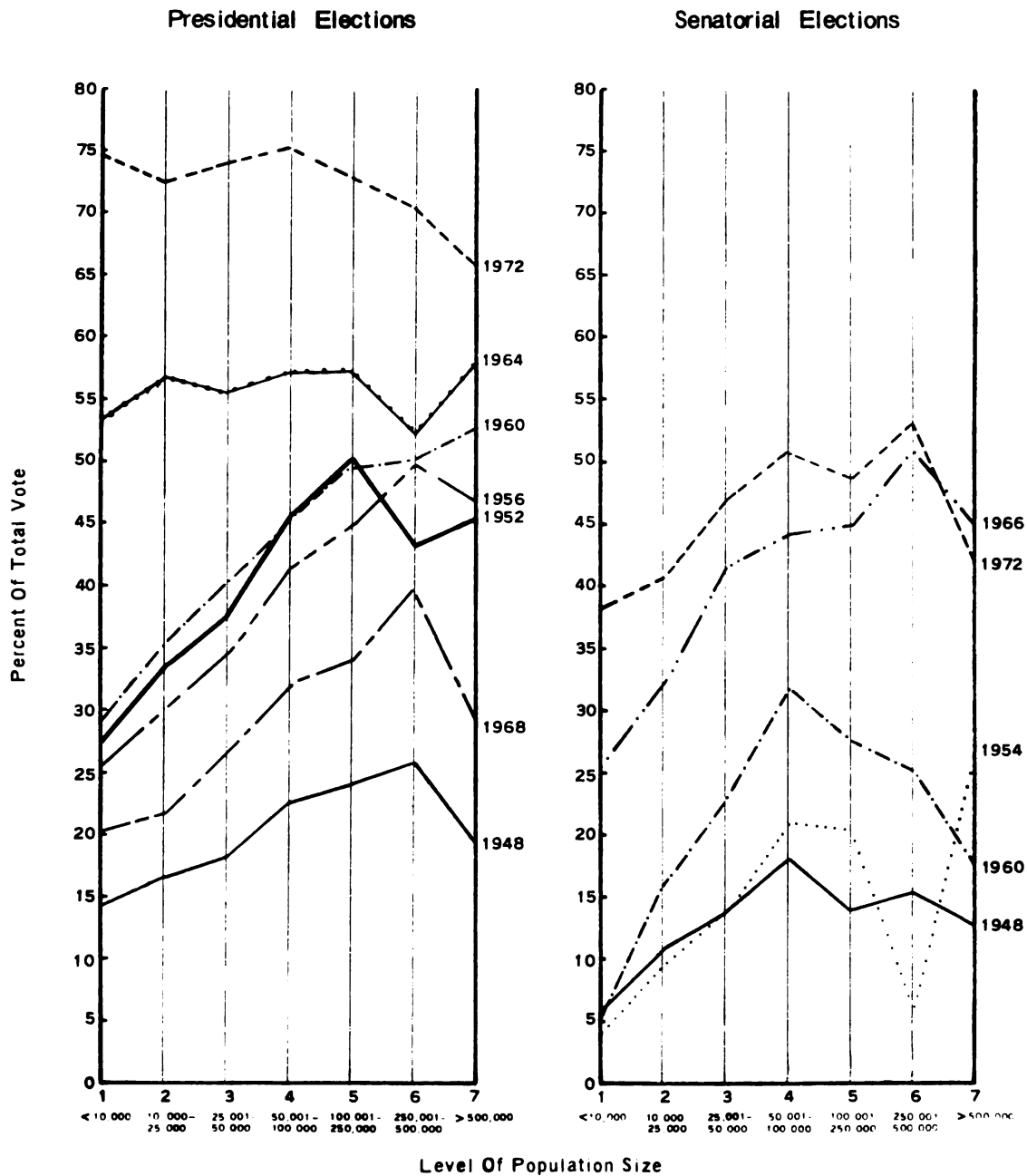
Category of Total Population Size	Total Sample											
	Presidential Elections							Senatorial Elections				
	1948	1952	1956	1960	1964	1968	1972	1948	1954	1960	1966	1972
< 10,000	16.1	28.7	27.3	30.8	53.6	22.0	74.5	8.0	6.2	7.3	26.9	39.4
10,000- 25,000	21.9	37.2	34.4	39.0	57.3	25.1	73.0	15.7	13.6	19.3	35.2	42.8
25,001- 50,000	19.1	38.0	35.9	41.1	55.6	28.8	74.4	14.5	14.5	24.5	43.2	48.4
50,001-100,000	22.8	45.6	41.4	46.4	57.1	32.4	75.1	18.1	21.0	31.8	44.3	50.9
100,001-250,000	24.0	50.1	44.9	49.9	57.2	34.0	73.0	14.0	20.4	27.7	45.0	48.6
250,001-200,000	25.0	43.2	49.7	50.4	52.2	39.9	70.5	15.3	6.0	25.3	51.0	55.6
>500,000	19.2	45.6	46.9	52.7	58.3	28.7	65.6	12.8	26.2	17.1	44.9	40.9

B

Total Sample Minus Core Counties												
< 10,000	14.3	27.3	25.7	29.4	53.5	20.3	74.7	5.8	4.0	5.5	25.5	38.4
10,000- 25,000	16.9	33.5	30.4	35.4	56.8	21.6	72.5	10.9	9.6	16.2	32.3	40.6
25,001- 50,000	18.3	37.4	34.8	40.2	55.6	26.7	74.0	13.8	13.9	22.8	41.5	46.9
50,001-100,000	22.8	45.6	41.4	46.4	57.1	32.4	75.1	18.1	21.0	31.8	44.3	50.9
100,001-250,000	24.0	50.1	44.9	49.9	57.2	34.0	73.0	14.0	20.4	27.7	45.0	48.6
250,001-500,000	25.8	43.2	49.7	50.4	52.2	39.9	70.5	15.3	6.0	25.3	51.0	55.6
>500,000	19.2	45.6	46.9	52.7	58.3	28.7	65.6	12.8	26.2	17.1	44.9	40.9

SOURCE: Compiled by author.

FIGURE 14  
 POPULATION SIZE AND LEVEL OF REPUBLICAN VOTE  
 (Total Sample Minus Core Counties)





consistent until the larger categories are considered. At the presidential level of competition, after the 100,000 population size category is surpassed, the relationship becomes far less regular and far less predictable. In 1948, 1956 and 1968 electoral support continues to rise with population size until the 500,000 category where support drops off somewhat. In 1952 electoral support declines after the 100,000 to 250,000 level is surpassed. Only in 1960 does the general positive relationship hold constant for all categories of population size.

As with presidential elections, a regular pattern of increasing support with increasing population size can be traced in all five senatorial elections. However, at this level of electoral competition this pattern of increase is broken at the 50,000 to 100,000 mark rather than the 100,000 to 250,000 breaking point discovered at the presidential level. After the 50,000 to 100,000 mark is surpassed, the relationship becomes rather irregular. But, in general, in earlier senatorial elections (1948-1960) electoral support begins to decline with larger population sizes. For later elections (1966-1972), electoral support continues on irregular rise until it drops off sharply for counties in the 500,000 category. These last two examples are not unlike the examples of presidential elections of earlier and middle periods (1948-1960).

If the same relationships are placed in a more longitudinal dimension, that is to say they are examined over the period from 1948 to the present, an interesting phenomenon is observed. In early elections (1948-1954) the level of support in lower categories (10,000-50,000) is far less than that at larger population size categories

(500,000 or more). In fact, except for 1948 and 1968, at the presidential level of competition the larger size categories are returning vote levels that lie at least in the competitive electoral range (>45%). This phenomenon is repeated at the senatorial level, only the mean levels of support at all size categories are less. This tendency towards competitiveness in larger populated counties and markedly lower levels of support in smaller populated counties begins to disappear, however, with increasing more recent elections. In fact at the presidential level after 1960,<sup>1</sup> the differences between the mean levels of electoral support for the lowest size categories and the highest size categories are very small. At the senatorial level the differences are larger but if 1966 and 1972 are any indication, the differences are decreasing.

The results of the size-of-place analysis offer strong evidence of the validity of the hypothesized positive relationship between population size<sup>2</sup> and electoral support for the Republican party. At both levels of electoral competition, counties with larger populations offer higher levels of electoral support than those with smaller populations. In the longitudinal sense the positive relationship has apparently become less intense with successive elections. At both levels of competition, the positive relationship between population size and mean level of support as measured for those elections in the pre-1960 period were much stronger than the positive relationships noted in the elections in the post-1960 period. In fact, by the presidential

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<sup>1</sup>Again the 1968 presidential election proves an exception.

<sup>2</sup>Larger population size is equated with a higher level of urban population.

election of 1972, the population-size categories above 50,000 maintain a negative relationship, since the mean level of support actually decreases with increasing size! These results give evidence of the progression of Republican electoral support. Apparently higher levels of electoral support for the GOP first came from counties with larger populations. With successive elections electoral support has gradually moved down the urban hierarchy into counties with smaller populations. By 1972, little total difference in mean levels of support separates the higher categories of population size from the lower.

Although the relationship between size and vote has generally been positive, the electoral support at larger size categories has demonstrated marked irregularity. And if a break in the generally positive relationship of population size and level of support is to be found, it lies at the largest population categories. The largest counties have a tendency (increasing in later elections) to offer proportionately less support to the Republican candidates at both levels of competition. If the most recent elections are a valid indication, this involves far more than simple irregularity. For in later election years, the differences between the level of electoral support in the two top population size categories appear to be increasing. In the 1968 presidential election 11.2 percent points separate the means of two largest population size categories; in 1972 there is a difference of nearly 10 percent; and in the 1972 senatorial elections an average of over 14.0 percent less support was given to GOP senatorial candidates in counties over 500,000 population than in those counties in the 250,000 to 500,000 size category. While the difference in mean levels of support between the largest and smallest category sizes is gradually

decreasing the support in larger population categories is apparently falling off somewhat.

Thus, on the one hand the spatial patterns of electoral response have apparently moved from geographic concentration in one portion of the study area to more uniformly distributed support that apparently has a distinct urban bias. That is to say, larger population clusters apparently facilitated the growth of Republican support. But as this support has grown, the relationship to the urban structure has changed. In fact, recent indications suggest a pattern of Republican support in rural or smaller population size categories and a drop in Republican support in larger population clusters, a pattern which approximates the national norm. If this pattern can be verified in subsequent elections, then scientists may begin to consider giving the South something other than a unique position in electoral theory.

## CHAPTER VI

### A PERSPECTIVE OF THE RESULTS

The previous chapters have presented some of the more salient findings of the analysis of the research problem. Although some evaluation of these results was offered in conjunction with their presentation, every attempt was made to tailor such interpretation to the limitations of the data and the methods of measurement and analysis employed. In this fashion was the reader left to form a personal evaluation and interpretation of the findings. But just as the reader is entitled to such opinion, so must the author be allowed license for a measure of personal evaluation. This final chapter is directed to that end.

An effort is made to provide an overall perspective of the results in relationship to both contemporary political reality and general electoral theory. Specifically, the results are interpreted in terms of the regional political framework, their meaning in light of contemporary theory, and the prospects for future research efforts.

#### The Results in a Regional Context

The most dramatic component of the Goldwater outcome in the Deep South was--change (Cosman, 1966b, 60).

This inquiry has sought to empirically investigate the spatial mechanisms inherent in changing patterns of electoral response.

Electoral change has been operationalized in the form of continued growth of electoral support for the Republican party in the American South. While the literature provides adequate justification of this operational definition of change, it provides insufficient evidence of the spatial mechanisms inherent in such change. This research is designed to fill that need. The problem involves analysis of the spatial mechanisms inherent in the changing structure of Republican electoral support in a selected study area of the American South from 1948 to 1972. Basically what we are saying is that here are the electoral response patterns as they existed in 1948 and this is how they look at selected intervals over the 24 years since then. Is there spatial regularity in the response? How has the pattern of response changed? Is there spatial regularity in the change? And finally, what is the mechanism of the change? In the latter instance, it becomes necessary to draw upon the literature to narrow the limits of the inquiry. The result is an investigation of the urban structure as a probable medium of the growth of Republican electoral support in the study area.

For the most part the results conform to the expectations outlined in Chapter II. The distribution of electoral support for the Republican party has changed. This change is evident in the electoral parameters. The Republican party has moved into a position where it can now offer a substantive challenge, at least at the two levels of electoral competition examined in this inquiry, to Democratic hegemony within the study area. Although these advances have come at both the presidential and senatorial levels of competition, the level of

support is consistently higher<sup>1</sup> at the presidential level. An expected volatility in the levels of support at the presidential level of competition was realized; an expected stability at the senatorial level was not. While the senatorial level of competition proved less volatile than the presidential, the stability of the standard deviation and mean level of support of the five distributions examined was insufficient to allow acceptance of the hypothesis of greater electoral stability at the senatorial level of competition.

It is interesting that much of the instability of the senatorial response patterns appears to be a result of the relatively large increase of electoral support at that level from the 1960 to 1966 elections. Since this increase is replicated at the presidential level in the period from 1960 to 1964, the early 1960's take on the appearance of a turning point in the fate of Republican electoral fortunes in the study area. While a measure of relative success can be identified in earlier elections, the 1964 presidential and 1966 senatorial elections mark a significant break in traditional response patterns. At one level a Republican presidential candidate wins a majority in the study area. At the other there are senatorial candidates in every possible senatorial race. Thus, while previous discussion has alluded to the national ineffectiveness of the 1964 southern strategy of the GOP, a re-evaluation of its influence on the South is apparently in order. Evidently its long range effect on the South proved quite substantial.

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<sup>1</sup>One exception involves the 1968 presidential election. The mean level of support was 26.85 percent; Republican senatorial candidates at the comparable date of 1966 gained 36.89 percent of the total vote.

Certainly the coincidence of Republican successes in the South after 1964, with calculated strategy to win southern votes in that year is insufficient cause to suggest that the turning point in Republican fortunes was a consequence of GOP presidential candidate Barry Goldwater and his "southern strategy." The change could well have come as a consequence of a long term southern strategy on the part of the national GOP or more importantly it could have come as a consequence of effective organization, at least at these two levels of competition, by southern Republicans. But in either case, Goldwater's candidacy provided a focus for change. For Goldwater was the first Republican presidential candidate to make victory in the South a major element of his strategy for winning the presidency. As such, he led the way for other candidates to follow. As for the influence of effective local and state organizations, Bernard Cosman (1966a; 1966b) has indicated that the 1964 candidacy of Goldwater stimulated a grassroots Republicanism in the Deep South--

One very dramatic element that the Goldwater candidacy left behind in the Deep South was a number of state and local Republican parties demonstrably stronger than at any time in the past . . . (Cosman, 1966b, 128).

This is not to imply Goldwater was the cause of Republican success in later years; rather he can be seen as an agent of Republican electoral growth. The South was ripe for change and the Goldwater candidacy presented southern Republicans with an opportunity for effective party organization (Cosman, 1966a). Goldwater became the catalyst that precipitated organization activity. And this flurry of organization was the foundation for post 1964 success. Thus, while Goldwater and states



rights might have provided the stimulus for increased GOP support in the 1964 presidential election, in the wake of Goldwater--in the period after 1964--it is the skeleton of an enduring party mechanism that precipitated continued success. For only the most generous of Goldwater proponents would attribute the successes in 1966 senatorial elections to any coattail effect. How does one coattail a candidate who has suffered such an overwhelming defeat only two years previous? Successes such as the 1966 gubernatorial candidacies of Georgia's Bo Callaway<sup>1</sup> and Florida's Claude Kirk, and the 1966 senatorial candidacy of Tennessee's Howard Baker, coming as they did in the off-year elections two years after Goldwater's attempt, bear only a remote connection to his candidacy.

In the years since Barry Goldwater, Republican candidates have proven somewhat more successful in attempts at the presidency. And this success has not proven detrimental to the fate of Republican candidates for southern political offices. For example, southern GOP candidates have benefited from the incumbency of a Republican president. Richard Nixon has practiced his own form of "muted" southern strategy. The Republican administration's position on crime, busing, civil rights and other issues salient to southern interests represent an improvement at least in southern frame of reference, to the earlier Democratic administrations. This constrained form of southern strategy falls a

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<sup>1</sup>Callaway won the Georgia gubernatorial election on the basis of popular vote. But under Georgia electoral procedure the small margin of his victory made it necessary for the election to be decided in the Georgia state legislature. Callaway lost the decision to the Democratic controlled legislature and Lester Maddox.

calculated measure short of what Alexander Heard (1952) called "going to the South," something a national based party could not do and survive as 1964 has demonstrated. The results of this reserved southern strategy has certainly not done harm to the Republican organizational efforts in the South.

But in the final analysis the success of Republicanism in the study area represents more than simple influence of an unsuccessful presidential candidate or of an incumbent president. Consider the fate of Republican candidates since 1966. Tennessee now has two Republican senators--Baker (elected in 1966 and 1972) and Brock (elected in 1970)--and a Republican governor--Dunn (elected in 1970). North Carolina elected a Republican governor, James Holshouser, Jr., and senator, Jesse Helms, in 1972.<sup>1</sup> And Florida elected Republican Edward Gurney as its senator in 1968. While these successes may have benefited from national party policy, they could hardly have come about without organization--basic level organization. These successes represent a measure of grassroots Republican organization designed to endure at all levels of competitive electoral politics. While the organization effort may not have reached all levels of competitive politics in equal measure, this appears to be only a question of time.

The results of this inquiry suggest that such organization has developed at upper levels of electoral competition; for at the two levels of competition examined, Republican inroads have been substantial since 1964. And although a third party candidate in 1968 mars the successful record of Republican presidential candidates, the spatial parameters derived from this inquiry indicate the nature of the setback

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<sup>1</sup>Republican candidates appear to do best against non-incumbents.

was numerical only. The level of support dropped, but the drop was shortlived.

Description of the spatial distribution of electoral responses in the period after 1964 supports the suggestion that the Goldwater phenomenon was not unique. The legacy of 1964 was change. For in the period after the 1964 presidential election, support does not retrogress to traditional concentration in mountain cores. The spatial parameters indicate that support continues to move toward uniformity in patterns of electoral support. In fact, from the point of view of Republican party fortunes, these spatial parameters are one of the most promising features of the analysis. The hypothesized change from spatial concentration of Republican support to spatial uniformity of support is confirmed. Migration of mean centers of electoral support from traditional core areas into Democratic strongholds and a steady increase in the measure of density toward values indicative of uniformity in electoral response are both symptomatic of movement towards increasing support in areas formerly deficient in Republican sentiment. This increase is in agreement with the hypothesis that more uniform patterns of electoral support occur first at the presidential level of competition and then, at later intervals, at the senatorial level. Even if, as in 1968, the electoral support that develops in an area does not always prove to be competitive, the potential for competition is there.

Thus, into the void left by southern disaffection with the national Democratic party policy has come the national Republican party. But the intrusion has not been confined to higher level political competition. Victories at congressional, gubernatorial and state legislative levels attest to this. Whether the intrusion represents

a realignment of southern partisanship is not a question open to this inquiry. Although there is a strong indication that massive and rather permanent shifts in voting responses have occurred with the study area, the data do not permit any statements relating to attitudinal realignment. However, the findings do lend themselves to a suggestion of increasing partisan competitiveness over a broader spatial arena. And nowhere in this analysis did this become more evident than in the examination of the relationship between electoral change and the urban structure.

A principal thesis of this inquiry was that increases in the competitiveness of the GOP in the study area was facilitated by increased population size or urban structure. The hypothesis as derived from the literature was that electoral change occurred first in larger urban areas. The examination of spatial regularity in the voting response provided some support for this thesis. The description of the voting structure appeared to indicate some coincidence of larger concentrations of urban population and higher levels of Republican support. More detailed examination via the medium of tests for rank order association revealed a positive association between the level of Republican support and the level of urban population. This positive association was strengthened by consideration of total population (in lieu of percentage of urban population) as a surrogate measure of urban population. But the examination of this association revealed a curious phenomenon. The association between population size and level of Republican vote is apparently weakening with successive elections. At the presidential level in 1964 there is no significant association. In 1972 the association becomes negative. And these two elections

represent the two most significant victories of the GOP in the study area! Perhaps these elections represent an indication of what is to come of competitive electoral politics in the South. This does not imply that in the future Republican candidates will dominate competitive electoral politics; rather it implies that as the Republican party becomes more competitive the relationship between urban structure and GOP electoral support will assume the appearance of the national pattern. Rural areas and smaller cities will support Republican candidates and larger cities and urban areas will support Democratic candidates. In the South this can only come as the fruits of grassroots Republican party organization are realized. For only through such organization will the party become competitive throughout the study area. And this uniformly pervasive competitiveness is apparently what has begun to develop.

In the earlier elections analyzed in this inquiry uniformity of support did not exist. If support was to be found it was in the traditional cores of Republican support or in some counties with larger populations. As the Republican party began to become increasingly more competitive, this increase was facilitated by larger populations. Change took place more rapidly in counties with larger populations. Support was relatively higher there. But this relationship was developed without benefit of the organization that apparently occurred after 1964. With the onset of this type of organization, the rural areas were as susceptible to Republican electoral efforts as were the urban areas of earlier periods. And with this the character of the urban-vote relationship changed markedly. The relationship began to resemble the national norm. Rural counties and smaller cities were as likely

as larger cities to offer higher levels of Republican support. In fact if the movement of large numbers of blacks into larger urban environments is considered perhaps rural areas were more likely to offer higher levels of electoral support than larger cities. In this inquiry detailed analysis of this relationship by category sizes offers a measure of support for this type of interpretation.

For the earlier elections the size-of-place analysis revealed a strong positive relationship between population size of a county and the level of Republican support. But in subsequent elections the size of place analysis appears to offer conformation of the weakening influence of urban size. At the presidential level little difference can be noted between the level of support at the lowest category and that at the higher categories. The only noticeable trend is that upper categories of population size appear to be less stable. But at the highest category, counties of 500,000 or more population, there is a noticeable tendency toward lower levels of support. Perhaps this signals the existence of a situation not unlike that of larger northern industrial cities, where the Democratic party has enjoyed a measure of pre-eminence. If so, this would indicate the emergence of a New Democratic party in the South--one centered on larger urban concentrations.

Thus, while it is possible to accept the hypothesis of a positive relationship between electoral support for the GOP and level of population size in every instance but two (1964 and 1972 presidential elections) the data suggest the relationship is weakening. But the fact remains that initial growth of support was facilitated by larger population size. And only when the party organization became pervasive enough to reach all sectors of the study area did the relationship decline.

### The Results in a Theoretical Context

The results of this inquiry support the thesis that electoral change is facilitated by larger population and urban size. In the study area, the growth of electoral support for a political party occurred initially at higher echelons of the urban structure. These findings support the conclusions of earlier studies such as Epstein (1956) and Adamany (1962) and in general appear to offer further empirical verification of the nature of the relation between electoral change and urban structure. But the coincidence of an erosion in the strength of the association between change and urban structure raises obvious questions as to the influence of party structure in such a relationship. If, as is indicated, the pace of electoral change was stimulated by fundamental changes in internal party structure then our understanding of the process of change would be greatly enhanced by closer scrutiny of the party structure itself. Did a grassroots level organizational movement provide the stimulus for the increases in support for Republican candidates in the middle 1960's. If so, from where did the leaders and activists in this movement come? Have they come from the urban or rural sector? Have they come from traditional areas of support or from emergent areas? And the candidates--from where are they drawn? Probing these questions in the southern context would extend our understanding of the role that party organization plays in electoral change.

However, in working to augment our grasp of the causes of change, we must not ignore the spatial mechanic of this change. This inquiry provides an indication that change is associated with one segment of a spatial system, i.e., the upper level of the urban sector. But the

actual mechanism of this change remains a matter of conjecture. It is possible, for example, that electoral change continues to operate within the upper echelons of the urban hierarchy until a saturation level is attained. Beyond this point little additional change is feasible. Hence, some spill over into rural sectors must take place. Using the example of the growth of Republicanism in the study area, it can be established that support grew initially at the upper echelons of the urban structure until continued development of higher levels of support was no longer feasible. From there increased support could only come from areas where additional converts might be reached. Thus, electoral growth spilled over into the remainder of the hierarchy--into more rural sectors. It is quite feasible that some external stimulus, party reorganization for example, served as a catalyst for more rapid movement into rural areas. These results appear to indicate that it did. But the mechanics of the process of change itself have yet to be verified.

Although the results of this inquiry strongly hint that electoral change does indeed operate well in an urban context, the aggregate nature of the data analysis precludes pinpointing the actual process of movement of support. The data units are too large. However, even though voting data are not particularly well suited to classical diffusion theory, this type of spatial movement might well be examined by isolating a southern metropolis for detailed analysis of the movement of support. By resorting to detailed analysis in a single urban area, the confusion resulting from the overlapping influences of a number of urban places could be avoided. Through longitudinal analysis of the growth of electoral support, the pattern of development could be isolated and



the influence of the urban concentration upon the surrounding countryside could be examined. If the more recent aggregate statistics were to be supplemented with survey data, the spatial structure of voting preference in a southern city might easily be compared with other structures in other cities. Thus, could our empirical evidence of the nature of the spatial structure of voting preference in an urban environment be augmented by providing a record of the changes in this structure over time? Such detail is essential if we are to delve more deeply into the social and economic components that underlie both the voting preference and the changes in that preference.

There is, however, the possibility that the examination of the relationship between voting preference and additional social economic characteristics need not await the availability of survey data. By the use of non-parametric statistics, such variables as black population, income levels, education levels and professional or employment status could be incorporated into analyses similar to that conducted in Chapter 5. One very promising arena would be an examination of the effect of rates of urban growth on the level of electoral support. Do faster growing areas give higher levels of support to the southern GOP? Again such analyses could be conducted at either the regional level or at the individual metropolitan level.

Reducing the level at which we examine the spatial structure of voting preference need not effect the approach used to describe the spatial distribution of voting preference. In some ways the techniques employed in this inquiry to describe the voting structure become even more effective at lower levels. At any rate such description is essential for purposes of familiarization with the voting structure of a

study area, if for no other reason. But they have a practical side as well. For, as a method of describing the spatial and numerical distribution of voting response, these techniques of spatial description could well be a way of accomplishing long range party planning. They are certainly less costly than continuous surveys. The idea is that allocation of party funds devoted to improvement of party structure could be accomplished on the basis of constituency performance. And attempts to improve the effectiveness of grassroots party organization could be concentrated in mean range constituencies, thereby increasing the effectiveness of the organization that must work to win over such constituencies to Republican candidates. Thus, long range planning and "between election" planning could be accomplished with considerably less expense than by continuous updating of survey data.

Numerical and spatial descriptive techniques may or may not prove of practical use to party organization. That question depends on the feasibility of long range planning based on constituency performances. But the feasibility of employing such techniques in voting analysis is more certain. Their effectiveness in providing a more accurate and objective means of describing voting structure has been demonstrated in this inquiry. Certainly political geographers have need to explore more fully the use of such spatial descriptive techniques in electoral analysis.

In summary, although these results offer continued verification of existing notions of the relationship between change and urban structure, they give cause for reassessment of our thinking on the nature of southern voting response. They offer additional insight into what are

apparently new vistas in the consideration of southern electoral behavior. The convergence suggested by Converse (1963) a decade ago has continued. But it has, contrary to his predictions, apparently gone further than urban environments. It has gone as Strong (1963) has suggested to something resembling two party behavior. Certainly an evaluation of the total impact of electoral change on the political behavior of the electorate in the study area must be tempered somewhat with the possibility of impermanence. Verification of the permanence of new patterns of electoral support must await 1974 and 1976. And verification of partisan attitudes must await adequate longitudinal survey analysis. But it is plain that if the conclusions drawn from the data analyzed in this inquiry are sound then we must begin to re-evaluate our thinking on southern political behavior. Indeed by the end of the decade of the 1970's, there may be little left of a reliable form of "southern" political behavior.

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## APPENDICES

## **APPENDIX 1**

### **A LIST OF COUNTIES IN THE STUDY AREA**

# APPENDIX 1

## A LIST OF COUNTIES IN THE STUDY AREA

### State of Alabama (67 Counties)

Autauga	Lauderdale
Baldwin	Lawrence
Barbour	Lee
Bibb	Limestone
Blount	Lowndes
Bullock	Macon
Butler	Madison
Calhoun	Marengo
Chambers	Marion
Cherokee	Marshall
Chilton	Mobile
Choctaw	Monroe
Clarke	Montgomery
Clay	Morgan
Cleburne	Perry
Coffee	Pickens
Colbert	Pike
Conecuh	Randolph
Coosa	Russell
Covington	St. Clair
Crenshaw	Shelby
Cullman	Sumter
Dale	Talladega
Dallas	Tallapoosa
Dekalb	Tuscaloosa
Elmore	Walker
Escambia	Washington
Etowah	Wilcox
Fayette	Winston
Franklin	
Geneva	
Greene	
Hale	
Henry	
Houston	
Jackson	
Jefferson	
Lamar	

### State of Florida (34 Counties)

Alachua
Baker
Bay
Bradford
Calhoun
Clay
Columbia
Dixie
Duval
Escambia
Flagler
Franklin
Gadsden
Gilchrist
Gulf
Hamilton
Holmes
Jackson
Jefferson
Lafayette
Leon
Liberty
Madison
Nassau
Okaloosa
Putnam
St. Johns
Santa Rosa
Suwannee
Taylor
Union
Wakulla
Walton
Washington

State of Georgia (159 Counties)

Appling	Elbert	Montgomery	White
Atkinson	Emanuel	Morgan	Whitfield
Bacon	Evans	Murray	Wilcox
Baker	Fannin	Muscogee	Wilkes
Baldwin	Fayette	Newton	Wilkinson
Banks	Floyd	Oconee	Worth
Barrow	Forsyth	Oglethorpe	
Bartow	Franklin	Paulding	
Ben Hill	Fulton	Peach	
Berrien	Gilmer	Pickens	
Bibb	Glascocock	Pierce	
Bleckley	Glynn	Pike	
Brantley	Gordon	Polk	
Brooks	Grady	Pulaski	
Bryan	Greene	Putnam	
Bulloch	Gwinnet	Quitman	
Burke	Habersham	Rabun	
Butts	Hall	Randolph	
Calhoun	Hancock	Richmond	
Camden	Haralson	Rockdale	
Candler	Harris	Schley	
Carroll	Hart	Screven	
Catoosa	Heard	Seminole	
Charlton	Henry	Spalding	
Chatham	Houston	Stephens	
Chattahoochee	Irwin	Stewart	
Chattooga	Jackson	Sumter	
Cherokee	Jasper	Talbot	
Clarke	Jeff Davis	Taliaferro	
Clay	Jefferson	Tattnall	
Clayton	Jenkins	Taylor	
Clinch	Johnson	Telfair	
Cobb	Jones	Terrell	
Coffee	Lamar	Thomas	
Colquitt	Lanier	Tift	
Columbia	Laurens	Toombs	
Cook	Lee	Towns	
Coweta	Liberty	Treutlen	
Crawford	Lincoln	Troup	
Crisp	Long	Turner	
Dade	Lowndes	Twiggs	
Dawson	Lumpkin	Union	
Decatur	Macon	Upson	
De Kalb	Madison	Walker	
Dodge	Marion	Walton	
Dooly	McDuffie	Ware	
Dougherty	McIntosh	Warren	
Douglas	Meriwether	Washington	
Early	Miller	Wayne	
Echols	Mitchell	Webster	
Effingham	Monroe	Wheeler	

State of Mississippi (18 Counties)

Alcorn  
 Clarke  
 George  
 Greene  
 Harrison  
 Itawamba  
 Jackson  
 Kemper  
 Lauderdale  
 Lee  
 Lowndes  
 Monroe  
 Noxubee  
 Perry  
 Prentiss  
 Stone  
 Tishomingo  
 Wayne

State of North Carolina (46 Counties)

Alexander	Polk
Alleghany	Randolph
Anson	Richmond
Ashe	Rockingham
Avery	Rowan
Buncombe	Rutherford
Burke	Stanley
Cabarrus	Stokes
Caldwell	Surry
Catawba	Swain
Cherokee	Transylvania
Clay	Union
Cleveland	Watauga
Davidson	Wilkes
Davie	Yadkin
Forsyth	Yancey
Gaston	
Graham	
Guilford	
Haywood	
Henderson	
Iredell	
Jackson	
Lincoln	
Macon	
Madison	
McDowell	
Mecklenburg	
Mitchell	
Montgomery	

State of South Carolina  
(42 Counties)

Abbeville  
 Aiken  
 Allendale  
 Anderson  
 Bamberg  
 Barnwell  
 Beaufort  
 Berkeley  
 Calhoun  
 Charleston  
 Cherokee  
 Chester  
 Chesterfield  
 Clarendon  
 Colleton  
 Darlington  
 Dorchester  
 Edgefield  
 Fairfield  
 Florence  
 Greenville  
 Greenwood  
 Hampton  
 Jasper  
 Kershaw  
 Lancaster  
 Laurens  
 Lee  
 Lexington  
 McCormick  
 Marlboro  
 Newberry  
 Oconee  
 Orangeburg  
 Pickens  
 Richland  
 Saluda  
 Spartanburg  
 Sumter  
 Union  
 Williamsburg  
 York



State of Tennessee (82 Counties)

Anderson	Meigs
Bedford	Monroe
Benton	Montgomery
Bledsoe	Moore
Blount	Morgan
Bradley	Overton
Campbell	Perry
Cannon	Pickett
Carroll	Polk
Carter	Putnam
Cheatham	Rhea
Chester	Roane
Claiborne	Robertson
Clay	Rutherford
Cocke	Scott
Coffee	Sequatchie
Cumberland	Sevier
Davidson	Smith
Decatur	Stewart
DeKalb	Sullivan
Dickson	Sumner
Fentress	Trousdale
Franklin	Unicoi
Giles	Union
Grainger	VanBuren
Greene	Warren
Grundy	Washington
Hamblen	Wayne
Hamilton	White
Hancock	Williamson
Hardin	Wilson
Hawkins	
Henderson	
Henry	
Hickman	
Houston	
Humphreys	
Jackson	
Jefferson	
Johnson	
Knox	
Lawrence	
Lewis	
Lincoln	
Loudon	
McMinn	
McNairy	
Macon	
Marion	
Marshall	
Maury	

**APPENDIX 2**

**CANDIDATES IN PRESIDENTIAL AND SENATORIAL ELECTIONS  
1948-1972**

## APPENDIX 2

### CANDIDATES IN PRESIDENTIAL AND SENATORIAL ELECTIONS 1948-1972

#### Presidential Elections

<u>Date</u>	<u>Republican Candidate</u>	<u>Democratic Candidate</u>
1948 <sup>1</sup>	Thomas E. Dewey	Harry S. Truman
1952	Dwight D. Eisenhower	Adlai E. Stevenson
1956	Dwight D. Eisenhower	Adlai E. Stevenson
1960	Richard M. Nixon	John F. Kennedy
1964	Barry M. Goldwater	Lyndon B. Johnson
1968 <sup>2</sup>	Richard M. Nixon	Hubert H. Humphrey
1972	Richard M. Nixon	George McGovern

#### Senatorial Elections

<u>Date</u>	<u>Republican Candidate</u>	<u>Alabama</u>	<u>Democratic Candidate</u>	<u>% Total</u>
		<u>% Total</u> <u>Vote</u>		<u>Vote</u>
1948	Paul G. Parsons	16.0	John J. Sparkman	84.0
1950			Lister Hill	76.5
1954	Foy J. Guin	17.5	John J. Sparkman	82.5
1956			Lister Hill	100.0
1960	Julian Elgin	29.8	John J. Sparkman	70.2
1962	James D. Martin	49.1	Lister Hill	50.9
1966	John Grenier	39.0	John J. Sparkman	60.1
1968	Perry Hooper	22.0	James B. Allen	70.0
1972	Winston M. Blount	33.0	John J. Sparkman	62.3

<sup>1</sup> A third major candidate was J. Strom Thurmond of the States Rights party.

<sup>2</sup> A third major candidate was George C. Wallace of the American Independent party.

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 Senatorial Elections
 

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<u>Date</u>	<u>Republican Candidate</u>	<u>Florida</u>		<u>Democratic Candidate</u>	<u>% Total Vote</u>
		<u>% Total Vote</u>			
1950	John P. Booth	23.7	George A. Smathers	76.2	
1952			Spessard L. Hollard	99.8	
1956			George A. Smathers	100.0	
1958	Leland Hyzer	28.8	Spessard L. Hollard	71.2	
1962	Emerson H. Rupert	30.0	George A. Smathers	70.0	
1964	Claude R. Kirk	36.0	Spessard L. Holland	63.9	
1968	Edward J. Gurney	55.9	Leroy Collins	44.1	
1970	William C. Cramer	46.1	Lawton Chiles	53.9	

Georgia

1948			Richard B. Russell	99.9	
1950			Walter F. George	100.0	
1954			Richard B. Russell	100.0	
1956			Herman Talmadge	100.0	
1960			Richard B. Russell	99.9	
1962			Herman Talmadge	100.0	
1966			Richard B. Russell	99.9	
1968	Earl E. Patton	22.5	Herman Talmadge	77.5	
1972	Fletcher Thompson	46.0	Sam Nunn	54.0	

Mississippi

1948			James O. Eastland	100.0	
1952			John Stennis	100.0	
1954	James A. White	4.4	James O. Eastland	95.6	
1958			John Stennis	100.0	
1960	Joe A. Moore	8.2	James O. Eastland	91.8	
1964			John Stennis	100.0	
1966	Prentiss Walker	26.7	James O. Eastland	65.6	
1970			John Stennis	88.4	
1972	Gil Carmichael	38.7	James O. Eastland	58.1	

North Carolina

1948	John A. Wilkinson	28.8	J. M. Broughton	70.7	
1950S	E. L. Gavin	32.6	Willis Smith	67.0	
1950	Halsey B. Leavitt	31.3	Clyde R. Hoey	68.7	
1954S			Sam J. Ervin	100.0	
1954	Paul C. West	34.1	William Kerr Scott	65.9	
1956	Joel A. Johnson	33.4	Sam J. Ervin	66.6	
1958S	Richard C. Clarke	30.0	Everett B. Jordan	70.0	
1960	Kyle Hayes	38.6	Everett B. Jordan	61.4	
1962	Claude L. Greene	39.6	Sam J. Ervin	60.4	
1966	John S. Shallcross	44.4	Everett B. Jordan	55.6	
1968	Robert V. Somers	39.4	Sam J. Ervin	60.6	
1972	Jesse A. Helms	69.5	Nick Galifianakis	28.9	

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 Senatorial Elections
 

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<u>Date</u>	<u>Republican Candidate</u>	<u>South Carolina</u>		<u>% Total Vote</u>
		<u>% Total Vote</u>	<u>Democratic Candidate</u>	
1948	Bates J. Gerald	3.6	Burnet R. Maybank	96.4
1950			Olin D. Johnston	99.9
1954			Edgar A. Brown	36.8
1956S			Strom Thurmond	100.0
1956	Leon P. Crawford	17.8	Olin D. Johnston	82.0
1960			Strom Thurmond	100.0
1962	W. D. Workman	42.8	Olin D. Johnston	57.2
1966S	Marshall Parker	48.7	Ernest F. Hollings	51.3
1966	Strom Thurmond	62.2	Bradley Morrah	37.8
1968	Marshall Parker	38.1	Ernest F. Hollings	61.9
1972	Strom Thurmond	63.3	Eugene N. Zeigler	36.7

Tennessee

1948	Carroll B. Reece	33.4	Estes Kefauver	65.3
1952	Hobart F. Atkins	20.9	Albert Gore	74.2
1954	Thomas D. Wall	30.0	Estes Kefauver	70.0
1958	Hobart F. Atkins	19.0	Albert Gore	79.0
1960	Bradley A. Frazier	28.2	Estes Kefauver	71.7
1964S	Howard H. Baker, Jr.	47.4	Ross Bass	52.1
1964	Daniel H. Kuykendall	46.6	Albert Gore	53.6
1966	Howard H. Baker, Jr.	55.7	Frank G. Clement	44.3
1970	William E. Brock	51.3	Albert Gore	47.4
1972	Howard H. Baker, Jr.	61.5	Ray Blanton	37.8

S Elections designated by a S following the year were for short terms to fill vacancies.

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