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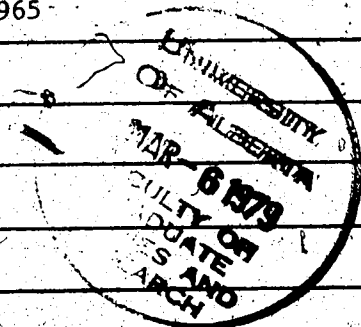DEGREE FOR WHICH THESIS WAS PRESENTED/
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THE UNIVERSITY OF ALBERTA

NATIONAL, REGIONAL, PROVINCIAL, AND

CONSTITUENCY EFFECTS IN CANADIAN VOTING

BEHAVIOUR, 1953-1965.

by

Ⓒ ROBERT PETER WOOLSTENCROFT

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SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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Chapter Six

Introduction

This study is concerned with the nature of the spatial bases of electoral behaviour in the six general elections held in Canada from 1953 to 1965. The overriding object is to determine whether or not the Canadian political system is influenced to a significant degree by sub-national political forces; and, if so, to what extent; and, lastly, whether or not these forces can be best conceptualized as emanating from the regions, or the provinces, or the constituencies.

It is in the tradition of political geography or political ecology in that its focus is upon the changes and shifts in the behaviour of electorates rather than individuals.[1] Through an examination of the movements in the proportions of party vote and voter turnout for the various Canadian electorates, both at specific points in time and over time, an attempt will be made to provide a richer understanding of the political environments which influence the nature and operation of the Canadian political system and the behaviour of politicians, parties, and electorates within it.

Even a casual observer of politics in Canada cannot help being impressed by the extent to which the country is said to be dominated by regionalism.[2] And, therefore, it is not surprising that the region, either implicitly or explicitly, is a pervasive and important concept in Canadian political analysis, extending from the

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study of voting and electoral behaviour,[3] political attitudes,[4] the problems and processes of policy formation,[5] the structures and workings of the House of Commons and Senate,[6] the nature and development of the party system,[7] the processes and problems of federalism,[8] the role of the civil service,[9] to the possibilities of provincial co-operation and integration.[10] The great and traditional issues of Canadian politics - French and English relationships, the lack of a strong, cohesive national identity, and the country's relationships with the United States - are intimately related to the regional bases of Canadian society.[11]

Despite, however, the commonplace emphasis attached to the crucial importance of the variable of regionalism in the Canadian political system, two questions - one technical and one substantive - have not yet been adequately settled.[12] First, there is a measurement problem, which has arisen out of the fact that the concept of regionalism has commonly been treated as something which is intuitively understood and immediately clear. At best, most analyses of Canadian politics which have stressed sub-national variations have shown an insensitivity to the ambiguities and nuances inherent in the concept of regionalism, or have not specified in a precise way how these variations are to be operationalized, or have assumed that whatever differentiations have been unearthed have had some significant political impact or influence. This lack of rigour in the specification of regionalism has meant that the empirical grounding

for a fuller understanding of the Canadian political system is lacking

The substantive question relates to the interpretative emphasis to be placed on the phenomenon of regionalism, particularly in terms of the factors contributing to the existence and maintenance of sub-national variations in loyalties, attitudes, and behavioural patterns. While there has been a ready acceptance of the proposition that Canadian society and politics are greatly influenced by regional factors, there is considerable question about whether the most appropriate unit for the presentation and analysis of sub-national differences are the five traditional regions or the ten provinces.

The first chapter of this study examines the question of the character of sub-national political forces in Canadian politics. The second chapter centres on the measurement of electoral regionalism and the third chapter focusses on the nature of the statistical model used in this study. The remaining chapters report the results obtained by the application of this model to the six Canadian general elections held from 1953 to 1965.

Introduction

Footnotes

1. See, among others, Mattei Dogan and Stein Rokkan, "Introduction,"
    in Mattei Dogan and Stein Rokken, ed., Quantitative Ecological
    Analysis in the Social Sciences (Cambridge: Massachusetts, 1969),
    1-15.

2. Regionalism, or its synonyms such as sectionalism or
    provincialism, has been conceptualized in a number of different
    ways; for our purposes in this chapter the term will be used
    in a general sense, to refer to sub-national variations or
    differentiations which have a spatial dimension.

3. See, among others, J.M.Beck, "The Democratic Process at Work in
    Canadian General Elections," in J.C.Courtney, ed., Voting in
    Canada (Scarborough, 1967), 2-31; J.M.Beck, Pendulum of Power:
    Canada's Federal Elections (Scarborough, 1968); John Meisel,
    "Conclusion: An Analysis of the National (?) Results," in
    John Meisel, ed., Papers on the 1962 Election (Toronto, 1964),
    272-88; John Meisel, The Canadian General Election of 1957
    (Toronto, 1962); R.R.Alford, Party and Society: The Anglo-
    American Democracies (Chicago, 1963); Peter Regenstreif,
    The Diefenbaker Interlude: Parties and Voting in Canada
    (Toronto, 1965); D.E.Blake, "The Measurement of Regionalism
    in Canadian Voting Patterns," Canadian Journal of Political
    Science, V, No.1 (March, 1972), 55-81; Mildred A. Schwartz,
    "Canadian Voting Behaviour," in Richard Rose, ed., Electoral
    Behavior: A Comparative Handbook (New York, 1974), 543-617.

4. Mildred A. Schwartz, Politics and Territory: The Sociology
    of Regional Persistence in Canada (Montreal, 1974): Mildred
    A. Schwartz, Public Opinion and Canadian Identity (Berkeley,
    1967); see also John C. Johnstone, Young People's Images of
    Canadian Society, Studies of the Royal Commission on
    Bilingualism and Biculturalism (Ottawa, 1969); Richard
    Simeon and David J. Elkins, "Regional Political Cultures
    in Canada," Canadian Journal of Political Science, VII, No.3
    (September, 1974), 397-437.

5. See, among others, J.E.Hodgetts, "Regional Interests and
    Policy in a Federal Structure," Canadian Journal of Economics
    and Political Science, XXXII, No.1 (February, 1966), 3-14.

6. See, among others, Norman Ward, The Canadian House of Commons: Representation (2nd edition, Toronto, 1963), 140-43; David Hoffman and Norman Ward, Bilingualism and Biculturalism in the Canadian House of Commons, Document of the Royal Commission on Bilingualism and Biculturalism (Ottawa, 1970).

7. Frederick C. Engelmann and Mildred A. Schwartz, Political Parties and the Canadian Social Structure (Scarborough, 1967).

8. /See, among others, Paul Fox, "Regionalism and Confederation," in Mason Wade, ed., Regionalism in the Canadian Community, 1867-1967 (Toronto, 1969), 3-29; John Conway, "Geo-Politics and the Canadian Union," in J. Peter Meekison, ed., Canadian Federalism: Myth or Reality, (2nd ed., Toronto, 1971), 388-407.

9. Donald V. Smiley, "The Structural Problem of Canadian Federalism," Canadian Public Administration, XXIV, No.3 (February, 1971), 326-43; A.F.W.Plumtre, "Regionalism and the Public Service," Canadian Public Administration, VIII, No.4 (December, 1965), 548-57.

10. John Deutsch, et al., Maritime Union Study: The Report on Maritime Union Commission by the Governments of Nova Scotia New Brunswick, and Prince Edward Island (Fredericton, 1970); David K. Elton, ed., One Prairie Province? Conference Proceedings and Selected Papers (Lethbridge, 1971).

11. See the various essays in R.M.Burns, ed., One Country or Two? (Montreal, 1971).

12. With some exceptions, notably Donald Blake's paper on regionalism in Canadian voting patterns, op.cit., and Mildred Schwartz's Politics and Territory.

Chapter One

The Character of Sub-National Politics in Canada

Two themes - regionalism and federalism - dominate both Canadian politics and political science, to the extent, as has been recently argued in a cogent article by Richard Simeon, that they are almost inextricably intertwined and confused.[1]

In part, the apparent connection between the two themes is that often they have not been adequately distinguished. As Simeon points out, the term of regionalism has been used in two broad senses. First, regionalism has been used to refer to differences between the regions and provinces in terms of such variables as "demographic make-up, economic and social structure, party systems, pattern of policy outputs, and the like."[2] Second, regionalism has been expanded to incorporate "the interplay between the interests of different provincial governments, or between their interests and those of the federal government."[3]

This study is an examination of regionalism in Canada in the first sense, that of persistent sub-national differentiations, with an emphasis on the pattern of movements in the turn-out and party vote percentages recorded in the six Canadian general elections from 1953 to 1965.

The factors underlying the persistence of regionalism in Canada are manifold and are not easily assigned primary or secondary importance.[4] This chapter is intended to provide an

explication of the regional character of Canadian politics and
to provide a theoretical basis for the explication, as expressed
in the introduction, that the Canadian political system is influ-
enced to a great extent by sub-national political forces.

As Richard Simeon and David Elkins have observed in
their important study of regional political cultures, "regional-
ism is one of the pre-eminent facts of Canadian life,"[5] to the
extent that the practices of Canadian political life are imbued
with its manifestations.

Perhaps the most obvious example is to be seen in the
intricate and careful manner, since the first administration of
Sir John A. Macdonald, in which Prime Ministers have constructed
their cabinets, paying sensitive attention to ethnic and religious
considerations, as well as geographical or spatial factors. This
great and continual pre-occupation with the representative nature
of the cabinet is justified on the grounds that the historical
cleavages of Canada and the particular interests of the provinces
must be given recognition and articulation in the federal govern-
ment's decision-making process.[6] Reference can also be made to the
Liberal party's practice of alternating between French- and
English-Canadian leaders,[7] the composition of the Supreme Court of
Canada,[8] the appointment of parliamentary secretaries,[9] and the
attempt to make Royal Commissions and commissions of enquiry repre-
sentative in some sense of the country's diversities,

especially along geographic lines. These "instrumentalities"10 are ample testimony to the perceived fragility of the Canadian political system. It is, however, in the area of political parties, voting behaviour, and the development of the party system that the impact of regionalism is particularly evident, and to which we now turn our attention.

Canadian political scientists and historians, accepting the logic that underlies the process of Cabinet formation, have followed André Siegfried's observation that since Canada is a " country of violent oppositions" it is prudent for politicians, in order to preserve the unity of the Dominion, "to prevent the formation of homogeneous parties, divided according to race, religion, or class."11 Professor Dawson, in his classic work, The Government of Canada, argues that since a political party desirous of electoral success must gain support from at least two of the traditional regions of the country

> a national party must take as its primary
> purpose the reconciliation of the widely
> scattered aims and interests of a number
> of these areas.12

Corry and Hodgetts put the matter more bluntly, in that they assert the diversity of opinion among people, and then argue that effective democratic government is achieved by the two-party system, composed of parties which act as "brokers" between the competing sections, ideas, and classes. In Canada, compared to,

say, the United Kingdom with its greater social homogeneity, there

is greater necessity for broadly-based parties and politicians who

practice the politics of pragmatism and compromise.[13]

The impact of regionalism on the political parties is

readily apparent from an examination of the literature on voting

behaviour in Canada. Robert Alford, in his cross-national study of

the socio-economic bases of voting behaviour in four Anglo-American

democratic political systems, found a low level of class voting and

indistinct lines of class support for the major national Canadian

political parties, in comparison with those of the United States,

Australia, and the United Kingdom. The New Democratic Party had more

of a class-support base than did the Liberal party - the other, for

Alford, "Left" party in Canada - but this distinction fades in com-

parison with the support bases of "Left" parties in the other systems.

Instead of Canadian politics being dominated by the social structure,

whether measured in terms of education, income, or occupation, class

influences on politics are deflected and submerged by religious,

ethnic, and regional cleavages.[14] Not only are the major political

parties heterogeneous in their support bases, but there are consider-

able variations between regions, to the extent that often what con-

stitutes the support base of a party in a given area is the support

base of another party in another region.[15] National patterns of

electoral support are not easily put into the form of national

generalizations because of the pervasiveness of sub-national var-

iations. Even the often-noted association between atholicism

and voting Liberal must be qualified by consideration of variations

in the strength of the relationship and contrary cases.[16]

- It is the existence of these complex patterns of voting

behaviour which lead Engelmann and Schwartz to contend that the

significant cleavages in Canadian politics are regional-

economic and regional-ethnic.[17]   In other words, the sub-national

differentiations of ethnicity and economic development have resulted

in the creation of regional climates of opinion which strongly inhib-

it the development and maintenance of consistent and national patterns

of political behaviour.

Another important manifestation of regionalism in Canadian

political life has been the development of the national party system.

Professor John Meisel recently has argued that it is difficult to

adapt to the Canadian case Lipset's and Rokkan's model of the trans

mation of cleavage structures into party systems in Europe because of

a number of substantive differences between the European and Canadian

patterns of development, the most important of which is the signifi-

cance of regionalism.[18] Engelmann and Schwartz not only see the

regions as being crucial determinants in the development of broker-

age politics and in the creation of a number of serious intra-party

cleavages, but they also attribute to regionalism the break-down of

the two-party system after the first World War and the birth of a

number of splinter parties.[19] The existence of a number of regional

grievances and dissatisfactions, especially in western Canada,

coupled with the disciplined organization of political parties in

the House of Commons, which minimizes the opportunities for Members

of Parliament to deviate from the policies set by the leaders of

the party or by the party as a whole, resulted in the formation of

new political parties. S.M. Lipset, in his review of C.B. Macpherson's

study of Social Credit in Alberta,[20] puts this argument most expli-

citly: Canada and the United States are very similar, particularly

in terms of the degree of social heterogeneity and the extent of

regionalism, but are distinguished by the form of government, the

nature of the political process, and the character of the party

system. These differences are closely intertwined in that the nature

and operation of the parliamentary form of government and the

absence of any "safety valve," such as the American primary system,

for the release and expression of regional discontents, have necess-

itated the formation in Canada of political parties whose purpose is

to speak for disaffected regions.[21]

John Wilson, although his   primary purpose is

the explication of the theoretical basis for the hypothesis that there

are ten political cultures in Canada, buttresses, in good measure, his

case by the analytic decomposition of the national party system. He

argues that there exist a number of different party systems in Canada

which are the function of both the level of industrialization, which is regionally differentiated, and the nature of political leadership in the country, particularly at the level of the provinces.[22]

This review of the impact of regionalism on the nature of Canadian politics, cast as it is in generally contemporaneous terms, ought not to obscure the fact that regionalism is not a new phenomenon.[23] Indeed, the pattern of Canadian history from the time of the Conquest of 1759 has revolved around a number of centrifugal forces, arising primarily but not exclusively from differences between the English and French peoples. Some Canadians, Sir John A. Macdonald being a notable example, in the years before and after Confederation undoubtedly felt that the differences between the Canadians were muted and subdued, with the obvious exception of the French-Canadians, and that these differences would soon lose their impact, to be submerged in the formation of a new "political nationality"[24] and a strongly united and nationally-oriented society. However, the process of federalization from 1864 to 1867 revealed a number of important obstacles to a unitary form of government, or, as the Canadians then understood it, a legislative union, and a relatively homogeneous society. The French-Canadians, conscious of the unique constellation of values and interests arising out of their linguistic, religious, and historical heritage,[25] and the people of the Maritime provinces, conscious of their relative lack of population, the dis-

tances separating them from "Upper Canada," and the lack of

developed local governmental institutions, were both unwilling

to accept the complete subordination of their interests to one

level of government. As George Brown, in an often quoted argument,

recognized during the Confederation Debates:

> We had either to take a federal union or
> drop the negotiation. Not only were our
> friends from Lower Canada against it (that
> is, a unitary government), but so were most
> of the delegates from the Maritime prov-
> inces. There was but one choice open to us.[26]

That Canada is a federation is attributable to the

diversities in Canada in 1867. The expression of those diversities

is found in the "federal bargain"[27] which was designed to remove

from the jurisdiction of the central government those divisive

cultural matters which in the past had thwarted attempts of pol-

itical integration. The division of powers which assigned most of

the important governmental responsibilities to the central govern-

ment allocated control of education and marriage to the provinces.[28]

Agriculture and immigration were areas of concurrent jurisdiction,

with the federal authorities being dominant in cases of conflict

between the two levels.[29] Two general grants of power to the prov-

inces were "Property and Civil Rights in the Province" and "Gener-

ally all Matters of a merely local or private Nature in the prov-

ince."[30]

It is well known, and not requiring much elaboration here,

that Confederation, as expressed in the British North America Act,

the written part of the Canadian Constitution, created a highly

centralized federal structure. However, despite Macdonald's expect-

ation that the provinces would be no more than mere municipalities,

and despite some of the provisions of the British North America

Act,[31] the new Canadian federation was not to remain permanently

centralized, with most of the important responsibilities of govern-

ment concentrated in Ottawa, and with the dominant political focus

and environment being the nation's capital. Since 1867 the nature

and operation of the federal system has diverged markedly from the

intentions of the Fathers of Confederation, to the extent that by

the 1960s and 1970s there was a clear and unmistakable attenuation

of the federal power and a rise in the importance and assertiveness

of the provinces.[32] Paradoxically, the Canadian system has evolved

towards the original model of the American federal system, which

had served as negative point of reference to the Canadians. (The

American Civil War had been perceived as being essentially the

result of excessive state power and a weak central government.) Now,

the Canadian system is perceived as being under considerable duress,

with the prospect of political disintegration ever present, partly

because of the Canadian failure to reach a permanent accommodation

between the French and the English, partly because the decentraliz-

ation of the federal system has reduced the ability of the central

government to meet the needs of a complex industrialized society,

and partly because the forces of regionalism, especially those

found in the persistent sub-national differentiation in values and

orientations, have created a political system in which the "national"

is hard to define and find and the regional seems to be a pervasive

characteristic of the attitudes and behaviours of the Canadian

people.[33]

It is necessary, before discussing the problem of the

precise nature of sub-national political levels and forces in the

Canadian political system, to provide a general discussion of the

factors which have contributed to the maintenance of regionalism in

Canadian society.

The traditional explanations for the maintenance and per-

sistence of regionalism in Canadian politics have been threefold:

namely, the influence of distinct geographical areas and diverse

ethnic communities; the operation of a number of economic factors;

and the nature of judicial interpretation of the British North

America Act, coupled with the increasing importance of provincial,

areas of jurisdiction. Most of the emphasis, at least judging from

the literature and traditional concerns of Canadians political

scientists, has been on the last explanation, although Schwartz, in

her Politics and Territory, has stressed non-structural factors.[34]

The geographical and ethnic explanation for the develop-

ment of the regional character of the Canadian political system has

taken essentially the following form. While Canada was to be a fed-

eration, most of the decision-making, drive, and initiative in the

system would originate from the politicians and civil servants in

Ottawa. The realization, however, of this role of national leader-

ship was hampered by the gradual expansion of the Dominion from

the original four provinces to nine by 1905 and ten by 1949, which

resulted in a society thinly strung out and irregularly dispersed

in a narrow band from one shore to the other. The physical encap-

sulation and separation of the Canadian people in the various

geographical regions (usually expressed in terms of the Atlantic

provinces, Quebec, Ontario, the Prairie provinces, and British

Columbia) has worked against the moulding of a national outlook

among Canadians on political questions. Furthermore, the character

of the physical environment, which incorporates great variations in

soils, resources, and climates, has contributed to great differences

in policy preferences across the country.

The impact of the physical environment upon the political

development of Canada has been aggravated by the topography of the

country which until recently has made inter-regional communication

difficult if not impossible. Often it was far easier to conduct

commercial relations with the neighbouring American territory than

it was to engage in trade between contiguous Canadian regions. The

North-South pull of the North American continent worked against the

establishment of a political nationality which had a dominant East-

West orientation and focus. The physical base of the Canadian politi-

cal system, however, while undoubtedly posing serious difficulties
for the important task of nation-building, probably was not suffic-
ient in itself to prevent the relatively smooth development and
operation of a centralized federation or the formation and crystal-
lization of political attitudes and political orientations focussed
on the centre of the system.

The Canadian people are not only divided by a number of
physical barriers but also are separated by a number of ethnic clea-
vages. A great deal of this division arises, of course, from the
presence of both the French and English peoples in Canada. Many of
the great and explosive issues and events of Canadian politics -
ranging from the hanging of Louis Riel, through conscription in the
two world wars, the proper relationship between the national and
provincial governments, bilingualism and biculturalism, to the
perennial question of whether Canada is one nation or two - have
resulted from the attempt to unite these two ethnic groups into one
political entity. While there has been a common tendency to envisage
Canadian society in terms of the English and the French, the impact
of ethnicity upon Canadian society and politics extends as well to a
number of other groups. There is considerable variation between the
provinces in the percentage of various ethnic groups, such as Germans
Ukrainians, Italians, as well as the French and the English, the two
"Charter" peoples.[35]

While there have not been specific analyses of how these

different patterns of settlement and population have influenced

the development of the Canadian political system, Professor Brady,

for one, has argued that prairie regionalism was influenced by the

rapid influx of immigrants who were not "specially attached to the

older Canada," contributing in the process to a weaker sense of

unity with eastern Canada.[36] In The Vertical Mosaic John Porter

pointed to the persistence of immigrant groupings in Canada, where

there has been a greater tendency, compared to the United States,

to accept people more on the basis of group and community affilia-

tions rather than as individuals.[37] Since Canada is more a mosaic

than a melting pot, with a concomitant emphasis on the values of

ascription and particularism rather than on achievement and univer-

salism,[38] there has not been an unchecked process of assimilation

and the consequent formation of universal and national orientations

and attitudes, thus re-inforcing the identification of certain

social groupings with the sub-national areas and communities of the

country.

Not only is Canada an amalgamation of a number

of different physical regions and ethnic groupings, but related close-

ly to the geographical structure of the country are a number of econ-

omic factors which have contributed greatly to the regional character

of Canadian politics. The national economy is really a number of dis-

tinct sub-national economic systems, each of which has its own partic-

ular pattern of economic activities, set of occupational mixes, and

level and rate of economic development. Schwartz summarized these

patterns by noting that the Prairie provinces' economy is mainly

based on commodity-producing enterprises in primary resources, such

as agriculture, mining, and refining. The Atlantic region is next

in its dependence on primary resources, followed by British Columbia,

and lastly, Ontario and Quebec, which are quite similar on their

reliance on wealth created from manufacturing.[39] Schwartz also noted

that the regions are distinquished in terms of unemployment rates,

per-capita earned income, and the seasonal character of employment,

and that the pattern of regional disparities since the 1920s has re-

mained fairly constant, with the exception of the Prairie region,

which has had considerable increase in wealth, particularly because

of the Alberta oil and gas industry.[40]

These variations in the economic structure of Canada and

the economic well-being of Canadians have contributed to the mainten-

ance and persistence of regionalism, especially in terms of the for-

mation of differing orientations to political life. Blake, for example,

notes that the low level of class voting, as reported by such scholars

as Alford, may reflect"the fragmentation of the working class by region

by virtue of the different nature of industrialization in different

regions" ,such that "a western oilfield worker, a British Columbia

pulp mill worker, and an Ontario assembly line worker may have differ-

ent political perspectives."[41]

Related to the regional character of the Canadian economy has been the profound change in the nature of federal-provincial relations since Confederation, which also has contributed to the persistence of regional differences within Canadian society. While a good part of the explanation for the development of the federal system has been cast in legalistic terms, especially the interpretation of sections 91 and 92 of the British North America Act, most notably by the Judicial Committee of the Privy Council, the consequence of this process has been to create strong provinces in the federal system despite the reasonably clear intentions of the Fathers of Confederation and the relatively straightforward wording of the appropriate sections of the Act.[42]

The presence of strong provinces in the Canadian system is, of course, important for federal-provincial relations, but also has significant implications for other aspects of political life. Wilson, for example, takes the considerable amount of independence possessed by the provinces in "all the areas of governmental jurisdiction (such as education, social welfare, labour law, election law, and the like) which affect in a significant way the economic, social, and political life chances of the people living within its borders,"[43] to imply that regional differences in Canadian politics may reflect different stages of political development between the provinces. Since the provinces are the main arenas for the development of political ideas and orientations for both provincial and national politics, the major

variations in political behaviour will be found to be better cast
in provincial rather than simply regional terms.[44]

It is necessary, before examining in greater detail the
question of the character of sub-national political forces in
Canada, to discuss with greater specificity the question of the
third traditional interpretation of the development of the polit-
ical system, namely the nature of judicial interpretation of the
British North America, especially the federal and provincial grants
of power, sections 91 and 92 respectively,   since, as was suggest-
ed earlier, the legal development of the system has had such a prom-
inent place in Canadian political science.

The sensitive nature of federal constitutions, particularly
in terms of the division of powers between the two levels of govern-
ment, requires some relatively impartial and non-partisan mechanism
for the arbitration of jurisdictional disputes between the two levels
of government. In Canada, this function has been performed by the
Supreme Court and, until 1949, by the Judicial Committee of the Privy
Council, which acted as the final court of appeal.[45]

An exhaustive history of the Judicial Committee's various
judgments is not appropriate in this work. Suffice it to say that the
Judicial Committee, especially since the Local Prohibition case of
1896,[46] rendered a number of crucial decisions that on the whole tend-
ed to enlarge the powers and responsibilities of the provincial
governments at the expense of the national government.[47] The culmin-

ation of the Judicial Committee's interpretation of the British

North America Act came in 1937 when aspects of R.B. Bennett's New

Deal - a number of pieces of federal legislation designed to

ameliorate some of the hardships and economic problems of the

Great Depression - were declared "ultra vires" on the grounds

that they extended beyond the national government's grant of

power.[48] This denial of the federal government's claim of compet-

ency to use its assigned powers as a basis for constructing social

programmes in areas of provincial jurisdiction, even in a time of

social crisis, reflected fully the Judicial Committee's interpreta-

tive scheme for reconciling disputes arising out of the British

North America Act.[49] The Dominion grant of power, which had been

intended by the Fathers of Confederation to be all inclusive and

general (that is, "Peace, Order, and good Government" followed by

a number of specific examples which were "for greater Certainty

but not so as to restrict the Generality of the foregoing"), was

divided into two separate and distinct compartments by the Judicial

Committee. In normal (that is, non-emergency) situations the pro-

cedure of the Committee was to ascertain whether the contested

legislation fell within the scope of, first, the enumerated power

of section 91, or, second, of the enumerated powers of section 92

(which contained the broad headings of "Property and Civil Rights

in the Province" and "Generally all Matters of a merely local or

private Nature in the Province"), or, third, of the general grant

of power ("Peace, Order, and good Government"). The Judicial

Committee's procedure, as opposed to the adjudication of disputes

on the basis of sections 91 and 92 considered as one compartment,

meant that if the contested legislation did not come under the

enumerated heads of section 91 (and it must be noted that section

91.2 - "The Regulation of Trade and Commerce" - which afforded con-

siderable room for expansion, was narrowly construed), then it

could quite easily be subsumed under the two broad headings of

section 92. What, then, was intended to be the main grant of power

became a residual power which could be used to override provincial

powers only in times of extreme emergency, specifically war or

famine, and the determination of what constituted an emergency in

Canada as in the hands of jurists sitting in London. As Professor

Frank R. Scott so succinctly put it, "the examples swallowed up

the rule."[50] The effect of judicial interpretation of the British

North America Act, beyond the delineation of the legal powers of

the two levels of government, was to contribute to the steady de-

centralization of the Canadian federal system and to reinforce a

number of centrifugal political forces within the system.

The interaction between geographical separation, ethnic

differentiation, different levels of economic development, and the

impact of judicial interpretation on the nature of the federal system

cannot be denied as being important determinants of regionalism in

the Canadian political system. Whether, however, these factors in

themselves are necessary and sufficient conditions for understand-

ing the development of the political system is doubtful. Professors

Black and Cairns, for example, argue that the "nation-building"

orientation of traditional analyses of Canadian politics has taken

on essentially legalistic, formalistic, and institutional emphases,

with a great preoccupation with the juridical development of the

political system,[51] and less obvious (in the sense of being readily

measured) the traditional orientation of "nation-building" has been

centralist to the extent that it has been concerned primarily with

the problems and development of the national government and its role

in the political system, with a concomitant lack of examination or

sympathy for the preoccupations, concerns, and roles of the provin-

cial systems.[52] While recently there has been some increased recogni-

tion of the country's diversities –in terms of other than the English-

French cleavage - and the growth of divergent social, economic, and

political priorities at the provincial level of the political system,

they have been usually viewed

> either as self-evident facts whose continued
> existence requires no further explanation or
> as inconvenient impediments to national unity
> which really ought to go away.[53]

In other words, the traditional and dominant approaches to

the problem of the development of the Canadian political system have

viewed the dynamics of the system from the top down, from the point of

view of the processes involved in the construction of a nation (not

that this in itself is non-productive) and not from the bottom up,

that is, the processes involved in the development of provincial

political systems. Simply put, the traditional approaches have

sidled up to the problem of the nature of Canadian politics but

have not fully faced it. As Black and Cairns make the point :

> Canadians have been engaged in more than the
> construction of a new state; they have also
> been building provinces and complex series of
> relationships between governments and societies
> as well.[54]

The assumption underlying this argument is that there

is an intricate series of interactions between social and economic

forces, on the one hand, and political forces, on the other.[55]

This is in striking contradistinction to the traditional formul-

ations, where there is no such reciprocity of influence, but where

instead social and economic forces structure political forces and

forms. One implication, at least for some scholars, of the traditional

modes of analysis is that federalism is a temporary form of govern-

ment, to be discarded as irrelevant and unnecessary when the processes

of industrialization and urbanization produce an interdependent

economy with nationally-oriented loyalties and business elites and

the concomitant diminution of regional loyalties and pre-occupations.[56]

Black and Cairns, for example, reject the inevitably of

the demise of federalism, at least in the Canadian context, because

of the continued existence of "disparate regional economies ...

(which) ... are complemented by the existence of distinguishable

socio-political communities at the provincial level.[57]

Indeed, Black and Cairns, in their analysis of the develop-
ment of the political system in Canada, argue that the emphasis of the
traditional explanations has been on the problems and processes of
"nation-building" to the neglect of

> t he creation and effects of social, political
> and physical communication networks within the
> provinces, the growth of regional economies with
> international as well as national ties, and the
> burgeoning provincial bureaucratic and other elites
> which confidently manage state systems bigger in
> scope, competence, and importance than some ,
> foreign sovereignties.[58]

The interpretation of Canadian politics "that Canadians
have been engaged not only in state-building but in province-
building as well" puts into a different perspective the development
of Canadian politics and the character of sub-national political
forces. The Canadian people, instead of having either a homogeneous
or universal orientation or a dichotomous pattern of English-French
differences in attitudes, have a number of different loyalties and
orientations, extending down from the nation to the region, the
province, and the local area. The Canadian identity is not monolithic;
it is not a common set of attitudes and orientations. Instead
"Canadianism" is to be found only in the "limited identities"
of Canadians which are shaped by regional, ethnic, and class influ-
ences, and

> represent entities of experience for Canadians
> no less than the transcontinental federal union;
> indeed, it is largely through them that Canadians
> interpret their nation-state as a whole.[60]

Contrary, then, to the expectations of some political

scientists, such as Alexander Brady and J.A. Corry,[61] the processes

of urbanization and industrialization have not seen the disappear-

ance of sub-national loyalties and orientations; indeed, these pro-

cesses, for scholars like Black and Cairns, have contributed to the

very maintenance of these differential patterns. Careless makes a

similar argument, by noting the development of major metropolitan

centres in all of the traditional regions, each marked with its own

network of communications and commercial and industrial structures,

and serving as an important reference point to the inhabitants of

that region.[62]

Despite their differing emphases and interpretations, the

various explanations for the development of the Canadian political

system agree that a crucial variable in the political process is the

existence of a number of sub-national political orientations and

loyalties, which, in turn, have contributed to the pattern of sub-

national variations in political behaviour. What is important for

our purposes is the striking difference between the traditional and,

for lack of a better term, the "modern" explanations of the forces

contributing to the development and maintenance of sub-national pol-

itical differentiations which are an inherent part of the concept of

regionalism. The traditional mode of analysis stresses the signif-

icance of social and economic differentiations, and the difficulties

encountered by the national government in its attempt to subdue

and overcome the effects of these differences; whereas the "modern"
school adds and emphasizes the importance of political variations
in the development of the Canadian political system. For example,
Black and Cairns argue that along with the increased importance of
provincial responsibilities there has been the development and
institutionalization of social and political organizations along
provincial lines.[63] These organizations provide a vital focal point
for the conduct of political life and also contribute to the
further development and maintenance of sub-national orientations,
loyalties, and behaviours. Indeed, it is the existence of these
organizations, the presence of provincially-oriented elites, and
the pattern of sub-national orientations which foster the aggressive
stands taken by provincial governments toward the national govern-
ment, and which make the governing of Canada so difficult and
problematic.[64]

One of the crucial problems confronting the Canadian
people is the striking of a viable and working balance between
national and sub-national political orientations, in order to avoid
the destructive dominance of one over the other. Both are destructive
because it is difficult to envisage the supremacy of regional loyal-
ties as not resulting in the inevitable disintegration of the pol-
itical system, while the triumphant hegemony of national attitudes,
preoccupations, and allegiances would raise the distinct possibility
that sub-national identities, behaviours, and orientations, those

components of Canada's present "limited identities," would be swept

aside and discarded. Canadians have not shown any clear-cut and con-

sistent inclination to do either; instead there has been persistent

development and maintenance of multiple loyalties, arising out of the

development of the national system and the construction of a number of

lower-level political environments.

The last sentence was deliberately and judiciously put. The

usual mode of analysis of Canadian politics has been to proceed with

five regions constructed on the following basis: The "Atlantic" region

which is composed of Newfoundland, Prince Edward Island, Nova Scotia,

and New Brunswick; the "Prairie" region which is made up of Alberta,

Saskatchewan, and Manitoba; and the remaining three regions are respect-

ively British Columbia, Ontario, and Quebec. The determination of these

regional boundaries does not follow a consistent set of criteria;

instead it is a admixture of economic factors, legal lines of demarca-

tion, ethnic concentrations, and geographical features, so that the

variables used for the construction of a region in one area of the

country are replaced by another set of features elsewhere. This easy

acceptance of the traditional delimitation of regions in Canada has led

undoubtedly to the fruitful production of research findings, but there

is a great danger that other important sub-national variations have

been obscured and glossed over. In other words, as is implied in the

arguments of Careless, Black and Cairns, and Wilson, there may be less

to say about intra-regional differences than intra-provincial varia-

tions. Donald Mills, in his examination of the occupational compos-
ition of the prairie provinces, points to this misapplication of the
regional concept in Canada by presenting data which illustrate that
argument precisely, and calls for the replacement of the usual five-
fold regional breakdown of data by the ten-fold presentation of sub-
national variations.[65] Mills is concerned with the work of economists,
but political scientists also have tended to assume that there is a
high degree of homogeneity in the political life in the traditional
regions (as witnessed by the easy usage of the terms "Prairies" and
"Atlantic Provinces") or that intra-provincial variations were of
little political consequence for the nation as a whole. Political
integration, it is here argued, has been seen as a problem of uniting
the disparate attitudes, pre-occupations, and orientations of five
regions, or just the French and the English, when it may be the case
that the actual problem flows out of the attempt to unify ten prov-
incial political systems, each of which is a vital and significant
political environment for the people contained within its borders.

This argument must be more precisely formulated. Given the
differences between the provinces in historical background and develop-
ment, the pattern of ethnic settlement and composition, and the level,
type, and rate of economic development, and given the fact that each
province has considerable latitude for independence in policy-making
and initiative in a number of important areas of government responsibility
it is not difficult to expect to find considerable differences between

the provinces in political behaviour.

These variations are drawn starkly in the various essays contained in Martin Robin's <u>Canadian Provincial Politics</u>, where the provinces are shown to differ greatly, particularly in terms of the support bases of the parties and the structure, as measured by the number of competitive parties and the nature of political competition, of the party system.[66] This is most evident on the case of the three prairie provinces, which constitute one of those areas in Canada where the regional concept is thought to have ready application, but where, over the years, three highly differentiated political systems have developed.

Differences such as these are not just of mere interest but they also are of substantive and theoretical importance as they pertain to the pattern of development of political systems in general. Lipset and Rokkan argue that the first phase of nation-building is characterized by the presence of territorial resistances to "the thrusts of penetration and standardization from the national center," which raise questions of cultural identity, typified by Robert E. Lee's query of "am I a Virginian or an American?"[67] Their abstract model of the development of party systems has two extremes.

> In the one case the decisive criterion of alignment
> is commitment to the locality and its dominant cult-
> ure: you vote with your community and its leaders
> irrespective of your economic position. In the other
> the criterion is commitment to a class and its collect-
> ive interests: you vote with others in the same
> position as yourself whatever their localities, and you
> are willing to do so even if this brings you into oppo-
> sition with members of your community.[68]

In the first case the political system would be characterized
by a pattern of strong sub-national variations in political behaviour.
Voting patterns would be noted for spatial or geographical variations
at some level of aggregation below the nation as a whole, such as
regions, provinces, or constituencies. In the second case spatial
dimensions would be of little importance for the description and expla-
nation of electoral patterns; whatever sub-national variations are
detected would be explained in terms of the differences in the socio-
economic characteristics of the various units used in the composition
of that particular level. Lipset and Rokkan suggest that every pol-
itical system, although their main reference area is Western Europe,
is characterized by two revolutions - the national and the industrial -
in the process of political development. The national revolution pro-
duces two types of cleavage, that of conflict between the centre and
peripheries or ethnically, linguistically, or religiously distinct sub-
cultures, and that of conflict between the authorities of the nation-
state and the established church. The industrial revolution is marked
by conflict between the landed interests and industrial entrepreneurs
and by conflict between owners and employers versus tenants and workers.[69]
Over time the cleavages of the national revolution are superseded by
those of the industrial revolution. [70] Simply put, the nation will reign
supreme over its parts.

The arguments of Black and Cairns, Careless, and Wilson
suggest that in Canada the process of political development is not the.

same as noted by Lipset and Rokkan for Western Europe, or, at least,

is not as far along that path. In particular, they suggest that the

provincial level of the political system is where the greatest amount

of variation will be found, rather than the regional level or any

lower-order levels within the system. While political influences

originating from the national level will be likely to have some impact

upon political behaviour at the provincial level, forces arising out

of the particular circumstances which guide and circumscribe the pol-

itical development of each province will lead to the primacy of the

political environment at that level of the political system, a pri-

macy which will be manifest in the pattern of significant intra-

provincial variations.

The traditional analyses of Canadian politics speak most

often in terms of the five regions - the Atlantic provinces, Quebec,

Ontario, the Prairie provinces, and British Columbia - implying that

sub-national variations in political behaviour and attitudes are

greater between regions than between any levels of aggregation below

the regions. What has been termed the "modern" interpretations of the

nature of Canadian political life devolves the pattern of differentia-

tions into a more complex set of relationships between the national

level of politics and the provinces, implying that the provinces rather

than the regions are the most significant political environments for

Canadians.

In summary, it has been argued that the development of the Canadian political system has been influenced by a number of social, economic, and political factors. Many of these have contributed to the maintenance and persistence of sub-national political differentiations within the system.

Regionalism, then, in the sense of persistent sub-national differentiations, in the area of voting behaviour suggests that a complex series of factors which have an underlying spatial dimension contribute to the presence within the political system of a number of deviations from the national pattern of electoral behaviour.

While there is widespread agreement that there is a geographical basis to Canadian voting behaviour, there is considerable dispute over whether these persistent deviations from the national pattern are better summarized in terms of either regions or provinces. The arguments of Black and Cairns, Careless, and Wilson suggest that the sub-national character of Canadian politics reflects the presence of provinces which act as significant political environments for the various Canadian electorates. While these electorates will be fulfilling their role in the national system, the context of their actions are of more limited arenas, those of the provinces. They are seen as influenced in their reactions to national politics by a number of factors operating within the bounds of the provinces which reduce the impact of either regional or national political forces.

While there is much agreement that sub-national political

forces and environments are important for understanding the nature
of Canadian politics, their precise weight is still open. Similarly,
no estimation of national political forces upon the behaviour of the
Canadian people is available.

In order to provide the basis for ascertaining the relative
weights of the various political forces in Canada two important
analytical tasks remain, namely the elaboration of the concepts of
sub-national political forces and sub-national political environments,
both of which are implied in the concepts of "nationalized" and
"de ationalized" political systems; and the technical question of how
to ascertain those forces - by what measurement procedures will the
impact of sub-national areas be weighed.

Chapters two and three, respectively, discuss the previous
studies of regionalism in Canadian voting behaviour, particularly in
terms of the measurement techniques employed, and the character of
the variance components model which will be used in this study to
provide estimates of the relative weights of the Canadian political
environments upon electoral behaviour, especially the voter turnout
and party vote movements.

Chapter One

Footnotes

1. Richard Simeon, "Regionalism and Canadian Political Institutions,"
   Queen's Quarterly, 82, No. 4 (Winter, 1975),499-510.

2. Ibid., 500.

3. Ibid.

4. See, for example, the discussion in Mildred Schwartz's Politics
   and Territory: The Sociology of Regional Persistence in Canada
   (Montreal,1974),20-3.

5. Richard Simeon and David J. Elkins, "Regional Political Cultures
   in Canada," Canadian Journal of Political Science, VII, No. 3
   (September,1974),397.

6. For the classic examination of this phenomenon see Norman McL.
   Rogers, "Federal Influences on the Canadian Cabinet," Canadian
   Bar Review, II, No. 2 (February,1933);also Frederick W. Gibson,
   ed., Cabinet Formation and Bicultural Relations: Seven Case
   Studies, Study of the Royal Commission on Bilingualism and Bicult-
   uralism (Ottawa,1970).

7. Peter Regenstreif, "Note on the 'Alternation' of French and
   English Leaders in the Liberal Party of Canada," Canadian Journal
   of Political Science, II, No. 1 (March,1969),118-22.

8. Bora Laskin, "The Supreme Court of Canada: A Final Court of and
   for Canadians," Canadian Bar Review, XXIX, No. 10 (December,1951),
   1041-79; Laskin wrote that whether "...one regards it as inevitable
   or not, it is a fact that membership on the Court has from the
   beginning been affected by sectional and religious considerations
   in the same way as has the composition of all federal cabinets
   since Confederation." Ibid., 1042. There is, of course, the legal
   requirement that 3 of the 9 judges must come from the Quebec bench
   or bar. The Federal Court, which was created in 1970, has 4 of its
   12 judges from Quebec.

9. R. MacGregor Dawson, The Government of Canada, rev. Norman Ward
   (5th ed., Toronto,1970),184. An unpublished study showed that
   there was a high degree of "representativeness" to parliamentary
   secretaries; see David Elton, Bar y Goodwin, and Peter Woolstencroft,
   "The Canadian Parliamentary Secretary," a paper prepared for
   Political Science 621 Department of Political Science, University
   of Alberta, Edmonton.   berta,1969.

10. The term is Livingston's; see his <u>Federalism and Constitutional</u> <u>Change</u> (Oxford,1956).

11. André Siegfried, <u>The Race Question in Canada</u>, Frank H. Underhill, ed. (Toronto,1966),113-14.

12. Dawson, <u>op.cit.</u>, 430.

13. J.A. Corry and J.E. Hodgetts, <u>Democratic Government and Politics,</u> (Toronto, third edition, revised,1959),219-25. This argument is a mixture of description and hopeful expectation; many instances can be cited of the parties' failures to act in the brokerage manner; two notable recent examples are the inability of the Liberal party to develop attractive policies for Western Canada and the failure of the Progressive Conservative party to adopt appealing policies for Quebec. Alan Cairns argues that the electoral system reduces the possibility of the parties arriving at policies which satisfy the various sections of the country by creating an imbalance between the parties' support bases and the number of seats they win. See his "The Electoral System and the Party System in Canada,1921-1965," <u>Canadian Journal of</u> <u>Political Science</u>, I, No. 1 (March,1968),69-70. It should be noted, however, that the analysis of the nature of the parties' policy-making and the extensiveness of brokerage politics is complicated by the difficulty in identifying and comparing "national" and "sectional" policies; see J.A.A. Lovink, "On Analysing the Impact of the Electoral System on the Party System in Canada," <u>Canadian Journal of Political Science</u>, III, No. 4 (December,1970),499-506.

14. Robert R. Alford, <u>Party and Society</u>,250-86.

15. Frederick C. Engelmann and Mildred A. Schwartz, <u>Political</u> <u>Parties and the Canadian Social Structure</u> (Scarborough,1967), 46-52; see also Robert R. Alford,"The Social Bases of Political Cleavage in 1962," in John Meisel, ed., <u>Papers on the 1962</u> <u>Election</u> (Toronto,1964),214-26.

16. The clearest example is Newfoundland where Perlin reported a strong association between being Protestant and voting Liberal and being Catholic with voting Conservative; George Perlin, "St. John's West," in John Meisel, ed., <u>Papers on the 1962 Election</u> (Toronto,1964),1-2. Baird and Laskin report that Catholics in Biggar, Saskatchewan vote CCF in provincial elections (although the study is marred by the lack of any checks on the socio-economic representativeness of the sample); see Richard Laskin and Richard Baird, "Factors in Voter Turnout and Party Prefer-ences in a Saskatchewan Town," <u>Canadian Journal of Political</u> <u>Science</u>, III, No. 3 (September,1970),456-58; see also Robert R.

Alford, "The Social Bases of Political Cleavage in 1962,"
214-217.

17. Engelmann and Schwartz, op. cit., 38-68.

18. John Meisel, "Cleavages, Parties, and Values in Canada," paper
    presented to the IXth Congress of the International Political
    Science Association, Montreal,1973, 6.

19. Engelmann and Schwartz, op. cit.,52-5.

20. S.M. Lipset, review of C.B. Macpherson's Democracy in Alberta,
    "Democracy in Alberta," Canadian Forum (November and December,
    1954), 175-77,196-98; see also Macpherson's reply, Canadian
    Forum (January,1955),223-25.

21. See Engelmann and Schwartz, op. cit.,52-3; see also Richard Van
    Loon and Michael Whittington, The Canadian Political System:
    Environment, Structure, and Process (Toronto,1971),278-81; the
    principle of "constituency autonomy," which was part of the
    Progressive Party's platform, of course, was in reaction to the
    traditions of parliamentary government; see W.L. Morton, The
    Progressive Party in Canada (Toronto,1950).

22. John Wilson, "The Canadian Political Cultures: Towards a
    Redefinition of the Nature of the Canadian Political System,"
    Canadian Journal of Political Science, VII, No. 3 (September,
    1974), 438-83.

23. Paul Fox, "Regionalism and Confederation," in Mason Wade, ed.,
    Regionalism in the Canadian Community,1867-1967 (Toronto,1969),
    3-29.

24. The phrase is George Étienne Cartier's; Confederation Debates,
    February 7, 1965.

25. The literature is voluminous; one of the most useful (although
    not uncriticized) is Michel Brunet's "Trois dominantes de la
    pensée canadienne-française: l'agriculturisme, l'anti-étatisme et
    le messianisme" in his La Présence Anglaise et les Canadiens:
    études sur l'histoire et la pensée des deux Canadas (Montreal,
    1964).

26. Confederation Debates, 1865, 108.

27. William H. Riker uses the term in his Federalism: Origin,
    Operation, Significance (Boston,1964), 11.

28. British North America Act, Section 93 and Section 92.12.

29. British North America Act, Section 95.

30. British North America Act, Section 92.13 and Section 92.16.

31. For example, the system of financial relations between the two
    levels of government, the system of superior-inferior courts,
    the appointment of Lieutenant-Governors and Senators by Ottawa,
    and the powers of disallowance and reservation held by the
    central government.

32. The various writings of Donald Smiley illustrate this argument;
    see, in particular, his Canada in Question: Federalism in the
    Seventies (Toronto,1972).

33. A fear expressed by Smiley in the Prefaces to both his The
    Canadian Political Nationality (Toronto, 1967) and Canada in
    Question: Federalism in the Seventies.

34. Schwartz, op.cit.

35. Elizabeth Wangenheim, "The Ukrainians: A Case Study of the
    'Third Force'," in Peter Russell, ed., Nationalism in Canada
    (Toronto,1966), 72-91.

36. Alexander Brady, Democracy in the Dominions (Toronto,1947),30.

37. John Porter, The Vertical Mosaic (Toronto,1965). Porter stresses
    that the ideology of the mosaic in Canadian society has served to
    maintain the dominance of the British elite. The persistence of
    ethnic pluralism has also tended to maintain old loyalties and
    to reduce the possibility of unity; 68-73.

38. Ibid., 70-1; also see S.M. Lipset, "Revolution and Counter-
    Revolution: Canada and the United States," in Thomas Ford, ed.,
    The Revolutionary Theme in Contemporary America (Lexington,1965),
    21-64; for an attack on Lipset's argument see Tom Truman,"A
    Critique of Seymour M. Lipset's Article 'Value Differences,
    Absolute or Relative: The English-speaking Democracies',"
    Canadian Journal of Political Science, IV,No.4 (December,1971),
    497-525.

39. Schwartz, op.cit.,26.

40. Ibid.,27-30.

41. Donald E. Blake, "The Measurement of Regionalism in Canadian Voting Patterns," Canadian Journal of Political Science, V, No. 1 (March,1972),59.

42. The Senate of Canada, Report to the Honourable the Speaker Relating to the Enactment of the B.N..A. Act,1867 (Ottawa: Queen's Printer,1939).

43. Wilson, op.cit.,441.

44. Ibid.,443-45.

45. For a summary of the important cases relating to sections 91 and 92 see Peter H. Russell, Leading Constitutional Decisions (revised edition, Toronto,1973).

46. Attorney-General for Ontario v. Attorney-General for Canada, 1896 (A.C. 348).

47. For an argument supportive of the Judicial Committee of the Privy Council see G.P. Browne, The Judicial Committee and the British North America Act (Toronto,1967); see also Alan C. Cairns, "The Judicial Committee and Its Critics," Canadian Journal of Political Science, IV, No. 3 (September,1971), 301-45.

48. See Martha Fletcher, "Judicial Review and the Division of Powers in Canada," in J. Peter Meekison, ed., Canadian Federalism: Myth or Reality (Toronto, second edition,1971), 173-4.

49. Ibid., 168-72.

50. F.R. Scott, "The Development of Canadian Federalism," Papers and Proceedings, Canadian Political Science Association, 3 (May,1931),247. As Cairns points out there has been a tendency for many scholars to attribute the decentralized nature of the federal system almost exclusively to the impact of the courts. He argues that rather than being idiosyncratic judgments they were appropriate to the Canadian situation; Cairns, op.cit., 330.

51. Edwin R. Black and Alan C. Cairns,"A Different Perspective on Canadian Federalism," Canadian Public Administration, IX, No. 1 (March,1966),27-45.

52. Ibid., 27.

53. Ibid.

54. <u>Ibid</u>.

55. <u>Ibid</u>., 28. Black and Cairns followed the lead provided by W. S. Livingston in his <u>Federalism and Constitutional Change</u> (Oxford, 1965), especially chapter one.

56. Black and Cairns cite in particular Professors Brady and Corry. <u>Ibid</u>., 33-4, 33.

57. <u>Ibid</u>. 38.

58. <u>Ibid</u>, 28.

59. J.M.S. Careless,, "'Limited'Identities in Canada," <u>Canadian Historical Review</u>. L. No. 1 (March, 1969), 1-10.

60. <u>Ibid</u>., 3.

61. Alexander Brady, "Report of the Royal Commission on Dominion-Provincial Relations," <u>Canadian Historical Review</u>, XXI, No. 3 (September, 1940), 247; J.A. Corry, "Constitutional Trends and Federalism," in A.R.M. Lower, <u>et al</u>, <u>Evolving Canadian Federalism</u> (Durham, North Carolina, 1958), 108. Corry presents this viewpoint in its clearest fashion; a province had just "...freedom for minor adventure, for embroidering its own particular patterns in harmony with the national design, for playing variant melodies within the general theme .... It is , everywhere limited in the distance it can go by having become a party of a larger although not necessarily a better scheme of things." 5.

62. Careless, <u>op.cit</u>., 6-7.

63. Black and Cairns, <u>op.cit</u>., 40-1.

64. <u>Ibid</u>, 42-4.

65. Donald L. Mills, "The Occupational Composition of the Prairie Provinces: A Regional-National Comparison," <u>Transactions of the Royal Society of Canada</u>, 6, series 4, section 2 (June, 1968), 229-43.

66. Martin Robin, ed., <u>Canadian Provincial Politics</u> (Toronto, 1972).

67. S.M. Lipset and S. Rokkan, "Cleavage Structures, Party Systems, and Voter Alignments: An Introduction," in S.M. Lipset and S. Rokkan, eds., <u>Party Systems and Voter Alignments</u> (New York, 1967), 9.

68. _Ibid._,13.

69. _Ibid._,14.

Chapter Two

The Measurement of Regionalism in Voting
and Electoral Behaviour in Canada

The argument in the previous chapter was to the effect that

regionalism - whether conceptualized in economic, geographical,

sociological, or political terms - has been an important factor in

the development of the Canadian political system. It is, as Richard

Simeon and David Elkins write, "one of the pre-eminent facts of

Canadian life."[1] In particular, the variable of the regions has been

taken by political scientists to be crucial for the understanding of

voting behaviour, the electoral support basis of the political parties,

and the development of the Canadian party system(s).[2]

While it is readily admitted - as will be clearly evident

from the discussion to come that previous studies of regionalism

and voting have contributed much to our knowledge about these

relationships, it is also argued that the strong primacy attached to

regionalism for the understanding of the vote has been cast in an

image which is both static and unidimensional in nature. The claim

here, then, is that earlier studies of the impact of regionalism

upon voting behaviour have incorporated measurement tactics which

have obscured some important dimensions of the phenomenon. The

purpose of this chapter is to explicate this claim in some detail,

and to propose the adoption of an alternate method of measuring the

relationship between sub-national political areas and the pattern

and flow of the vote.

The commonplace emphasis on regionalism in the study of

voting in Canada requires that the examination of how political

scientists have conceptualized and measured the variable of the

region be limited in some manner lest we be overwhelmed by the number

of cases. The method, then, in this chapter is to examine those

studies in which the region's impact upon the vote is an important

consideration and in which furthermore, the various ways of showing

the relationship have been examined.

Engelmann and Schwartz in their Political Parties and

the Canadian Social Structure provide an extended discussion of the

impact of regionalism in Canadian politics.[3] They argue, in brief,

that "the social structure has developed in such a way that two

critical dimensions have emerged with great significance for political

parties. These dimensions are regional-ethnic and regional-economic."[4]

While no effort is made to provide an explicit definition of region-

alism, it is clear from their discussion that they mean areal group-

ings (specifically provinces or groups of provinces) which have

become politically significant because of the presence of varying

proportions of members of different ethnic groups and/or differences

in economic resources and development between spatial units. Later

Engelmann and Schwartz relate "the two dimensions of regionalism" to

voter turnout and party vote. They show the rates of turnout between

the provinces in federal elections over time (1921-1962) and argue

that these differences (which range from a low of 63 percent in

Newfoundland to a high of 83 percent in Prince Edward Island) reveal

that circumstances in each province affect its residents "in such a

manner as to increase or decrease the likelihood of their voting."[5]

A similar line of reasoning is followed in the case of party vote

inasmuch as they trace the historical development of political parties in the regions and provinces in the light of "the features of Canadian society which are especially pertinent to an understanding of the origins and operation of political parties."[6] Some attention, although not in tabular form, is drawn to the variations between regions and provinces in the pattern of party vote. Later, Engelmann and Schwartz argue that "voting preferences associated with social class (as measured by occupation) are confounded by the provincial milieu."[7]

The discussion of regionalism by Engelmann and Schwartz highlights the two traditionally-accepted manifestations of the phenomenon: first, the historical and environmental bases of political behaviour; second, the differential patterns in the support bases of the political parties between various levels of aggregation, such as regions or provinces.

The former characteristic, however, points to two deficiencies of regional analyses. The link between historical experiences and relationships and environmental conditions - which are taken as indicators of regionalism - and the observed variations in political behaviour is more presumed and self-evident than shown. This presumption, of course, is a direct and practical consequence of ex post facto research, where it is not possible to control in an experimental sense the interaction between the antecedent and the consequent - the presumed cause and effect relationship - so we can be certain about the strength of the relationship or, for that matte that a relationship in fact exists.

In particular, the treatment of regionalism in terms of
its historical roots and its impact upon the political system contains
one serious weakness. Regional differences in historical experiences
and relationships account more for the nature and development of the
various party systems within the broader political system and less
for more recent political behaviour: the difficulties are greater
the more contemporaneous the political behaviour that has to be
understood. The framework of the political system, inasmuch as it
has its roots in the historical development of the system, will
provide a set of constraints and limitations upon behaviour (that is
to say, the historical bases of the system influence greatly the
number and type of political parties which are reasonably competitive
in the different provinces and regions), but only a tenuous connection
with the pattern and ebb and flow of electoral behaviour in the
elections many years subsequent to the formation of those political
parties. Specifically, the historical bases of regionalism lend a
strong understanding to, say, the almost unbroken domination of federal
politics in Quebec by the Liberal party since the election of 1896;
the near-monopoly of constituencies and votes in the Atlantic
provinces held by the Liberals and Progressive Conservatives; and
the strong electoral presence of "third parties" in the four western
provinces, but are unable to say much about the response of electorates
in these regions to federal politics in, say, the period from 1953 to
1965. While time, then, is incorporated into the analysis, the
connection between regionalism and political behaviour is still very
loose and to a great extent assumed.

Moreover, this analytical approach contains the danger
that the emphasis on regionalism as a historical phenomenon will
neglect or will not speak very much to the presence and impact of
political forces lying below the traditional conception of sub-
national forces emanating from either single provinces or groups of
provinces. And it is very difficult, given the lack of an explicit
measure of the impact of regionalism, to speak with any sense of
assuredness about, or with any ability to test, the rise and fall
over time of regional influences. The phenomenon of regionalism
does not exist in a vacuum: it is a competitor with other forces
and influences such as national and local political forces. If we
are to provide much empirical weight to the study of regionalism in
Canadian politics, then it is necessary that the method of analysis
contain the ability to allow for the impact of different political
forces within the political system.

The second manifestation of regionalism discussed by
Engelmann and Schwartz, variegated support bases for political
parties in different spatial units, raises another important analytical
problem in the study of regionalism and political behaviour.
Variations in behaviour which are cast into sub-national terms - and
which form the basis for the conclusion that regionalism is an
important aspect of the political system - may in fact reflect the
existence of similar patterns of behaviour within the political system
which are not uniformly evident because of the presence of sub-national
differences in the socio-economic characteristics of electorates. As
Przeworski and Teune argue, "systems differ not when the frequency of

particular characteristics differ, but when the patterns of the
relationships among variables differ."[8] Regional differences, then,
may not be the result of similar populations acting differently but
of different populations acting in a more or less similar fashion.
Specifically, the differences over time in the Progressive Conserva-
tive vote between, say, Ontario and Alberta may reflect either the
fact that the two electorates, highly similar in nature, have
responded differently, or that the electorates are responding in a
similar fashion, but are differentiated from each other in some
fashion, such as ethnic origin, class composition, or religious
affiliation. In the former case, space as represented by the proper
names of Alberta and Ontario would be incorporated into the explana-
tion, while in the latter example the explanation would be in terms
of the relationship between a number of socio-economic variables
and the party vote.[9]

Donald Blake's application of a multiple regression model
to party vote (Liberal and Progressive Conservative) and constituency-
level socio-economic data (religion, ethnicity, and occupation) for
Canada's English-speaking provinces from 1953-1965 is sensitive to
this problem inasmuch as his object is to ascertain cross-sectional
differences over time in the support bases of the two major parties
(although he does not concern himself with the problem of relating
differences in the socio-economic composition of constituencies
between provinces and the level of party vote).[10] Blake's method
is to compare the relationship between these socio-economic
characteristics and party vote in the various provinces compared

to the pattern detected in the province of Ontario, the unit of comparison which was selected ,"because it is the most industrialized, urbanized, and most populous province in Canada, and has long been a focus of antagonism on the part of poorer provinces."[11] Regionalism, then, is defined in terms of the extent of deviations from the Ontario voting patterns.[12] Since "the most striking feature... (of the Conservative and Liberal support models)...is the apparent importance of regionalism,"[13] Blake argues that the "evolutionary model" – which is an important component of Alford's analysis in his Party and Society[14] – does not adequately describe the development of the Canadian party system, although this conclusion is qualified in that

> [o]nce religious and ethnic differences have
> been accounted for, the net relationship
> between occupational characteristics of the
> electorate and party support, with few
> exceptions [sic] persists across regions.
> The relationships which seem to vary most
> by region are those between religion and
> ethnic origin and party support.[15]

Blake has dealt in a very sophisticated manner with one of the important dimensions of electoral regionalism, and there is no argument here with either his methodology or the substance of his argument. The impressiveness of his contribution to the study of regionalism ought not to distract us, however, from the point that his overriding concern for understanding "regionalism idiosyncracies in political behaviour" is only partially met.[16] His article deals with changes over time in the support bases of the parties and does not speak either to the flow of the vote and voter turnout or to

spatial variations in the movement of these variables. Geography, then, for Blake is an important variable in the understanding of Canadian voting behaviour, but he is unable to speak to the problem of measuring the "nationalization" of electorates.[17] We now shift our concern to an examination of those studies of electoral region- alism which have been concerned with the question of sub-national variations in the patterns of party vote and voter turnout.

The easiest - and most common way - of displaying sub- national variations in voting behaviour is to simply show the differences in party vote or voter turnout in each of the regions or provinces of the country for a single election. This kind of cross-sectional analysis is also, for a number of reasons, the most unsatisfactory method of indicating the impact of the sub-national level of aggregation upon behaviour.

John Meisel, for example, in his summary essay entitled "Conclusion: An Analysis of the National (?) Results," in Papers on the 1962 Election, presented the vote percentages for the parties by area (provinces and regions).[18] The point is then made that "with only a little more than one-third of the popular vote, neither of the old parties could claim to have obtained anything like national support."[19] Moreover,

> the most outstanding feature of the
> election, as has often been noted,
> was the widely differing ways in
> which the various provinces and
> regions of Canada reacted to the
> issues and personalities before
> them.[20]

This judgment, apparently, is made on the basis that, for example, the Progressive Conservative party took only 27.3 percent of the vote in British Columbia and reached a high of 51.3 percent in Prince Edward Island; similarly, the Liberal vote ranged from a low of 19.4 percent in Alberta to a high of 59.0 percent in Newfoundland.

The measurement of regionalism on the basis of simple differences in the provincial and regional proportions of the vote obtained by the parties is limited and static inasmuch as the discussion is restricted to a single point in time, which precludes the possibility of movements between the different levels of aggregation. Furthermore, since aggregate data are free of any evidence of perceptions, it is impossible to speak to the hypothesis that "the various provinces and regions of Canada reacted...(differently)...to the issues and personalities before them."

Peter Regenstreif, in his book The Diefenbaker Interlude, argues that Canadian voting behaviour is marked by divergent regional patterns. Indeed, region, along with ethnicity and religion, "ranks very high in accounting for the voting behaviour of Canadians."[21] Although Regenstreif recognizes that there are a number of weaknesses in the traditional formulations of regions in Canada, most of his work employs the usual groupings, except that British Columbia is included in the Western region.[22] In addition to discussing the regional origins and strongholds of the various political parties, Regenstreif uses three measures of regional effects. First, he uses the spread between regions of highest and lowest party support to

measure regional differences.[23] Second, regionalism is measured

by disparities in seats won and votes obtained.[24] Third, differ-

ential patterns of increase or decrease in party vote are taken as

indicators of regionalism.[25] However, while these measures touch

upon the problem of electoral regionalism, they suffer because of

their inability to monitor carefully national and sub-national

movements.

Other scholars - most notably Murray Beck[26] and Robert

Alford[27] - have been concerned with the problem of detecting changes

over time in electoral behaviour, particularly in the case of party

vote.

Beck concerns himself with spatial shifts in party

fortunes during both periods of change and stability of political

power. The first concern is met by utilizing two different, albeit

related, measures of change.

The first measure is a comparison-during the period of

change in government-of shifts in the seats won by the parties

in the four regions of Ontario, Quebec, Atlantic provinces, and

Western provinces, which leads to the conclusions that the transfer

of power in 1874, 1878, 1896, 1911, 1921, 1930, 1935, and 1957-58

was characterized by each region swinging away from the governing

party.[28] This method of measuring changes is seriously restricted

by the well-known exaggeration of the parties' strengths and weak-

nesses provided by the electoral system with its single-member or

first-past-the-post system of election.[29] Given this exaggeration

it is impossible to weigh with any certainty the relative importance

of national and sub-national political forces.

Beck's second measure looks at changes over time in the proportion of the vote obtained by the Progressive-Conservative party. On this basis he argues that with few exceptions "every province moved in the direction of change when change did occur."[30]

During periods of stability, Beck argues, "a party usually improved its position in about half the provinces and suffered losses, in the other half in any one election."[31] Eventually, of course, the government party suffers defeat, which, Beck asserts, is the result of a large proportion of the floating voters in all regions somehow reaching the conclusion that the time was ripe for a change."[32] While the winning party may fail to gain "an overall majority in each of the four regions...the trend was unmistakable."[33] Moreover, Beck notes that

> special regional or local factors, such
> as personal, economic, religious, or
> racial factors, or the fact that an
> opposed political party had recently
> won a provincial election, might serve
> to dilute the trend in some provinces,
> but would not arrest it significantly.[34]

Beck concludes his discussion by noting that in the elections from 1962 to 1965, when there was a swing away from the Progressive Conservative party in all regions, "the extent, unevenness, locale, and beneficiaries of the swing were sometimes bewildering."[35] Canada acted as if it were four or five countries electorally.[36]

One of the manifestations of regionalism for Robert Alford is "when regions shift from election to election in opposing directions, thus indicating that the impact of national political currents affect

regions in contradictory ways."[37]   Later, Alford draws attention to

the great range in the vote obtained by the Liberal party and the

CCF-NDP in the various provinces from 1953 to 1962.[38]

Nonetheless,

> the trends of change in the Liberal vote
> from election to election are almost
> always consistently in the same direction,
> despite the radical divergence of the
> absolute level of Liberal voting. This
> is testimony to the penetration of
> national political currents into each
> province, regardless of its degree of
> devotion to a given party.[39]

In a similar vein for all elections from 1921 to 1958

Alford argues that there is "some evidence that political regionalism

in Canada is dwindling" since the standard deviation from the average

swing has become smaller, except for the 1958 election, "which was

marked, however, by a remarkably uniform swing of all regions (Ontario,

Quebec, British Columbia, Atlantic provinces, and Prairie provinces)

to the Conservative party."[40]

While both Beck and Alford are concerned with examining the

question of the relationship between the national party vote movements

and sub-national movements - although, of course, nothing can be said

about the impact of individual constituencies upon behaviour - their

methods and measures provide only a limited description of the

relationship between the nation as a whole and provinces and regions.

In Beck's case, the analysis is restricted to just an examina-

tion of the direction of the various sub-national movements - compared

to each other and the overall national trend - for two points in time

(that is, the shifts in party vote from one election to the next), so

that no provision is made for the detection of trends over a longer
span of time. Since his measure is no more than a comparison of
percentage increases in the vote, it is not possible to say anything
precise about the magnitudes of the movement.

Alford's measure, which produces a summary score of between-
region variance, gives an indication that the regions are becoming more
similar in their relationship to the national trend, but is also
restricted to only two points in time. Moreover, the measure of
standard deviation does not allow for the simultaneous estimation of
the impact of a number of levels within the system upon the flow of
the vote.

Beck, and Alford both use the term "swing" in their discus-
sion about sub-national movements, a usage which does not coincide
with the commonly-accepted understanding of the measure, to which
we now turn our attention.

Swing has been the usual mode of detecting sub-national
deviations from the national trend in electoral behaviour using
aggregate data.[41] Although it has received little attention in
Canadian analyses of electoral behaviour, it has been extensively
used by analysts in Australia and the United Kingdom. This lack of
application of swing to the Canadian case is undoubtedly partially
due to the multi-party nature of the political system, which means
that the calculations involved become more than somewhat difficult
and that the interpretative problems increase considerably, although
Australian analysts, who have the additional burden of the preferen-
tial ballot to contend with, have produced generally satisfactory

results.[42] However, the factor of greater theoretical significance
which accounts for the relative absence of the swing measure in
Canadian electoral analysis is that the movements from one party
to another have not been uniform across the country, to the extent
that the relationship between the national swing figure and the
swing value for any single constituency is likely to be minimal.
The application of swing to Canada, then, since it would represent
the mean national movement of a number of disparate - if not contra-
dictory - movements, would be essentially meaningless.[43]

In addition, swing is limited as a means of understanding
the pattern of sub-national movements for two important reasons.
First, the measure is restricted to only pairs of elections (although
not necessarily consecutive ones), so that it is not sensitive to
cyclical changes. Second, although swing is intended to provide
information about those areas of the country which have shown some
deviation from the national pattern, it is, in fact very imprecise
about the spatial sources of sub-national movements. Generally, the
calculations of swing have been at the level of constituencies, with
comparisons to the national swing, although, certainly, calculations
for larger sub-national aggregations are possible. The problem
encountered by Beck and Alford in being unable to work with a number
of levels of the political system simultaneously also occurs in the
case of swing.

While it is of course of some descriptive utility to have
an estimate of the magnitude of the deviation from the national move-
ment, it must be recognized that there remains the distinct possibility

that the deviation reflects not factors arising out of the level

used in the calculation of swing, but that it i , in fact, a function

of the impact of higher or lower levels of the political system.

What, then, is said to represent a provincial trend, in contra-

distinction to the national trend, may, in fact, be a product of a

regional movement, a number of lower-level constituency movements,

or both.

The argument to this point, then, is that previous attempts

to analyze sub-national movements in political behaviour have been

lacking in three important respects. First, the analyses have been

based on measures which are restricted to only two points in time.

Second, the measures are very imprecise about the spatial dimensions

underlying the movements. Third, the measures do not provide the

ability to handle simultaneously the impact upon behaviour of a

number of different levels of the political system.

The next chapter will describe in detail the statistical

model employed in this work to provide greater specificity to our

knowledge about the relationship between geography and electoral

behaviour in the Canadian political system.

Chapter Two

Footnotes

1. Richard Simeon and David J. Elkins, "Regional Political Cultures in Canada," *Canadian Journal of Political Science*, VII, No. 3 (September, 1974), 397-437.

2. Political scientists in recent years have increasingly written about the Canadian party system in the plural, another manifestation of the impact of regionalism upon the political system; see, for example, David J. Elkins, "The Perceived Structure of the Canadian Party Systems," *Canadian Journal of Political Science*, VII, No. 3 (September, 1974), 502-24; John Wilson, "The Canadian Political Cultures: Towards a Redefinition of the Nature of the Canadian Political System," *Canadian Journal of Political Science*, VII, No. 3, (September, 1974), 438-83.

3. F.C. Engelmann and M.A. Schwartz, *Political Parties and the Canadian Social Structure* (Scarborough, 1967).

4. *Ibid.*, 16.

5. *Ibid.*, 41.

6. *Ibid.*, 25.

7. *Ibid.*, 47; their discussion is based on data from a CIPO survey first analyzed by Robert Alford; see Robert R. Alford, "The Social Bases of Political Cleavage in 1962," in John Meisel, ed., *Papers on the 1962 Election* (Toronto, 1964), 203-34.

8. Adam Przeworski and Henry Teune, *The Logic of Comparative Social Inquiry* (New York, 1970), 45.

9. *Ibid.*, 26-30.

10. Donald E. Blake, "The Measurement of Regionalism in Canadian Voting Patterns," *Canadian Journal of Political Science*, 5 (March, 1972), 55-81; for a more extended discussion of the methodology employed by Blake, see Donald E. Blake, "The Measure and Impact of Regionalism in Canadian Voting Behaviour," paper presented to the Annual Meeting of the Canadian Political Science Association, June, 1971. See, also, William P. Irvine, "Assessing Regional Effects in Data Analysis," *Canadian Journal of Political Science*, IV, No. 1 (March, 1971), 21-4; N.H. Chi, "The Regression Model of Regionalism: A Critique," *Canadian Journal of Political Science*, V, No. 2 (June, 1972), 291-97; and William P. Irvine, "A Reply to Professor Chi's Critique," *Canadian Journal of Political Science*, V, No. 2 (June, 1972), 297-300.

11. _Ibid._, 64.

12. _Ibid._

13. _Ibid._, p. 67

14. Robert R. Alford, _Party and Society_ (Chicago, 1963).

15. Blake, "The Measurement of Regionalism in Canadian Voting Patterns,"

16. _Ibid._, 58.

17. _Ibid._

18. John Meisel, "Conclusion: An Analysis of the National (?)
    Results," in John Meisel, ed., _Papers on the 1962 Election_
    (Toronto, 1964), 273. He notes, further, "that almost any
    statement made about Canadian voting behaviour as a whole
    can be shown to be strongly contradicted in some region or
    among some section of the population," 286.

19. _Ibid._, 272.

20. _Ibid._

21. Peter Regenstreif, _The Diefenbaker Interlude: Parties and
    Voting in Canada_ (Toronto, 1965), 105.

22. _Ibid._, 133-53. It should be pointed out that Regenstreif is
    very concerned with provincial variations as well, although
    the overarching emphasis of his book is on regionalism.

23. _Ibid._, 12, 32.

24. _Ibid._, 36.

25. _Ibid._, implicitly in chapters 6 to 10, which deal with
    regional variations.

26. J. Murray Beck, "The Democratic Process at Work in Canadian
    General Elections," John C. Courtney, ed., _Voting in Canada_
    (Scarborough, 1967), 2-31; this article was revised from an
    earlier paper found in J.H. Aitchison, ed., _The Political
    Process in Canada_ (Toronto, 1963).

27. Alford, _Party and Society_.

28. Beck, _op. cit._, 25.

29. Alan C. Cairns, "The Electoral System and the Party System in Canada,1921-1965," _Canadian Journal of Political Science_, I, No. 1 (March,1968), 55-80; see also J.A.A. Lovink, "On Analysing the Impact of the Electoral System on the Party System in Canada," _Canadian Journal of Political Science_, 3 No. 4 (December,1970), 497-515, and Cairn's reply,517-21.

30. Beck, _op.cit._, 25; Beck in footnore 26 claims that in three of these "few-minor exceptions" the swing actually occurred in a previous election. In fact, however, the exception of Alberta in 1911 was preceded by only one election since that province had been admitted into Confederation, so that is not possible to speak of an earlier swing; the"exception"of Nova Scotia in fact is not, since there had been a decrease - not an increase- in the Conservative vote in the previous election of 1926; and Beck fails to notice the case of British Columbia in 1930, which is a proper exception in his understanding.

31. _Ibid._,

32. _Ibid._,27.

33. _Ibid._.

34. _Ibid._.

35. _Ibid._,28.

36. _Ibid._.

37. Alford, _Party and Society_,42.

38. _Ibid._, 46.

39. _Ibid._.

40. _Ibid._,269-70. Alford's phrasing appears to be contradictory; however, although no data are presented in tabular form, it seems that Alford is using three different measures, namely,standard deviation from the average swing, the direction of changes in the votes obtained by the parties, and the percentage difference in level of party support from one region to the next, simultaneously to refer to one phenomenon - electoral regionalism. Blake calculated the standard deviation from the average swing for the four elections from 1958-1965, but found that this pattern did not continue; Blake, _op.cit._,58.

41. There are a number of different ways of calculating swing: the most common is found in the various Nuffield College election studies; see David Butler and various others, published after each election since 1945, The British General Election (London, Various Years); for what is known as the 'Steed Swing' see Michael Steed's Appendix to The British General Election of 1964, David Butler and Anthony King (London, 1965), 337-59: also Hugh Berrington, "The General Election of 1964," Journal of the Royal Statistical Society, Series A, 128 (1965), 17-66: A.G. Hawkes, "An Approach to the Analysis of Electoral

Swing," Journal of the Royal Statistical Society, Series A, 132 (1969), 68-79; W.L. Miller, "Measures of Electoral Change Using Aggregate Data," Journal of the Royal Statistical Society, Series A, 135 (1972), 122-42. For a criticism of the concept of swing see Jorgen Rasmussen, "Disutility of the Swing Concept in British Psephology," Parliamentary Affairs (August, 1965), 442-57: for a discussion of the 'paradox of swing' see David Butler and Donald Stokes, Political Change in Britain (London, 1969), 303-12.

42. Malcolm Mackerras, Australian General Elections (Sydney, 1972).

43. A similar argument is discussed by Qualter in his application of the cube law to Canadian elections; Terence H. Qualter, "Seats and Votes: An Application of the Cube Law to the Canadian Electoral System," Canadian Journal of Political System, I, No. 3 (September, 1968), 338-39.

Chapter Three

An Examination of the Character of Stokes' Partially Nested, Mixed Analysis of Variance Model of Political Effects.

In the preceding chapters, two substantive arguments were made about the nature of regionalism in Canadian politics and political science. First, the claim was made that sub-national political areas have had significant influences upon various aspects of Canadian political life, a factor which, in turn, has lead to a tradition of emphasizing regional differences in Canadian political analysis. Second, while the study of electoral and voting behaviour constitutes an important part of this tradition, there have been a number of severe limitations to previous approaches to electoral regionalism which have limited our comprehension of the forces underlying the behaviour of Canadian voters.

We now turn in this chapter to an explicit examination of the statistical model employed in this study for the measurement of national and sub-national political forces. This model was developed and has been applied by Donald Stokes, whose research produced a number of important findings about the nature of American and British politics, particularly in terms of the relative weight of political forces within those political systems.[1] In brief, he finds that there has been a "nationalization" of political life, and a concomitant decline in the influence of sub-national forces upon voting in national elections for both countries over roughly the same period of time.[2]

Donald Aitkin has used the model for an examination of the spatial

bases of electoral behaviour in Australia;[3] Richard Katz has utilized

Stokes' model and an alternative model in an examination of electoral

movements in the United States and Italy;[4] and Robert Jackman has

applied a variant of the model to the Canadian case.[5]

The format of this chapter will be to discuss the properties

of Stokes' variance components model; then to examine some criticisms

of the model, particularly those raised by Katz; then a comparison

of Stokes' model with that used by Jackman; and finally a discussion

of the technical problems encountered in applying Stokes' model to the

data used i̶.

It is appropriate to provide some restatement of the

substantive p̶ before us, prior to proceeding to a discussion

of the formal properties of Stokes' model, so that the kinds of

questions which are answerable in light of the model's nature are

made clear. Briefly put, the essential concern of this study is to

ascertain the extent to which Canadian electoral politics from

1953-1965 can be said to be "nationalized" or "de-nationalized," or,

in other words, the extent to which Canadian electorates can be said

to be influenced by national forces or influences emanating out of

the various sub-national levels of the system. If there is reason

to believe that sub-national levels do have an impact upon voting

behaviour, the question then arises as to whether these forces can be

best conceptualized in terms of regions, provinces, or constituencies.

From this perspective, a number of subsidiary considerations

follow, such as: What areas, if any, seem to have contributed to the relative lack, if any, of nationalized electoral politics? Has there been stability or change in those areas which have contributed to the weakness of national political forces? Has there been any significant change in the relative rankings of the various political forces within the country? Are there any constituencies which over time have exhibited idiosyncratic patterns of political behaviour? Or, are there any constituencies which have shown little independence from the pattern of politics at higher levels of the political system? Lastly, are there any factors which are common to the constituencies which have exhibited either highly similar or divergent movements in party vote and voter turnout?

The satisfactory resolution of the questions relating to the impact of sub-national areas upon political behaviour requires that any model which measures movements in party vote and voter turnout must provide for two important factors - namely, the effects of time and the effects of a number of political levels within the political system. Time is important because the idea of regionalism implies some degree of long-term permanence and continuity in the pattern of divergence between a sub-national area and the rest of the country. Different levels are important inasmuch as the Canadian electorates can be envisaged as living within a number of different political environments, of varying degrees of saliency, which influence behaviour.

These requirements mean that many models of analysis of

variance are not satisfactory for our purposes. Nonetheless,

explication of the logic and properties of a simple analysis of

variance model will provide a convenient entry point to the more

complex model used in this study.

It should first be noted that analysis of variance is a

statistical method used for ascertaining the difference between the

means of more than two samples or groups.[6] While such tests are

used frequently in agricultural and educational research and in

experimental psychology, they have not been used extensively in

political science. The primary reason for this lack of usage is

that the method of analysis of variance usually is considered to be

most appropriate in experimental situations, where the researcher

is able to manipulate the independent variable (formally, the

"treatment") and measure for the dependent variable, the difference

between the means of the groups ("effects"). The method, however,

can be used in cases where the variables are more a result of

classification than experimental manipulation.

In this study, we cannot directly manipulate the

independent variables - thus, of course, raising the degree of

uncertainty - but we can proceed as if we were taking a sample

of elections in Canada, and then measuring the effects of two variables

elections, at one point in time and over time, and levels of the

political system - upon party vote and voter turnout in the

constituencies. For the sake of simplicity the following discussion

will be in terms of voter turnout (the logic of the models is no different for party vote).

A simple one-way analysis of variance model of voter turnout over a pair of elections takes the following form. First, it is necessary to calculate the percentage differences for turnout in each constituency, as follows:

(1) $\qquad y_{ij} = y_{ij}(57) - y_{ij}(53)$

where $y_{ij}(57)$ is the estimated proportion of

the electorate in the ith constituency in the

j^{th} province in the Canadian general election

of 1957, and

$y_{ij}(53)$ is the corresponding proportion in the

Canadian general election of 1953.

The calculation of this distribution of first differences for each constituency over all constituencies provides an overall mean difference of $\overline{Y}..$ and a variance score of

$$\frac{\sum (y_{ij} - \overline{Y}..)^2}{N}$$

which measures the extent of the dispersion of the various constituency scores around the overall mean. The total variation in turnout from 1953-1957 around the overall mean for the constituencies is $(y_{ij} - \overline{Y}..)^2$, which is the sum of the squared deviations from the mean. This last expression — known formally as the sum of squares — can be decomposed.

into two parts or components, representing the "between provinces" variation and the "within provinces" variation. The former component refers to a pooled set of squared differences between the means for the provinces, while the latter component is a pooling of the "within-province" variation for each of the provincial groupings of constituency first-differences, as follows:

(2) $\qquad s^2 = s_w^2 + s_b^2$

where,

s^2 is the estimated total variance,

s_w^2 is the pooled, estimated within-province variation, and

s_b^2 is the pooled, estimated between-province variation.

In technical terms, the above expression take the following form:

(3) $\qquad ij(y_{ij}-\overline{Y}..)^2 = ij(y_{ij}-Y_{.j})^2 + ij(\overline{Y}_{.j}-\overline{Y}..)^2$

The first term on the right-hand side of the equation is the sum over all provinces of the squared deviations of the various constituency scores within a province from the overall mean for that province. The second term represents the squared deviations of the various provincial means from the grand mean for all provinces. The first term measures variability due to constituencies and the second term measures the variability which is attributable to provinces.

While this set of procedures provides a partitioning of the total variation into provincial and constituency components, it does

not afford a measure of the impact of national political forces or effects. This defect in the usual variance model is remedied by Stokes in his development of a partially nested, mixed analysis of variance model. Further, the model provides for the effects of time, at single intervals and over time.[7]

In this model, then, the turnout in a general election in the jth constituency in the ith province in the kth year is the sum of three time-independent effects and three time-specific effects, as follows:

$$(4) \quad y_{ijk} = \alpha + \beta_i + \gamma_{ij} + a_k + b_{ik} + c_{ijk}$$

where,

α \qquad is the time-independent national trend or effect,

β_i \qquad is the time-independent effect of the ith province,

γ_{ij} \qquad is the time-independent effect of the jth constituency in the ith province,

a_k \qquad is the effect of national forces in the kth election year (the time-specific national effect),

b_{ik} \qquad is the effect of forces in the ith province in the kth year (the time-specific provincial effect), and

c_{ijk} \qquad is the effect of forces in the jth constituency in the ith province in the kth year (the time-specific constituency effect).

Note: The formulae for the above terms and the quantities needed for the production of the various variance component scores are found in Appendix I.

It should be emphasized that the time dimension of equation (4) has two components: each of the three levels - the nation, the provinces, and the constituencies - are seen as being influenced by two distinct but related trends, one of which, in technical terms, is known as random or time-specific, and the other is known as constant, fixed, timeless, or time-independent.

The time-independent national trend is quite simply the overall or grand national mean turnout for all elections under consideration; the time-independent provincial trend is the deviation of the grand national mean from the overall mean for a particular province; a time-independent constituency trend is the deviation of the overall provincial mean from the overall mean for a particular constituency. The logic underlying the formation of these time-independent trends is that we are interested in ascertaining to what extent - after the removal of the time-independent mean for the higher level - the various units within each level are distinguishable from each other in their relationship to the higher level.

The time-specific trends are more complex, involving the removal or addition, for the provinces and constituencies, of three different terms. The time-specific national trend is the deviation of the grand national mean from the national mean for a particular year; the time-specific provincial trend is the result of the removal from the provincial mean for a particular year of the overall provincial mean and the time-specific national trend (or, the removal

of the national mean turnout for that year and the addition of the

grand national mean); the time-specific constituency trend involves

the removal from the turnout proportion for a particular constituency

in a particular year of the overall constituency mean and the

provincial mean for that year and the addition of the overall

provincial mean. The logic underlying the formation of these time-

specific trends is that it is necessary to ascertain the extent to

which the various units in each level deviate from the long-term

pattern of behaviour.

Stokes describes this model as being a partially nested,

mixed analysis of variance.[8] It is mixed because, as indicated

above, it contains two distinct time effects, one of which is time-

independent or constant over time, and one which is time-specific

and varies over time, that is, from election to election. It is

nested because constituencies are grouped within provinces and

provinces are grouped within the nation. The structure of the analysis

of variance and the various means which are used in the formation of

the various terms in equation (4) are shown in Figure 1.[9]

FIGURE 1

Format for Derivation of Formulae used
in Stokes' Mixed, Nested Variance
Components Model.

	PROVINCE$_1$			PROVINCE$_2$				PROVINCE$_1$				
	CONST.$_1$	CONST.$_2$	CONST.$_j$	CONST.$_1$	CONST.$_2$	CONST.$_j$		CONST.$_1$	CONST.$_2$	CONST.$_j$		
ELECTION$_1$	y_{111}	y_{121}	y_{1j1}	y_{211}	y_{221}	y_{2j1}	$y_{2.1}$	y_{i11}	y_{i21}	y_{ij1}	$y_{i.1}$	$y_{..1}$
ELECTION$_2$	y_{112}	y_{122}	y_{1j2}	y_{212}	y_{222}	y_{2j2}	$y_{2.2}$	y_{i12}	y_{i22}	y_{ij2}	$y_{i.2}$	$y_{..2}$
ELECTION$_k$	y_{11k}	y_{12k}	y_{1jk}	y_{21k}	y_{22k}	y_{2jk}	$y_{2.k}$	y_{i1k}	y_{i2k}	y_{ijk}	$y_{i.k}$	$y_{..k}$
	$y_{11.}$	$y_{12.}$	$y_{1j.}$	$y_{21.}$	$y_{22.}$	$y_{2j.}$	$y_{2..}$	$y_{i1.}$	$y_{i2.}$	$y_{ij.}$	$y_{i..}$	$y_{...}$

where, using "dot" notation to indicate averages, and

where, in y_{ijk} i represents provinces, j is constituencies, and k is elections

y_{ijk} = turnout in the jth constituency in the ith province in the kth election

$y_{ij.}$ = mean turnout in the jth constituency in the ith province over all elections

$y_{i.k}$ = turnout in the ith province in the kth province

$y_{i..}$ = mean turnout in the ith province over all elections

$y_{..k}$ = mean turnout in the nation in the kth election

$y_{...}$ = mean turnout in the nation over all elections

The basic tautological expression (one which forms the basis for any analysis of variance model) used for the derivation of Stokes' model is as follows:

(5) $(y_{ijk} - y_{..k}) = (y_{ijk} - y_{i.k}) + (y_{i.k} - y_{..k})$

This expression shows the difference between the turnout proportion in a single constituency in a particular year and the mean national turnout for that year as being the sum of two quantities: first, the difference between the constituency mean and the provincial mean for that year, and, second, the difference between the provincial mean and the national mean for that year.

In order to obtain the time-specific partitioning of y_{ijk} we move the time-specific national term from the left-hand of the equation to the right-hand side, and remove from each side of the expression the national time-independent effect, as follows:

(6) $(y_{ijk} - y_{...}) = (y_{ijk} - y_{i.k}) + (y_{i.k} - y_{..k}) + (y_{..k} - y_{...})$

This expression decomposes the constituency time-specific terms of y_{ijk} into three components, that is, reading from right to left on the right-hand side of the equation, the within-province (constituency) component, the across-province (provincial) component, and the universal (national) component, which, as the new term on this side of the expression, is formed by the removal of the national time-independent effect from the time-specific national effect.

Equation (5) can also be put into time-independent terms by substituting in place of the constituency and provincial time-

specific terms the appropriate time-independent terms, as follows:

(7) $(y_{ij.} - y_{...}) = (y_{ij.} - y_{i..}) + (y_{i..} - y_{...})$

This expression gives the difference between the mean turnout for a single constituency over time and the grand national turnout as the sum of two quantities: first, the difference between the time-independent constituency mean and the overall provincial mean, and, second, the difference between the time-independent provincial mean and the grand national mean.

The subtraction of equation (7) from equation (5), and re-arrangement of the various terms produces the following expression:

(8) $(y_{ijk} - y_{ij.}) + (y_{...} - y_{..k}) = (y_{ijk} - y_{i.k}) - (y_{ij.} - y_{i..}) +$
$(y_{i.k} - y_{..k}) - (y_{i..} - y_{...})$

The transportation of the national quantity $(y_{...} - y_{..k})$ from the left-hand side of the equation to the right-hand side results in the formation of a complex expression composed of both time-specific and time-independent effects, as follows:

(9) $(y_{ijk} - y_{ij.}) = (y_{ijk} - y_{i.k}) - (y_{ij.} - y_{i..}) +$
$(y_{i.k} - y_{..k}) - (y_{i..} - y_{...}) +$
$(y_{..k}) - (y_{...})$

In this expression, the difference between the constituency turnout rate in a particular election and the overall constituency turnout is represented as being the sum of three time-specific trends, namely, the constituency, provincial, and national components. Within each bracketed term of the total expression a time-independent effect is subtracted from a time-specific effect. Each time-independent term

is composed of the overall mean for that level and overall mean for the next-higher level, and each time-specific term contains the removal, from the mean turnout in a particular year for a level, of the mean turnout of the next higher level for that year.

At this point, it should be noted that the summation of the three time-independent terms on the right-hand side of equation (9), that is, $(y_{...})$, $(y_{i..}-y_{...})$, and $(y_{ij.}-y_{i..})$, yields the term $(y_{ij.})$ which is the constituency time-independent effect on the left-hand side of the equation.

If we substitute, for the momentary convenience of reading, the symbols A, B, and C, respectively, for these three terms, then $(y_{ij}') = A + B + C$, as follows:

(10) $(y_{ijk})-(A + B + C) = (y_{ijk}-y_{i.k}) - (y_{ij.}-y_{i..}) +$

$$(y_{i.k}-y_{..k}) - (y_{i..}-y_{...}) +$$

$$(y_{..k})-(y_{...})$$

Finally, by transposing the terms (A+B+C) to the right-hand side of the equation, and by re-substituting the original quantities we obtain the following expression:

(11) $y_{ijk} = (y_{...}) + (y_{i..}-y_{...}) + (y_{ij.}-y_{i..}) +$

$(y_{..k})-(y_{...}) + (y_{i.k})-y_{i..})-(y_{..k}-y_{...}) +$

$(y_{ijk}-y_{ij.}) - (y_{i.k}-y_{i..})$

In words, then, the turnout in constituency j of the ith province in the kth election is the sum of three time-independent trends (for, respectively, the national, provincial, and constituency

trends), and the three time-specific trends (for, respectively, the national, provincial, and constituency effects). Each of the time-independent trends is the deviation of the overall mean for the higher level of aggregation from the overall mean for the lower level. Each of the time-specific trends are composed of the time-specific term for that level less the time-independent quantity for that level, and less the time-specific and time-independent terms for the next higher level of aggregation. The time-specific trend components are adjusted or corrected in this manner in order to remove the portion of each level's variation that is attributable to the influence of the time-specific and time-independent trends of the higher level.

In order to obtain the equation which expresses the variance of voter turnout in the jth constituency of the ith province over all elections under analysis, we square the collection of the three bracketed terms in equation (11), that is, the three time-specific trends; the three time-independent trends are not involved in this operation as their variance scores by definition with respect to the time factor are equal to zero, as follows:

(12) $\text{Var}(y_{ij}) = \text{Var}(a) + \text{Var}(b_i) + \text{Var}(c_{ij}) +$

$$2\left[\text{Cov}(a,b_i) + \text{Cov}(a,c_{ij}) + (\text{Cov}(b_i,c_{ij})\right]$$

where $\text{Var}(a)$- variation in national effect - is

$$Var(b_i) - \text{variation in provincial effect - is} \quad \frac{(y_{..k}) - (y_{...})}{}^2$$

$$Var(c_{ij}) - \text{variation in constituency effect - is} \quad (y_{i.k.} - y_{i...}) - (y_{..k} - y_{...})^2$$

$$(y_{ijk} - y_{ij.}) - (y_{i.k.} - y_{i..})^2$$

Three features of this equation are worthy of comment.
First, the calculations for the national and provincial variance
components are based on the assumption that both effects will have a
uniform impact across all of the constituencies. In other words,
the national and provincial movements in turnout over time around
their respective time-independent means are the average national and
provincial effects for all constituencies and not the actual impact
these forces have in each riding.[10] While the impact of national
forces will vary from province to province and constituency to
constituency, and the impact of provincial forces will vary from
constituency to constituency, so that in each case the impact of
higher-order effects will be either overstated or understated, the
average magnitudes of the variance components will be right for
the nation as a whole.[11]

This assumption that the national and provincial mean
movements represent average or uniform effects is predicated on the
assumption that it is possible to ignore or control for the impact
of lower-order forces on the higher-order mean. The nested character
of the model in good measure, provided that the number of provinces

and constituencies in the nation were large, precludes against this

contamination of higher-order effect by lower-order effects since, as

Stokes argues, "it would be very unlikely that the average of the vote

over the whole country would be deflected by the net effect of what

is happening at the...(provincial)...level."[12] While each lower-order

level will make some contribution to the movements of the higher-

order level, since these contributions are independent for each unit

of each lower-order level, then "they would tend to cancel each other

when averaged across the whole nation."[13] Lest there is still an

upward deflection of lower-order effects to the higher-order level,

which is possible in the Canadian case given the existence of only

ten provinces, some of which have only a few constituencies, the

three variance component terms in equation (12) have been adjusted

in such a way as to remove this confounding effects. These adjustments

are found in Appendix I.

The third important characteristic of equation (12) is the

three covariance terms, which are of crucial importance in that they

represent the "cross-level" or "interaction" terms of the model. They

provide an indication of the extent to which the time-specific movements

of two levels of the system interact or relate to each other. In

other words, they present evidence as to whether or not there is

something particular in, say, the way the province of Newfoundland

is tied to or influenced by the nation as a whole. Since the model

is partly nested, three kinds of covariances are obtained, specifically,

constituency-nation interaction, constituency-province interaction,

and province-nation interaction.

Stokes at one point in his discussion of the development of the model,[14] and Alker, in his discussions about its properties,[15] argue that these covariances are not of any substantive importance, as either they are close to zero or do not differ from each other more than would be expected on a statistically random basis. If this were the case, then the analysis of the variation in party vote or voter turnout need be only in terms of the variance components.

However, Stokes, later in his discussion about the properties of the model and some of the results generated by its application to the United States, raises the importance of the covariance terms beyond the threshold of triviality and insignificance by referring to their ability to monitor those effects, that is, political forces, which are influencing in contrary ways the pattern of voter turnout in different sub-national units.[16] This, of course, is precisely the kind of thing that is integral to the phenomenon of regionalism, in which people respond in non-isomorphic ways to the personalities, events, and issues of the higher level; that is, the people of Saskatchewan might respond to national political forces in a way that is substantively different from the way the people of Newfoundland respond.[17]

The model, as indicated previously, recognizes two important characteristics of electoral behaviour, and contains an implicit notion of electoral nationalization. First, electorates are seen as living within a political system that contains a number

of potentially influential environments.[18] Second, electorates are

envisaged as being subject to two distinct temporal trends; the

time-independent trends reflect steadfast loyalties or other constant

tendencies, similar to Converse's concept of a normal vote,[19] the

time-specific trends, particular to distinct points in time, reflect

the impact of transitory issues, events, controversies, politicians,

and political organizations.

The implicit notion of electoral nationalization contained

within the model flows from its treatment of the time-specific trends

in the various provinces and constituencies.

A highly "nationalized" political system is one in which

the time-specific trends are identical in two respects, namely,

direction and magnitude. If, for example, the Liberal party gained

five percent nationally, one would expect, in a highly nationalized

system, to find gains of five percent for the Liberals in each of

the various constituencies within the nation. In such an ideal

situation, it would be argued that Canada was a highly homogeneous

community - not necessarily homogeneous in ethnic, religious,

linguistic, or class terms, but in the sense of the absence of sub-

national electoral forces or factors: the political system would

be seen as being dominated by those issues, events, personalities,

and political organizations which have a national focus and

orientation.

If, on the other hand, the Liberals gained five percent

nationally in a political system where there was a very high

separation between the constituencies, or, for that matter, the

other levels of the system, the gain would represent nothing more

than a simple arithmetic mean of many diverse movements across the

country: that is, in this case of a highly "denationalized"

political system, there would be a very high probability of just as

many constituencies registering Liberal gains as those recording

losses for the Liberals. In such a political system, it would be

argued that the pattern of electoral behaviour is dominated by

those issues, events, personalities, and political organizations

which have a local perspective and orientation. Instead of a

homogeneous political system, we would speak of a system where there

was a great deal of separation between or independence of units at

the same level of aggregation. In an ideally nationalized political

system geography would be of no political significance: in terms

of the relationships between, say, provincial electorates and the

nation as a whole, it would be of no consequence whether one lived

in Newfoundland, Alberta, or Ontario. However, in a denationalized

political system, where the various provincial electorates were

highly differentiated, spatial location would be politically significant.

Professor Richard Katz has raised two objections to this

understanding of electoral nationalization.[20] First, since there is

the assumption that a national (or provincial or constituency) factor

will have a constant impact on some set of voters, such as French-

Canadians, then that factor's impact on the aggregate electoral result

in the various constituencies should be a function of the proportions

of the electorates within the constituencies which are French-

Canadians, rather than being constant across all constituencies.

> Indeed, since different groups may react in
> opposite ways to the same stimulus, the
> direction as well as the magnitude of the
> shift caused by a single factor may vary
> across...(constituencies)...because of
> varying distributions of ethnic, social,
> political, or economic groups.[21]

Two points can be made in rebuttal to this argument. First,

our concern is to ascertain the extent of electoral nationalization,

which contains a concern for being able to detect those sub-national

units which in fact do diverge from the national pattern. Once this

task is accomplished, then our attention can be focused on trying

to account for the factors which seem to lie behind the differential

movements. In this sense, then, what is an objection to Stokes'

notion of electoral nationalization becomes part of his own argument.[22]

Second, as argued by Stokes himself, his model contains three

covariance terms "which were intended to detect the differential

impact of national politics on state or local politics and of state

forces on local constituencies."[23]

The second objection raised by Katz is somewhat more

compelling, although it is somewhat couched in his argument behind

his contention "that constituencies may vary considerably in their

susceptibility to influence from whatever source, for example,

because of differences in the distribution or intensity of partisan-

ship."[24] Variations in partisanship or intensity of party identification are no different in principle from the argument that constituencies vary in light of their socio-economic characteristics, inasmuch as all of these variables will have an impact upon the flow of the vote. The problem that is contained in Katz's second objection arises from his comment that a swing to one party of 10 percent will mean that a constituency where that party received 95 percent of the vote in the last election would then obtain 105 percent in the current contest.[25]

Katz's concern closely follows Hugh Berrington's argument against the usual way in swing had been calculated by British political scientists.[26] Berrington argues as follows:

> The swing is said to be a swing of x percent of the electorate, or, more precisely of those voting: it is not related to the population at risk. The electorate, as such, however, cannot swing; it is only former Conservative or Labour voters who can swing by changing their party. (Although, of course, new voters or abstainers can create the equivalent of a swing.) A 2 percent swing to Labour in Rhondda East is not the same as a 2 percent in South Kensington. In Rhondda East, 2 percent constitutes a fairly high proportion of the former Conservative vote, in South Kensington a small fraction.[27]

Stokes' model is deficient in that it ignores "the population at risk" and treats as equivalent, say, three constituencies in which the Conservatives took, respectively, 10, 50, and 75 percent of the vote. While there are few constituencies which fall in the fourth quartile, a number of ridings do fall in the first

quartile, particularly in Canada where the multi-party system is characterized by uneven party competition across the country. For example, in 1953, the Conservatives took 20.0 percent or less of the total vote in 58 constituencies out of the 248 contests by the party (23.4 percent), and received 20.0 percent or less in 40 of the 257 constituencies it contested in 1957 (14.0 percent). In both cases, the majority of the constituencies were located in the four western provinces and particularly in Alberta, Saskatchewan, and British Columbia. This problem is less acute in the case of turnout as few constituencies fall outside of the range in turnout rate from 50 to 80 percent.

Jackman has attempted a somewhat similar kind of analysis to that conducted in this study. In fact, he claims that his model is "quite similar" to Stokes' model.[28] However, while Jackman approaches the problem of electoral nationalization in similar conceptual terms, the model which he has utilized differs in some important respects. Moreover, he is not concerned with voter turnout movements and treats his data somewhat differently than is done here.

Jackman uses a dummy-variable multiple regression model that is equivalent to a two-way analysis of variance model, except that the sum of squares do not add up to any meaningful total since the column and row factors are not orthogonal (that is, the number of observations in each row and column are not the same).[29] Since the model is a two-way analysis of variance it is able to provide

only estimates of the national and provincial components, and the

constituency factor is represented only by an error term. Jackman

later argues that since the design of the model is proportional

(that is, it has an equal number of constituency observations within

provinces over time), it is possible to obtain separate estimations

of the national and provincial components using only a one-way

analysis of variance procedure (specifically, for each component, a

coefficient of determination or R^2 is obtained; the sum of both

components subtracted from 1 gives the estimated constituency

component).[30] Stokes' model is different inasmuch as the estimated

variance component for each level is formed by obtaining the

variance in turnout around the grand mean for that level, and, in

the case of provinces and constituencies, removing the time-independent

effects of higher levels. Other crucial differences between the

two models arises out of the fixed character of Jackman's model, which

means that there is no provision for time (that is, it has no time-

independent effects), and the lack of any covariance terms. Moreover,

Jackman does not provide for any adjustment in the national and

provincial component scores arising out of the possible upward

deflection in higher-order effects by lower-order effects. While

Jackman's study and this work are addressed, then, to the same

questions, there are a number of significant differences between the

two models, so that the results of the two studies, which do differ

in some respects, are not comparable.

Data Problems

There are two types of data problems associated with the
application of Stokes' model to the Canadian case.[31]

The first problem arises out of the nature of the party
system in Canada. The United States, unlike Canada, has a two-
party system: the model, as described above, is based on
dichotomized variables. In order to apply the Stokes model to
Canada, two alternative courses were pursued for the party-vote
analyses. First, the data were dichotomized into Liberal and
Progressive Conservative shares of the two-party vote. The second
dichotomization was in terms of either the Liberal or Progressive
Conservative proportions of the total votes cast. In both cases,
the dichotomization reflects the fact that only the Liberals and
Conservatives, in terms of votes obtained or seats contested over
time, can be considered as national parties. The second
dichotomization takes into account the various third parties,
particularly the C.C.F.-N.D.P. and Social Credit (including Le
Ralliement des Créditistes in Quebec in 1965).

The second problem arises out of the double-member
constituencies of Halifax in Nova Scotia and Queens in Prince Edward
Island, acclamations, and the failure of either the Liberals or
Progressive Conservatives to nominate a candidate in a constituency.

The voters in the two double-member constituencies were
able to vote for two candidates. Since both cases occurred in
provinces with relatively few constituencies it was considered

desirable to retain as many ridings as possible. This was done by

dividing the actual results so as to create two separate

constituencies. Since each of these new constituencies had the

same values for turnouts and party vote this procedure would tend

to reduce the constituency variance component scores, and to raise

slightly the provincial component scores, especially in the case

of Prince Edward Island which had a total of only four

constituencies.

The concern for retaining as many constituencies as

possible also governed the decisions regarding acclamations and

uncontested constituencies.[32] Stokes' model requires a minimum

of two constituencies in a province (which eliminates the

inclusion of the Yukon and the North-West Territories) with the

same conditions of competition over the full set of elections.

In Canada from 1953-1965, there were 28 cases (out of a total N

of 1,578 constituencies) in which this condition of equivalent

competitiveness was not met. 27 of these cases were from the

1953 and 1957 elections and 1 from the 1962 election. These 28

cases were composed of 3 acclamations (all of which were won by

the Liberals: two were in Quebec in 1953 and one was in

Newfoundland in 1957), 2 constituencies missing a Liberal

candidate, and 23 missing a Progressive Conservative candidate.

The majority of the constituencies with missing candidates were in

western Canada during the 1953 and 1957 elections, although only

3 constituencies twice suffered from missing candidates.

In order not to suffer the lack of a number of
constituencies, the decision was made to obtain estimated turnout
and party vote proportions for these constituencies. This
procedure simply involved the estimation of what the party vote
and voter turnout would have been if the seat had been contested.
This estimation was based on the obtained relationship between
what happened at that particular constituency, when contested,
and what happened at the level of the province for that election.
When repeated over the series of elections, this procedure
resulted in an overall ratio, which then was applied to the
constituency for which there was missing data on the basis of
the provincial mean for that year. This procedure, while allowing
for the full inclusion of constituencies, will have a minimal
effect on the variance component scores. To the extent that there
is an effect, it will show at the level of the provinces and
reduce the constituency level component somewhat since the ratio
used for the estimated scores was based on the provincial mean.

We now turn in the next three chapters to the
application of Stokes' variance components model to the pattern of
voter turnout and party vote in Canada from 1953-1965. The
application of the model will generally take the form of national-
provincial-constitu v and national-regional-constituency.[33]
In the latter case, three of the regions - Ontario, Quebec, and
British Columbia - are also provinces - so that the analysis in
some respects is restricted to the two regions of the Atlantic and

Prairie provinces. In addition to the above, a third analysis,

involving sub-provincial regions in the three provinces of Ontario,

Quebec, and British Columbia, was run in an attempt to ascertain

if there were any sub-provincial regions which may be considered

as significant political environments.

Footnotes

Chapter Three

1. For an explication of the model see Donald E. Stokes, "A
   Variance Components Model of Political Effects," in _Mathematical_
   Applications in Political Science, 1, in John M. Claunch, ed.,
   Dallas, 1965), 61-85; for a presentation of the results when
   applied to the United States and Britain, see Donald E. Stokes,
   "Parties and the Nationalization of Electoral Forces," in
   The American Party Systems: Stages of Political Development,
   William Nisbet Chambers and Walter Dean Burnham, eds., (New
   York, 1967), 182-202; for other discussions of Stokes'.model,
   see H.R.Alker, Jr., "Statistics and Politics: The Need for
   Causal Data Analysis," in _Politics and the Social Sciences,_
   Seymour Martin Lipset, ed., (New York, 1969), 244-313; also
   H.R.Alker, Jr., "A Typology of Ecological Fallacies," in
   Quantitative Ecological Analysis in the Social Sciences,
   M. Dogan and S. Rokkan, eds., (Cambridge, Massachusetts, 1969),
   69-86.

2. Stokes, "Parties and the Nationalization of Electoral Forces,"
   187-92.

3. Don Aitkin, "Electoral Forces in Federal Politics," a paper
   presented to the Australasian Political Studies Association,
   Tenth Annual Conference, University of Tasmania, August, 1968.

4. Richard S. Katz, "The Attribution of Variance in Electoral
   Returns: An Alternative Measurement Technique," _American_
   Political Science Review, LXVII., No.3 (September, 1973),
   817-28.

5. Robert W. Jackman, "Political Parties, Voting, and National
   Integration: The Canadian Case," _Comparative Politics,_
   IV, No.2 (July, 1972), 511-36.

6. For general discussions of analysis of variance models, see
   William Hays, _Statistics for the Social Sciences_ (New York,
   2nd edition, 1973), chapters 12 and 13; Shayle R. Searle,
   Linear Models (New York, 1971); B.J.Winer, _Statistical_
   Principles in Experimental Design (New York, 2nd edition, 1971),
   359-66.

7. Stokes, "A Variance Components Model of Political Effects," 62-6.

8. _Ibid._, 66.

9. For a similar discussion see Alker, "A Typology of Ecological
   Fallacies," 70-8.

10. Stokes, "A Variance Components Model of Political Effects," 72.

11. Ibid., 73.

12. Ibid., 71.

13. Ibid.

14. Ibid., 67.

15. Alker, "Statistics and Politics: The Need for Causal Data Analysis," 248-53.

16. Stokes, "A Variance Components Model of Political Effects," 75.

17. Stokes expresses the relationship in the following manner: "Some forces which arise at a higher level may have opposite effects in different states or local constituencies. For example, the religious aspect of the candidacy of John Kennedy in 1960 had quite different effects in Protestant and Catholic areas." And "...such effects will tend to produce a higher or lower negative covariance between movements of the vote at higher or lower political levels. In 1960, for example, the net Republican gain in the national mean due to religion would have been positively associated with the movement of the vote in Protestant states or districts, negatively associated with the movement of the vote in Catholic states or districts." Ibid., 74-5 (emphasis in original).

18. In principle, there are an infinite number of possible political environments; those models which would incorporate levels other than used in this study involve overwhelming computational work (the likeliest candidate for the downward extension of the model is the polling district which represents the lowest level of the political system for which electoral data are readily available).

19. Philip Converse, "The Concept of a Normal Vote," in Angus Campbell et al, Elections and the Political Order (New York, 1966), 9-39.

20. Katz, op.cit., 819.

21. Ibid.

22. Stokes, "A Variance Components Model of Political Effect," 78-80.

23. Donald E. Stokes, "Comment: On the Measurement of Electoral

"Dynamics," American Political Science Review, LXVII, No.3 (September, 1973), 829.

24. Katz, op.cit., 819.

25. Ibid.

26. Berrington, op.cit.

27. Ibid., 19.

28. Jackman, op.cit., 523.

29. Ibid., 521.

30. Ibid., 524.

31. Constituency data were obtained from the appropriate issues of the Report of the Chief Electoral Officer (Ottawa); since prior to 1963 the party affiliation of candidates was not reported in the Report recourse was made to The Parliamentary Guide. Jackman uses data from Howard Scarrow, Canada Votes (New Orleans: The Hauser Press, 1962), op.cit.,518.

32. Jackman represents acclamations as being won with 100 percent of the vote and apparently does not include seats which were not fully contested over years; ibid.

33. Because of the adjustments made in the various variance components formulae to remove any possible upward deflection of higher-order effects by lower-order effects, there will be very slight differences in the national components reported for the national and regional analyses.

Chapter Four

Variance Components of Voter Turnout in Canadian General Elections, 1953-1965.

In this chapter, the analysis of variance model developed
and described in the previous chapter is applied to the examination
of the variation in voter turnout during the six Canadian general
elections from 1953 to 1965. This discussion will have two sections:
first, a general comparison of the relationship between the regions
and the provinces and the nation as a whole; and, second, the
specific presentation of the results generated by the application
of the model.

It should be noted that the electoral record for this
period was marked by two distinct trends: from 1953 to 1958 the
turnout increased dramatically, reaching a record high for Canada
of 79 percent in 1958 from the relatively low percentage of 67
percent recorded in 1953, a low unmatched since the three elections
of the 1920's; the first two elections of the 1960's saw relative
stability in turnout, with an overall slight decline from 1958,
then a more precipitous fall in 1965 to a turnout rate of 75 percent.
This period of electoral history, then, was characterized by
considerable fluidity in the proportion of the electorate which
cast a vote, especially compared to the relative stability in turnout
for the five elections from 1930 to 1949, where the rate of turnout
stayed within the range of 70 to 76 percent, and the three elections
from 1968 to 1974, where the proportions were within the range of

73 to 77 percent.

This summary description of the movement in turnout proportions raises a number of important specific questions about the underlying forces responsible for this variation. Is the total variation primarily attributable to the presence of national forces, or did sub-national areas have differential reactions to the political context of the period? If it is possible to detect the relative weakness of national forces - over time and/or compared to other political systems - what areas of the country seemed to have great impact on the overall variation in turnout? Further, can these sub-national influences best be conceptualized as emanating out of the various regions or provinces or constituencies of the country? Lastly, has there been any decline or rise in the weight attached to national forces or, for that matter, forces arising from the lower-order levels of the political system?

With these questions in mind, we can now proceed to an examination of the general relationship between the nation and the regions and the provinces in turnout patterns. Figure 1 shows the turnout proportions for the five traditional regions - the Atlantic provinces, Quebec, Ontario, the Prairie provinces, and British Columbia - and the nation for the six-election period. In general, there seems to be a high degree of parallelism between the nation and the regions: when the nation is rising, so are the regions; when the

nation is falling, so are the regions; when the nation is stable,

again so are the regions. The most noticeable exception to this

pattern of congruity is British Columbia, which from 1962 to 1963 was

rising strongly when the nation as a whole was declining very slightly.

Figure 1

Voter Turnout by Nation and Regions in Six Canadian General
Elections, 1953-1965.
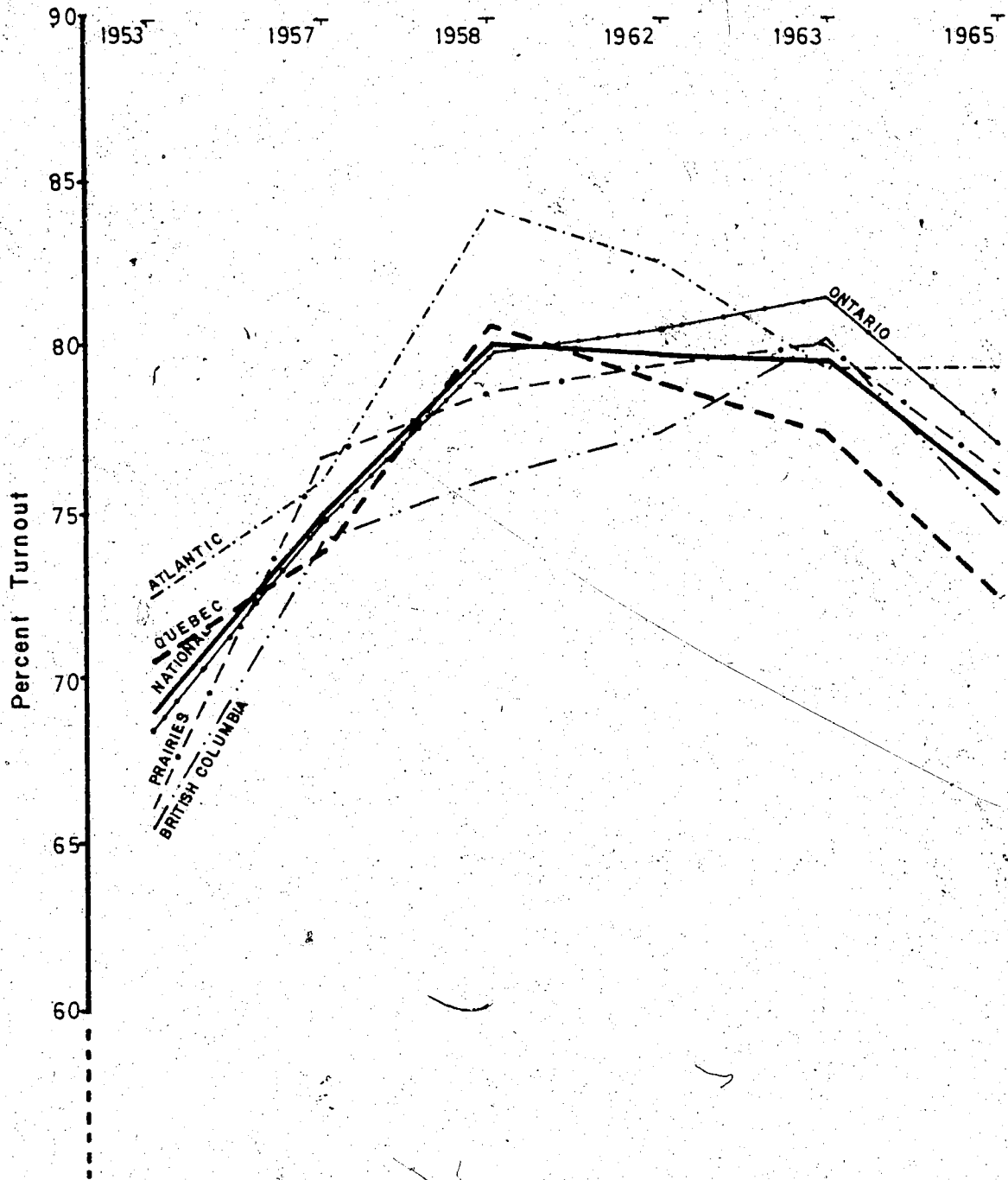
Figure 2, which shows the movement in the turnout
proportions for the nation and the provinces, indicates that there
is considerably more divergence between these levels of the political
system than between the nation and the regions, evidence that
consideration of regional aspects of political behaviour obscures
some important provincial differences. This notion that the
traditional conception of regionalism tends to hide what is happening
within the nation becomes more evident when Figures 1 and 2 are
examined for the presence of units moving in a contrary direction
to the national movement in turnout. In the case of the regions only,
British Columbia, in the periods of 1958-62 and 1962-63, moved more
than one percent in a direction contrary to the nation as a whole,
while the same test for the provinces reveals a more complex pattern
of movements: from 1953 to 1957, while the national rate of turnout
was increasing by over six percent, Newfoundland's proportion was
dropping by almost six percent; in 1958-62 six provinces acted
contrary to the national movement, with Prince Edward Island,
Saskatchewan, and British Columbia increasing by over one percent as
the nation declined slightly; in 1962-63, when the national turnout
rate again showed a minute drop, Alberta and British Columbia had
large increases in turnout; and in 1965, when the nation's turnout
was falling four percent, Nova Scotia was rising some three percent.[1]

Employing the national-regional format of analysis would
lead to the conclusion that in three pairs of elections (1953-57,

Figure 2

Voter Turnout by Nation and Provinces in Six Canadian General
Elections, 1953-1965.
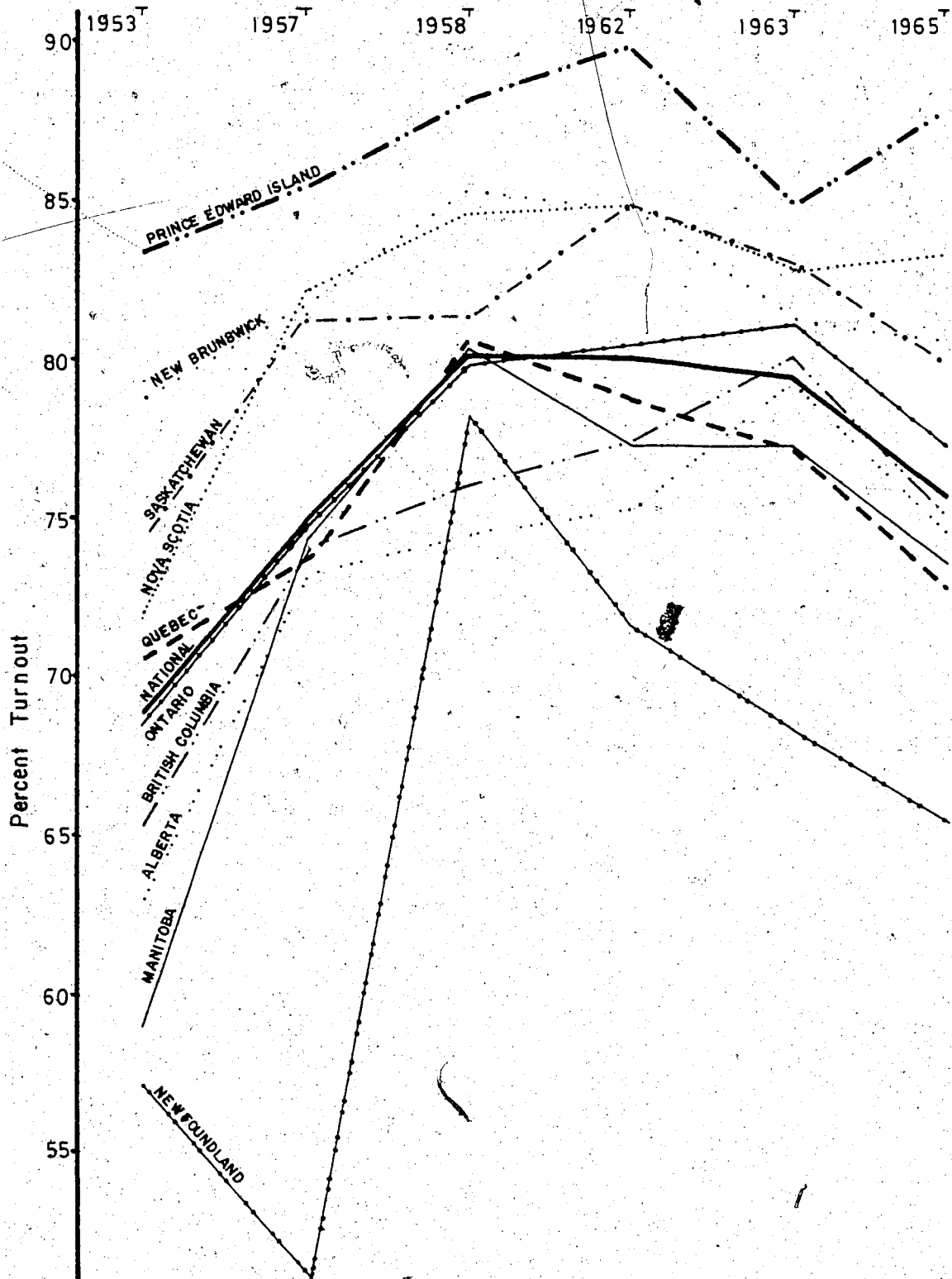
1957-58, and 1963-65) there was a considerable degree of parallelism
between the nation and its sub-national levels; however, the
national-provincial format indicates that in only the election set
of 1957-58 were there not any contrary movements.

The difficulties associated with the national-regional
framework of analysis is further exemplified in Table 1 which shows
the differences in turnout proportions for regions and provinces
between the highest and lowest units in each election and overall
elections.

Table 1

Percentage Differences in Turnout Between Highest
and Lowest Units, by Regions and Provinces, and by
Elections and Overall Elections.

	1953	1957	1958	1962	1963	1965	All Elections
Region	7.2	2.5	8.0	5.2	4.1	6.9	4.4
Province	26.1	34.2	13.6	18.0	16.4	22.6	21.2

The regions are characterized by relative similarity and
stability in turnout proportions in comparison with the provinces,
which are marked by both great differences between the units with
highest and lowest rates of turnout and great variability over time.
Moreover, the 1957 election had the least amount of spread between the
regions but the same election also had the greatest amount of provincial
dispersion, a somewhat similar anomaly appears in the case of the 1958
election when there was the least amount of spread between the provinces
and the greatest amount of dispersion for the regions, although the

greater difference is still found at the level of the provinces.

These differential movements in turnout proportions between regions and provinces are more visibly evident in Tables 2 and 3, which show the relative ranking of units in both sub-national levels of the political system for the turnout proportions between elections and overall elections. These rankings and unit movements can be summarized by two simple mathematical operations: first, the summation of the deviation of each unit's ranking in a particular election year from its overall position; second, the summation of the deviation of each unit's standing in one election from its ranking in the previous contest.

Table 2

Ranking of Regions by Turnout, by Election Year and Overall.

	1953	1957	1958	1962	1963	1965	Overall
1.	Atl.	Pra.	Atl.	Atl.	Ont.	Atl.	Atlantic
2.	Que.	Atl.	Que.	Ont.	B.C.	Ont.	Ontario
3.	Ont.	Ont.	Ont.	Pra.	Pra.	Pra.	Prairies
4.	Pra.	B.C.	Pra.	Pra.	Atl.	B.C.	Quebec
5.	B.C.	Que.	B.C.	B.C.	Que.	Que.	British Columbia
	4	6	4	0	8	2	Summation of Each Unit's Deviation in Election Year from Overall Rank
		8	8	4	8	6	Deviation of one Year's Rank from Previous Year's Rank

Table 3

Ranking of Provinces by Turnout, by Election
Year and Overall.

	1953	1957	1958	1962	1963	1965	OVERALL
1	P.E.I.	P.E.I.	P.E.I.	P.E.I.	P.E.I.	P.E.I.	Prince Edward Island
2	N.B.	N.S.	N.B.	N.S.	Sask.	N.S.	New Brunswick
3	Sask.	N.B.	N.S.	Sask.	N.S.	N.B.	Nova Scotia
4	N.S.	Sask.	Sask.	N.B.	N.B.	Sask.	Saskatchewan
5	Que.	Ont.	Que.	Ont.	Ont.	Ont.	Ontario
6	Ont.	Man.	Man.	Que.	B.C.	B.C.	Quebec
7	B.C.	B.C.	Ont.	B.C.	Alta.	Alta.	British Columbia
8	Alta.	Que.	Nfl.	Man.	Man.	Man.	Manitoba
9	Man.	Alta.	B.C.	Alta.	Que.	Que.	Alberta
10	Nfl.	Nfl.	Alta.	Nfl.	Nfl.	Nfl.	Newfoundland
	6	6	10	4	10	8	Summation of Each Unit's Deviation in Election Year from Overall Rank
		12	12	14	16	6	Deviation of One Year's Rank from Previous Year's Rank

Comparison of the two bottom lines in each table reveals
that there is somewhat greater variability for provinces than regions,
although it should be noted that there is not much difference between
the two levels if each score is divided by N-1 which controls for the
different number of units at each level In terms of regions and
provinces, by both measurements, Quebec has the greatest number of
movements, but in the regional case all other regions have very similar
movements, while in the case of the provinces there are a number of
quite distinctive patterns of movement.

The above tables, figures, and discussion constitute
evidence to the effect that while one can point to considerable

similarity between the nation and its sub-national levels -
particularly so in the case of regions - there are a number of
differential movements - most notably at the levels of the provinces -
which indicate the presence of sub-national forces acting upon the
behaviour of the Canadian electorates. It bears emphasizing,
however, at this point,that we have not been able to say anything
about the slope, that is, magnitude, of the movements, nor anything
of the relative weights of the political forces arising out of
various levels of the Canadian political system. We cannot speak
with any precision or confidence about which provinces or regions
are acting, either at one point in time or over time, in a fashion
contrary to the rest of the nation, except in only a summary way
as was done above.

In order to accomplish these objectives, the discussion
now turns to an examination of the results of the application of
the analysis of variance model to the turnout data. Table 4
presents the partitioning of the variance in turnout for the six
elections from 1953 to 1965 into national, regional, and constituency
components.

Table 4

Components of Variance of Percent Turnout in Six
Canadian Federal Elections from 1953 to 1965, by
Nation, Region, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	18.7175	4.3264	.59
Region	2.5210	1.5878	.07
Constituency	10.6296	3.2603	.34
			1.00

While the level of the nation constitutes the single most
important factor, contributing just under 60 percent of the total
variation, the constituency level accounts for over one third of
the variation and the region comprises a relatively negligible force.
The forces, then, which activate voting participation in Canada are,
in good measure, to be found in the sub-national spatial groupings of
the system.

The relative weakness of the national level in Canada
is clearly evident from a comparison with Stokes' findings on turnout
in the United States which are shown below in Table 5.

Table 5

Components of Variance of Percent Turnout for the
American House of Representatives from 1952 to
1960, by Nation, State, and District.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	72.87	8.54	.86
State	7.20	2.68	.08
District	5.22	2.28	.06
			1.00

Source: Donald E. Stokes, "A Variance Components
Model of Political Effects," in John M. Claunch,
ed.,Mathematical Applications in Political Science, 1
(Dallas, 1969), 75.

Quite clearly in the United States in the 1950's the

greatest effects on turnout were national, with the two lower-

order levels of the political system having apparently only

minuscule effects on turnout patterns.[2] The relative unimportance,

compared to the American experience, of national forces in accounting

for variation in turnout in Canada is of considerable theoretical

significance if not of some surprise. While Canada has a more stable

pattern of turnout (due primarily to the steady rate of participation

in 1958, 1962, and 1963), a significant proportion of whatever

variation does occur comes about through the influence of sub-

national areas, indicating that to some extent the Canadian

electorates are differentiated by a number of forces and influences.

In other words, while some areas of the country are turning out in greater numbers at the polls, other areas, for a host of possible reasons, are reacting in a weakened or negative manner: although the data do not allow for any testing of the hypothesis, it may be suggested that what is politically relevant in one area is unimportant somewhere else.

It should be noted that the "constituency" component in Table 4 encompasses all of the variation that is occurring at the level of the provinces and constituencies. In order to allow for the testing of the question of whether regions or provinces constitute the greater source of differentiation, Table 6 indicates the variance components for turnout from 1953 to 1965 by nation, province, and constituency.

Table 6

Components of Variance of Percent Turnout for the
Six Canadian General Elections from 1953 to 1965,
by Nation, Province and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	18.7486	4.3300	.59
Province	4.9000	2.2136	.15
Constituency	8.3314	2.8864	.26
			1.00

A comparison of Table 6 with Table 4 reveals an increase in the proportion of the total variation attributed to the level of the province from what had been designated as a regional effect and a decline in the constituency effect of about 8 points. In other words, the provinces constitute a greater source of spatial differentiation than do the regions while the constituencies continue to be the second most influential level of the political system.

In order to ascertain whether or not Canada during the period of analysis was becoming more or less nationalized, the six elections were broken into two sets of elections, enabling a comparison between the three elections of the 1950's and the three elections of the 1960's. Tables 7 and 8 below show the variance components of percent turnout by nation, region, and constituency for the two election sets.

Table 7

Components of Variance of Percent Turnout for the Three Canadian General Elections from 1953 to 1958, by Nation, Region, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	31.2947	5.5942	.66
Region	2.1261	1.4581	.04
Constituency	13.6164	3.6900	.29
			.99

Table 8

Components of Variance of Percent Turnout for the
Three Canadian General Elections from 1962 to 1965,
by Nation, Region, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	5.5605	2.3581	.51
Region	1.4199	1.1916	.13
Constituency	4.0181	2.0045	.36
			1.00

Two things are clearly evident from these two tables.

First, the relative magnitudes of the variance components in the

1950's are much greater than in the 1960's, reflecting, of course,

the much greater movement in the turnout proportions which occurred

during the first three elections under analysis. Second, while

there is no change in the rank ordering of the three levels from the

1950's to the 1960's, the effect of the national level is sharply

reduced from about two-thirds of the total variation in the first

half of the analysis period to just over one-half in the second

half of the period, with both of the lower-order levels of the

political system showing increases in their effects upon turnout.

These differences, it should be noted, are compatible with what we

know about the political history of the period: the 1950's,

especially the elections of 1957 and 1958, were noted for the sudden

emergence upon the political scene of John Diefenbaker; the apparent

disillusionment with his leadership and the reluctance to follow

the lead of Lester Pearson led to a generalized sense of drift,

uncertainty, and indecision in the early 1960's which allowed local

and regional factors to be operative to a greater extent than in

the 1950's.

Tables 9 and 10 below show the variance components for

turnout by nation, province, and constituency for the three elections

of the 1950's and the three elections of the 1960's.

Table 9

Components of Variance of Percent Turnout for the
Three Canadian General Elections from 1953 to 1958,
by Nation, Province and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	31.3954	5.6032	.66
Province	7.3703	2.7148	.16
Constituency	8.7853	2.9640	.18
			1.00

Table 10

Components of Variance of Percent Turnout for
the Three Canadian General Elections from 1962
to 1965, by Nation, Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	5.5465	2.3551	.51
Province	1.7490	1.3225	.16
Constituency	3.6096	1.8999	.33
			1.00

A pattern similar to that found in the case of the nation-region analysis is evident in the case of the provincial format; it should be noted that while the level of the province constitutes a relatively significant force, compared to the regional level in the 1950's, there is only a slight difference between the two levels in the elections of the 1960's, meaning, of course, that most of the decline in the effect of national forces re-appeared at the level of the constituencies.

The analysis to this point has presented evidence to the effect that Canada during the period of examination - and particularly in the 1960's - was a political system characterized by the strong presence of sub-national political effects. In order to render more specificity to the argument that political differences with spatial or geographic bases underlie the pattern of Canadian political

behaviour we now turn to the covariance terms, which were discussed
in the previous chapter, to ascertain which regions and provinces can
be said to be acting in a highly congruent or non-isomorphic fashion
compared to the national movements in turnout. Specifically, the
covariance terms, inasmuch as they represent the summation of the
movements of two levels of the system after the removal of the time-
iddependent effects of the level and the higher level (that is,
indicating the relationship between the time-specific movements of
the two levels), indicate those areas of the country which are dis-
proportionately attracted or repelled by the forces originating at
the higher level of the political system. Table 11 below shows co-
variance scores that indicate the greatest amount of attraction or
repulsion. Figures 3 and 4 following display the national-regional
and national-provincial covariance scores by election year that
were used for the covariance scores in Table 11.

Table 11

Covariance Scores of Percent Turnout for the Six
Canadian   General Elections from 1953 to 1965,
by Regions and Provinces

Regional/National		Provincial/National	
Quebec	-3.3470	Prince Edward Island	-11.8856
Atlantic	+1.6642	New Brunswick	-10.2988
Ontario	+1.6676		
British Columbia	+1.7604	Manitoba	+11.9862
Prairies	+2.6127	Newfoundland	+13.1066

-110-

Figure 3

National-Regional Time-Specific Values for Turnout in Six
Canadian General Elections, 1953-1965.
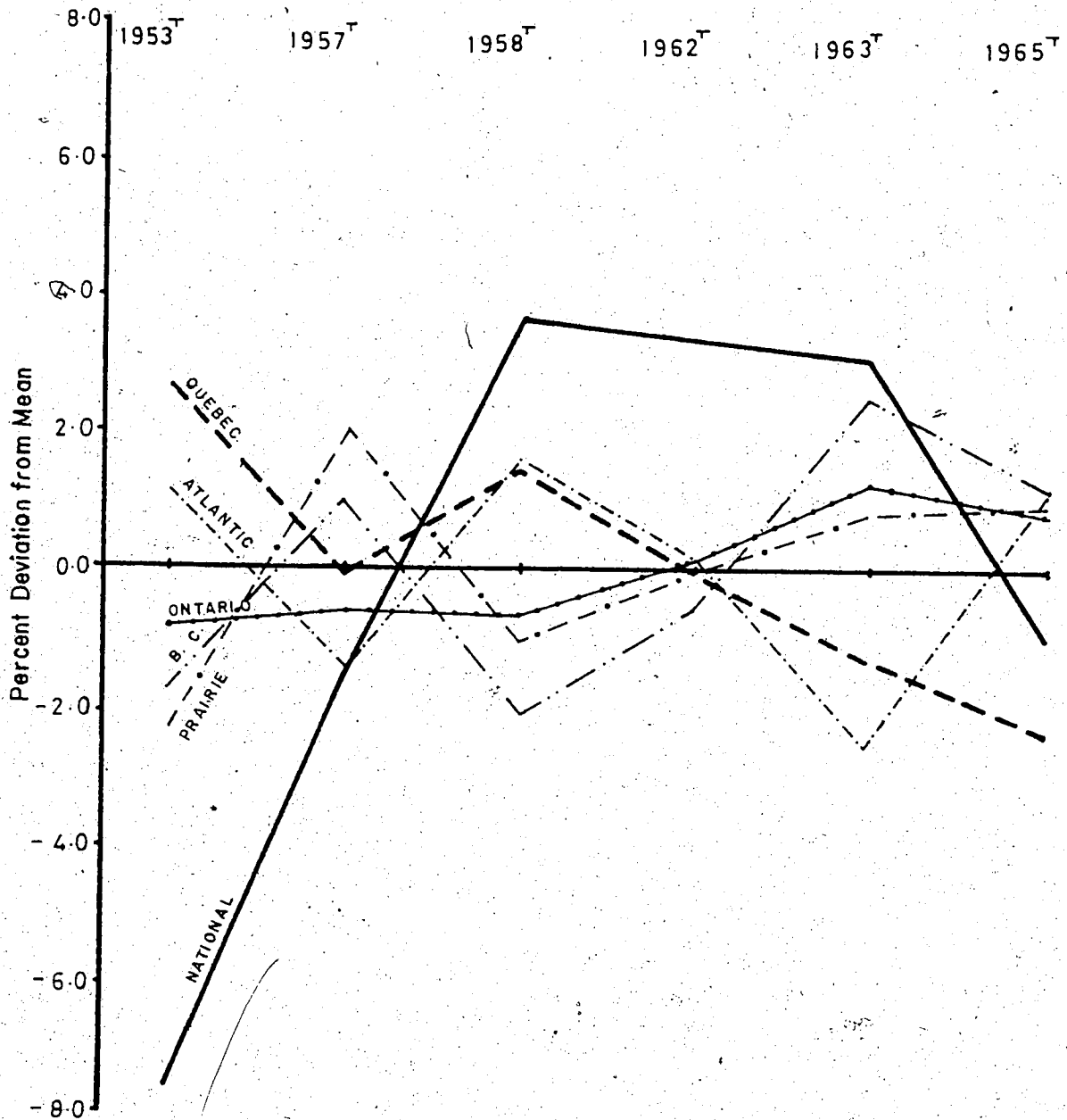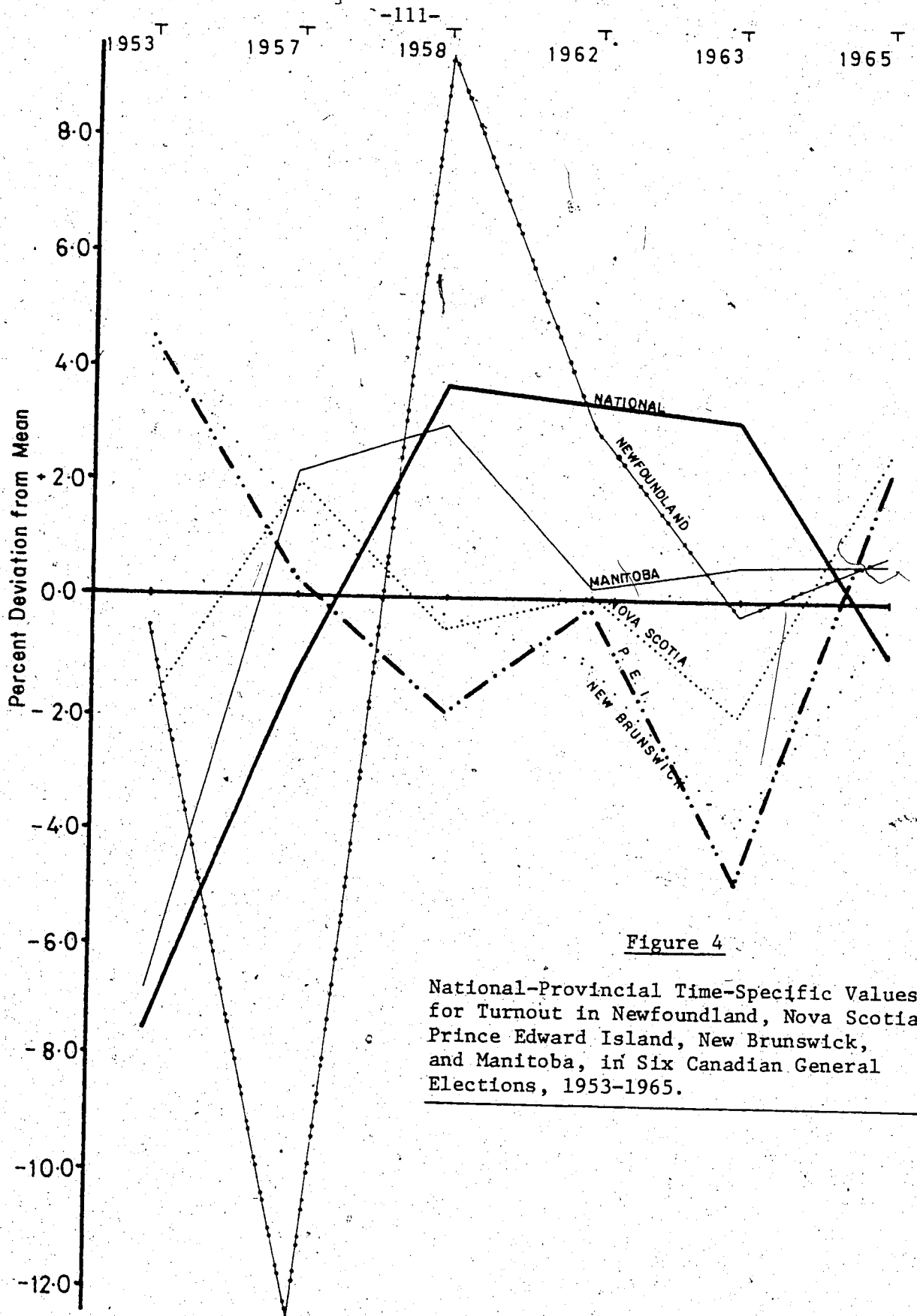
Figure 4

National-Provincial Time-Specific Values
for Turnout in Newfoundland, Nova Scotia,
Prince Edward Island, New Brunswick,
and Manitoba, in Six Canadian General
Elections, 1953-1965.

While none of the regions can be said to show much divergence from the national pattern, with the possible exception of the Quebec region, which trend reflects the secular decline in turnout of voters in that area from 1953 to 1965, four of the provinces (three of which are from the Atlantic region) have high covariance scores: Prince Edward Island and New Brunswick are strongly repulsed from the national movement over time while Newfoundland and Manitoba are strongly attracted. What bears reiteration at this point, is that what at one level of aggregation seems to be similar and alike, at another level of aggregation assumes a posture of striking differences between units that comprise that higher order of aggregation. In other words, the summary scores presented for a region as indicative of some meaningful aspect of political life become at the point of disaggregation nothing more than an average, thus hiding a number of divergent and contradictory movements below that level of aggregation. This is particularly so in the case of the Atlantic region which, on the one hand, seems to be locked into the national pattern and, on the other hand, is composed of provinces which follow three idiosyncratic patterns: repulsion and attraction in the extremes and conformity in the case of Nova Scotia with its covariance score of +0.3220.

The analysis to this point has made the case that the Canadian political system from 1953 to 1965 was characterized by increasing denationalization, that is, increased importance of sub-

national political forces upon the behaviour of the Canadian
electorates: moreover, there are a number of pieces of evidence
which indicate that these sub-national political forces are best
conceptualized as emanating less from the traditional regions of the
country and more from the provinces and the constituencies of the
political system. We now turn our attention to these provinces
and constituencies in an attempt to understand better the spatial
bases of Canadian electoral behaviour; in order to do this with
clarity the discussion will start with two regional comparisons.

Figures 5 and 6 show the movements in turnout for randomly
selected constituencies in the Atlantic and Prairie regions of Canada;
these curves represent the turnout pattern after the removal of
national forces: that is, they reflect the impact of regional and
lower-order (provincial and constituency) factors upon turnout.
The heterogeneity of the movements over all elections is interpreted
as meaning that the regional variance is small and the lower-order
variance is large. In other words, one cannot, on the basis of this
evidence, speak of an "Atlantic" or "Prairie" political environment
over time. Tables 12 and 13 show the pattern of movements found in
these charts in somewhat different fashion in that they reflect the
movements of all constituencies within each of the two regions.
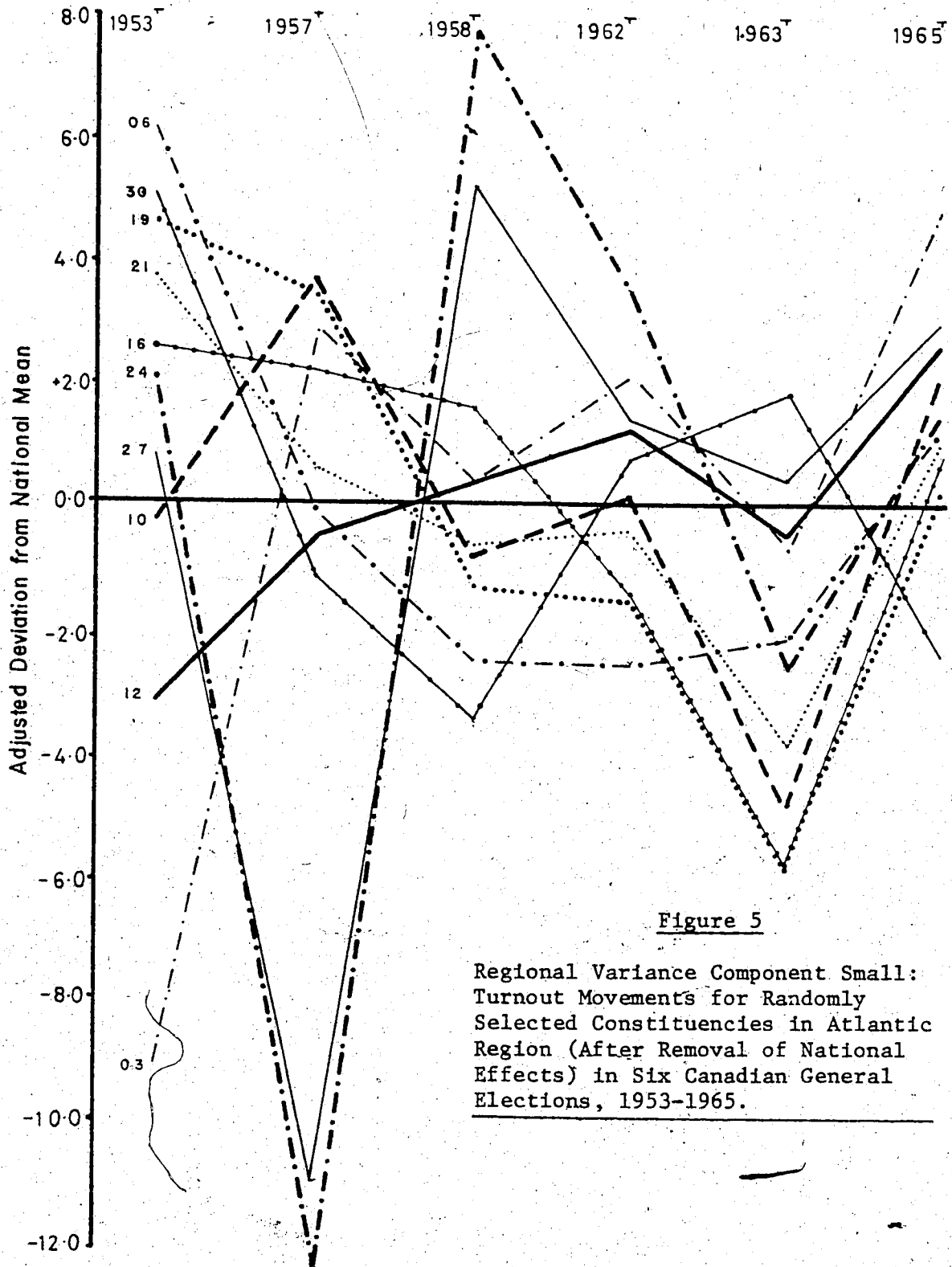
Figure 5

Regional Variance Component Small:
Turnout Movements for Randomly
Selected Constituencies in Atlantic
Region (After Removal of National
Effects) in Six Canadian General
Elections, 1953-1965.

Figure 6

Regional Variance Component Small: Turnout Movements for Randomly Selected Constituencies in Prairie Region (After Removal of National Effects) in Six Canadian General Elections, 1953-1965.
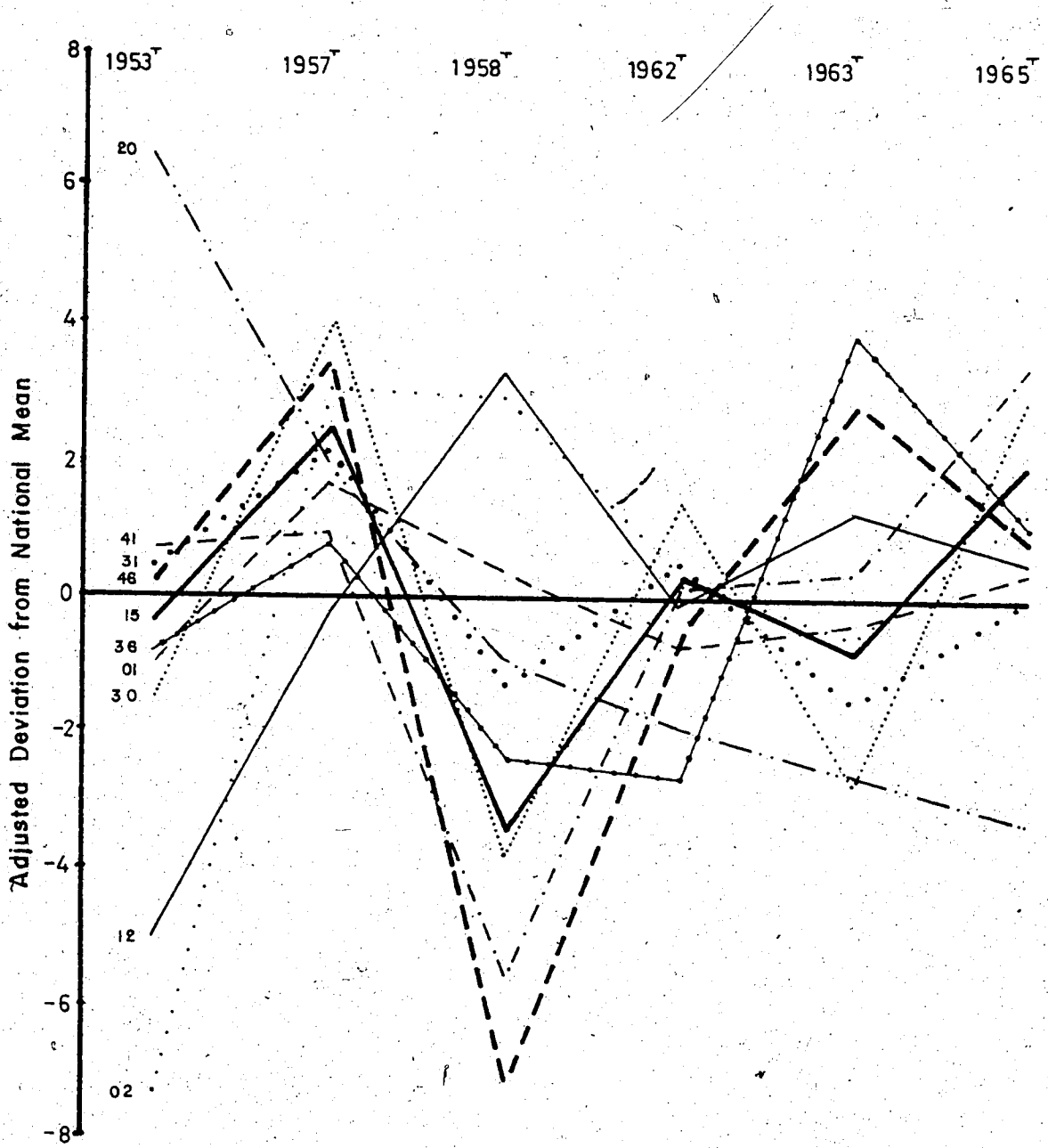
Table 12

Total Regional and "Constituency" Variation for
Atlantic Region, 1953 to 1965.

	Total Regional Variation	Total Constituency Variation	Percent Constituency Variation
1953	132.9	125.9	.95
1957	245.6	230.9	.94
1958	158.3	143.9	.91
1962	31.9	31.5	.99
1963	76.7	34.8	.45
1965	42.9	33.8	.79

Table 13

Total Regional and "Constituency" Variation for
Prairie Region, 1953 to 1965.

	Total Regional Variation	Total Constituency Variation	Percent Constituency Variation
1953	237.0	181.3	.76
1957	55.2	20.9	.38
1958	118.5	107.9	.91
1962	24.8	24.7	.99
1963	57.6	51.8	.90
1965	39.7	33.30	.83

From 1953 to 1965 there has been for both regions a decline in the amount of total regional variation, with the 1962 election for both regions being characterized by the least amount of variation. What is of greater consequence is that in five of the six elections the lower-order levels of the system (represented by the term "constituency") were quite clearly the most dominant sources of influence: only in two separate elections - 1963 in the case of the Atlantic region and 1957 in the case of the Prairies - can one speak with confidence of regional movements. Generally speaking, then, the pattern of turnout movements within the two regions is one of divergence rather than convergence.

The question that now arises is whether or not the strong lower-order movements reflect province-wide factors or the impact of local and constituency influences. In one sense, of course, this question has been answered already in that the earlier discussion made the point that sub-national political forces seemed to emanate more from the constituencies than from the provinces. What was not clear is whether or not this pattern of constituency dominance over provincial factors holds for all provinces or is consistent over time.

Figures 7 and 8 show the two provinces - Prince Edward Island and Ontario - with the two most dissimilar patterns, with the latter envincing a pattern of low provincial variance components and the former indicating movements of turnout dominated by high

Figure 7

Provincial Variance Component Larger Turnout Movements for Three
Constituencies of Prince Edward Island (After Removal of National
Effects) in Six Canadian General Elections, 1953-1965.
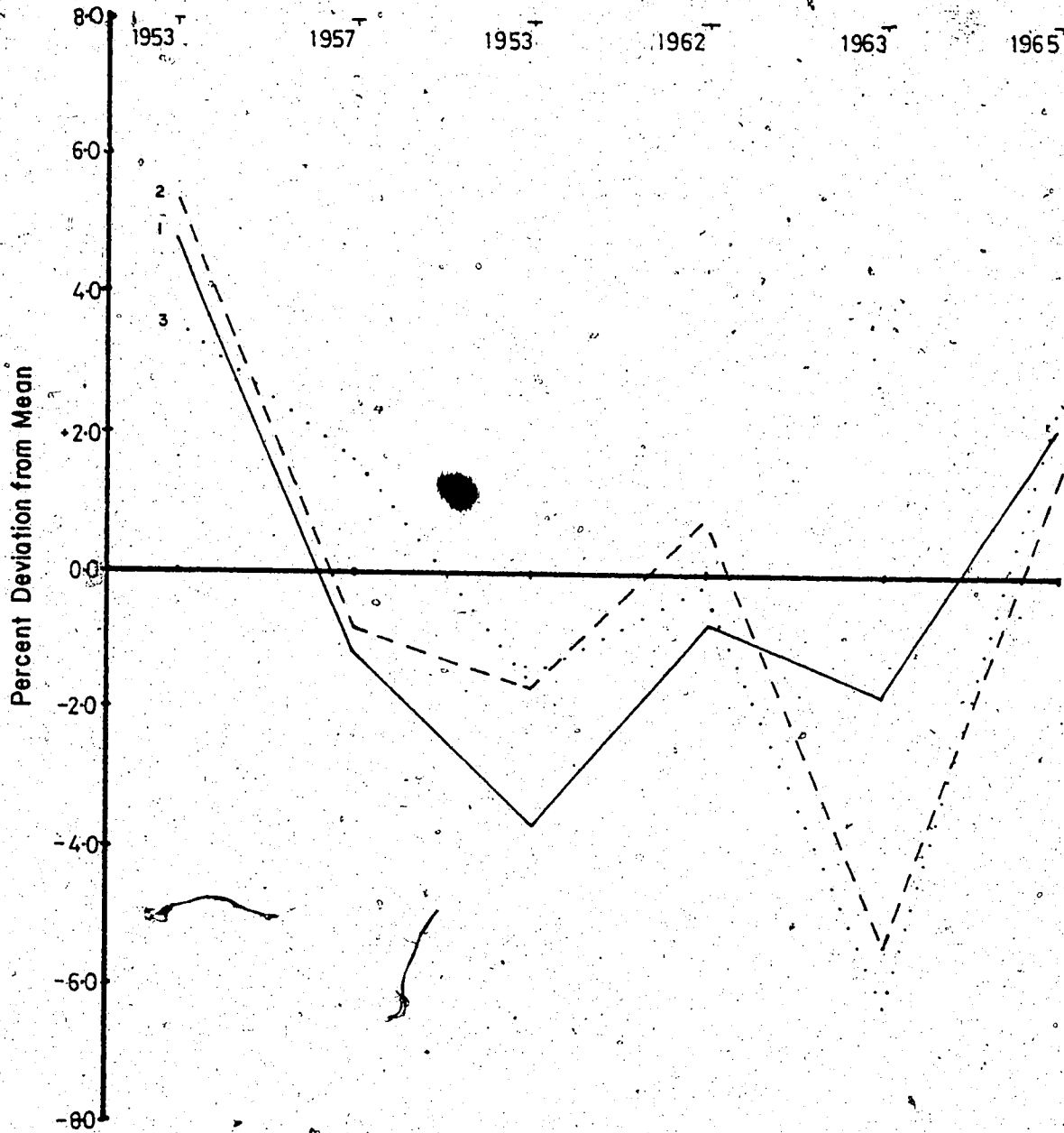
Figure 8

Provincial Variance Component Small: Turnout Movements for Ten
Randomly Selected Constituencies in Ontario (After Removal of
National Effects) in Six Canadian General Elections, 1953-1965.
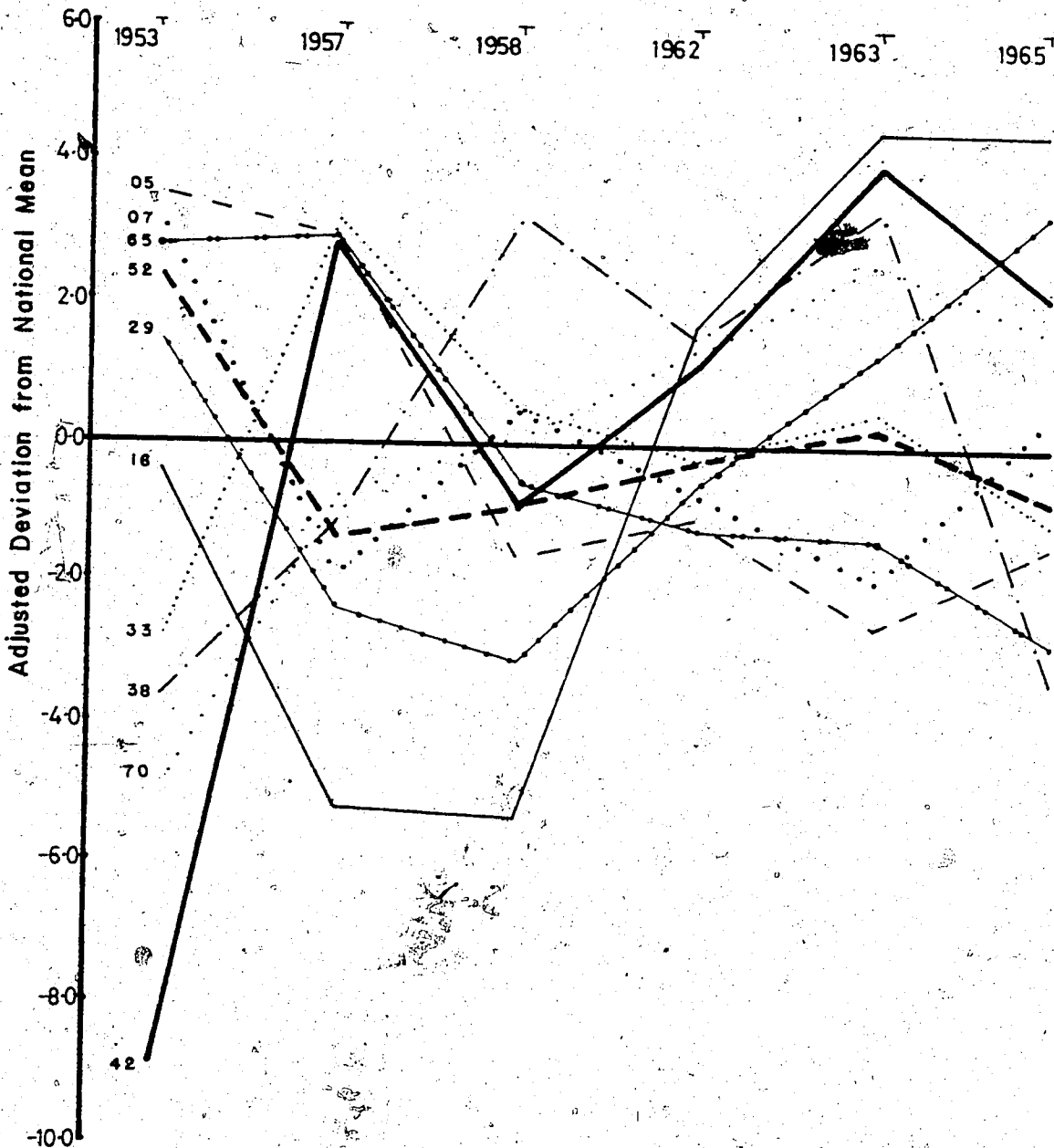
provincial variance components. The three constituencies in

Prince Edward Island show very congruent movements with only two

instances when a constituency showed a contradictory or non-

isomorphic movement. Table 14 below shows the total provincial

and constituency variation for Prince Edward Island from

1953 to 1965.

Table 14

Total Provincial and Constituency Variation in
Turnout for Prince Edward Island, 1953 to 1965.

	Total Provincial Variation	Total Constituency Variation	Percent Constituency Variation
1953	15.9	.4232	.03
1957	1.7	1.5564	.91
1958	4.1	.6910	.17
1962	.2691	.2597	.97
1963	22.7	2.9498	.13
1965	4.3	.1218	.03

In four of the elections- 1953, 1958, 1963, and 1965 -

there were strong provincial tides while in the other two elections -

1957 and 1962 - constituency factors were dominant. However, it

should be noted that in these two elections we are dealing with

essentially negligible variation from the national pattern. And, of

course, Prince Edward Island is the smallest province in Canada and

encompasses the greatest amount of social and economic homogeneity,
factors which would contribute to the general predominance of
provincial-wide orientations and influences.

The Ontario pattern, as shown for a number of randomly
selected constituencies in Figure 8, is in stark contrast to the
case of Prince Edward Island. Instead of a series of symmetrical
movements, the Ontario pattern is one of strong divergence with
little evidence that provincial-wide political influences contributed
much to the movement in turnout, which is confirmed by Table 15
below which shows the total provincial and constituency variation
for Ontario from 1953 to 1965.

Table 15

Total Provincial and Constituency Variation in
Turnout for Ontario 1953 to 1965.

	Total Provincial Variation	Total Constituency Variation	Percent Constituency Variation
1953	260.2	247.3	.95
1957	133.6	126.7	.95
1958	105.6	97.8	.93
1962	63.8	63.6	.99
1963	88.4	65.3	.74
1965	121.9	109.7	.90

Table 16

Proportion of Total Variation in Turnout Within Provinces
Attributable to Constituency-Level Factors, 1953 to 1965

	Ont.	Que.	Sask.	N.S.	B.C.	Nfl.	N.B.	Man.	Alta.	P.E.I.
1953	.95	.74	.77	.84	.45	.91	.22	.13	.50	.03
1957	.95	.99	.36	.34	.78	.01	.56	.24	.50	.91
1958	.92	.77	.40	.92	.43	.13	.99	.20	.49	.17
1962	.99	.99	.70	.99	.84	.34	.32	.88	.59	.97
1963	.74	.78	.79	.32	.23	.99	.15	.85	.25	.13
1965	.90	.67	.99	.34	.74	.90	.90	.79	.46	.03
Average	.94	.82	.67	.62	.58	.55	.32	.52	.47	.37

In five of the six elections, the proportion of the
total variation within the province, after the removal of the
national effect, was at least 90 percent: only in the election
of 1963 is there any evidence of a provincial effect, and even
in that election almost three-quarters of the total variation
within Ontario is attributed to the constituencies.

Table 16 shows the proportion of the total variation
within the provinces, for each of the provinces, after the re-
moval of national effects, which is attributable to the influ-
ence of constituency-level factors. A number of important con-
clusions can be drawn from this table. First, no province shows
a pattern of turnout movements which can be attributed to pre-
dominantly provincial political forces: Alberta, perhaps cpmes
closest to such a pattern, but even in this case the constituency
forces are generally similar im impact to provincial forces and
in only one election - that of 1963 - is there clear-cut evidence
of province wide political influences. Prince Edward Island,
which has a lower average constituancy-level score than Alnerta,
has two elections where constituency forces are very powerful.
Second, Ontario,as already mentioned, and Quebec, are both dom-
inated by strong constituency forces, although in the case of
Quebec it might be argued that the last two elections indicate
some moderation in the domination of movements in turnout by

constituency-level political forces; however, we have too few

cases to speak confidently. A similar situation exists in the

case of Nova Scotia, except that the decline in the impact of

constituency-level factors is much more apparent. Third, two

provinces - Saskatchewan and Manitoba - have quite definite trends:

both provinces, although more so in the case of Manitoba, have

since the elections of the 1950's become more and more dominated

by constituency forces and less and less influenced by provincial

trends. Fourth, the two remaining provinces - British Columbia and

New Brunswick - have no definite trend in the pattern of movements

in turnout.

The general picture of the movements in turnout in Canada from 1953 to 1965 that has been drawn so far has been one of relative domination by national factors in the turnout movements with a considerable proportion of the total variation attributable to the impact of sub-national political forces with, generally speaking, constituency forces being more important than provincial or regional-forces. Moreover, while in the context of the entire nation there has been a decline in the strength of national forces and an increase in local and constituency forces, this decline has not been universal or consistent as some provinces during the 1960's electoral period experienced some increase in the relative strength of province-wide political forces.

Still, the evidence points in the direction of strong constituency forces, and we now turn our attention to ascertaining what constituencies seemed to have particularly idiosyncratic movements; that is to say, what constituencies, after the removal of national and provincial forces (a procedure which, as has been explained earlier, must produce only estimates), indicate a great deal of independence from the effects or movements of higher-order levels of the Canadian political system.

Figure 9 indicates the frequency distribution of the scores in total constituency effect over all election-years for each riding in Canada. The immediate impression is that an overwhelming majority of the constituencies (71.5 percent) have scores of less

Figure 9

Frequency Distribution for all Constituencies of Total
Variation in Constituency Effect Scores for Turnout in Six
Canadian General Elections, 1953-1965.
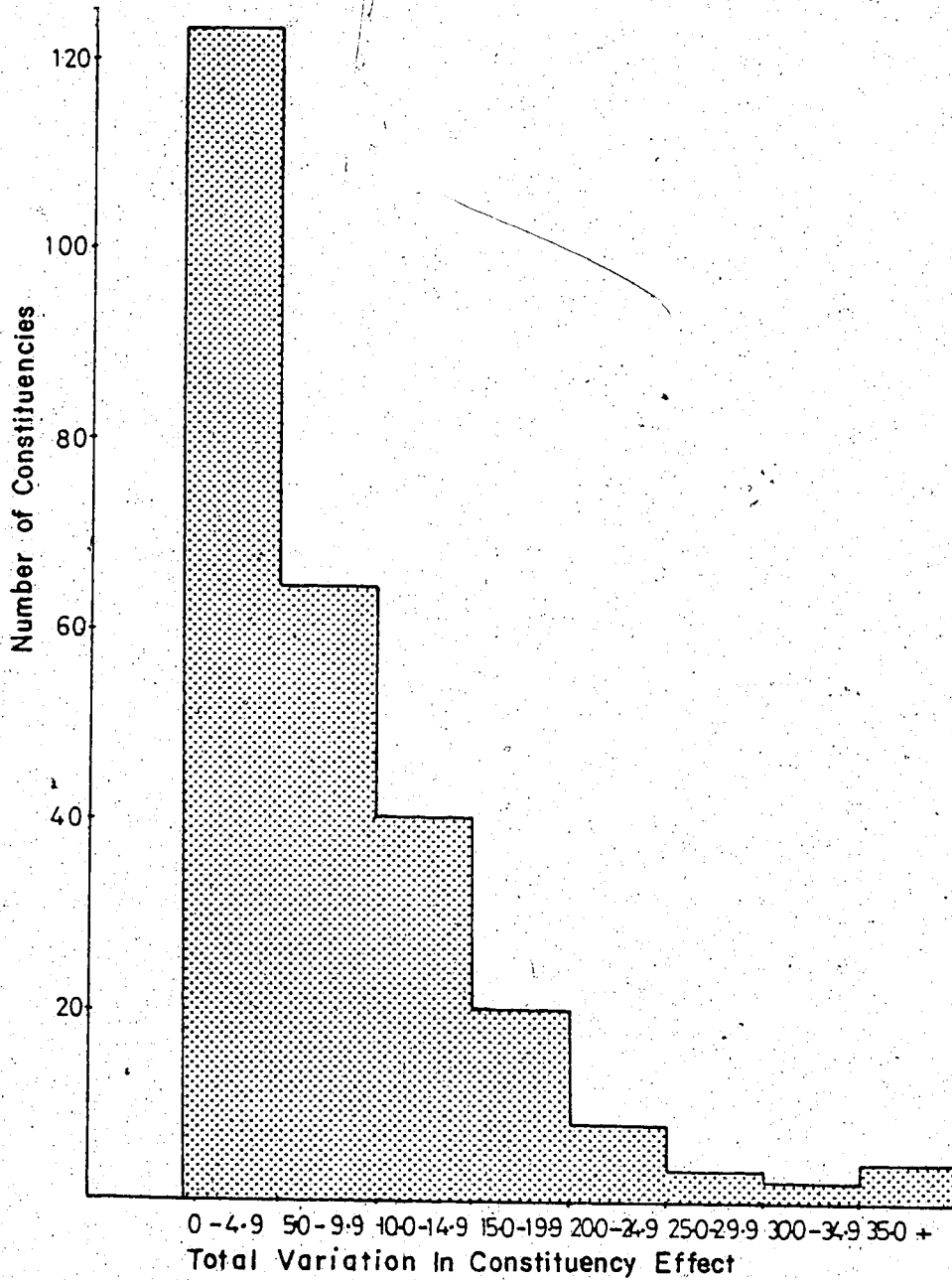
than 9.9 percent; indeed, almost half (46.8 percent) of the

constituencies have only minor total variation, indicating that

they are tied to the movements of higher-order levels of the

political system. Such a constituency is shown in Figure 10

below.
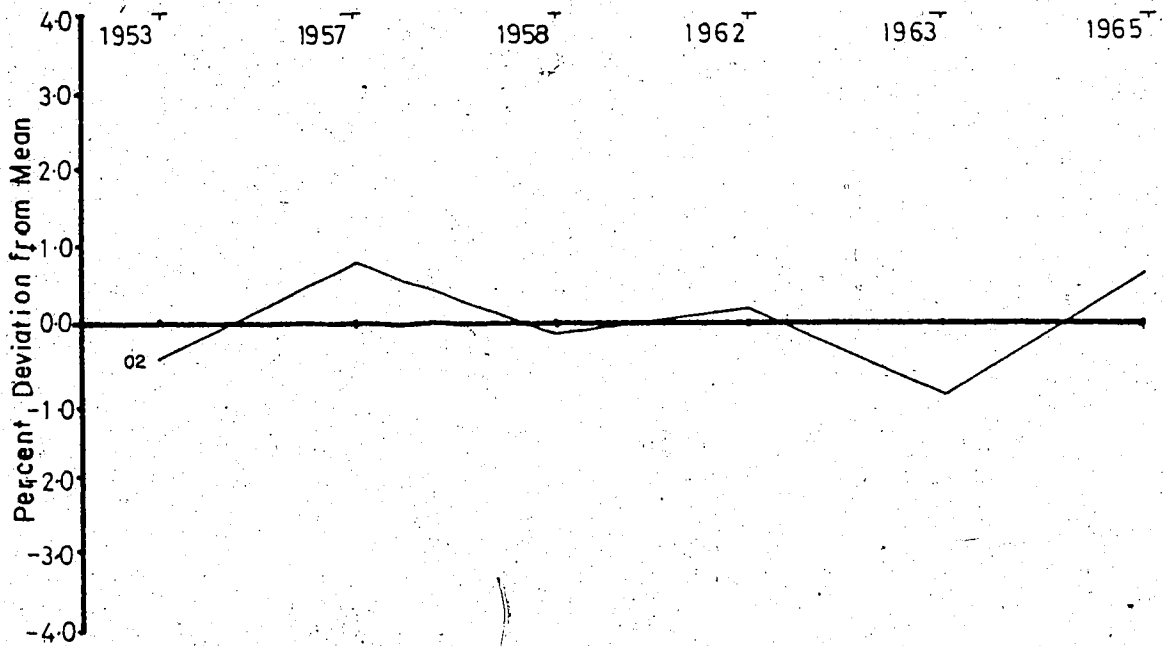
Figure 10

Example of a Constituency With Low Variation in Constituency Effect:
Case of Churchill,Manitoba.

In order to show the distribution of constituencies

across the country, Table 17 presents the provincial percentage

distribution of constituencies along a continuum of low to high

constituency scores. Only four of the provinces - New Brunswick,

Prince Edward Island, Manitoba, and British Columbia - have more

than three quarters of their ridings with total constituency

variation scores of less than 4.9 percent. Somewhat less dramatic,

perhaps, is the fact that only three provinces - Ontario, Quebec,

and Newfoundland - have in relative terms fewer constituencies

located in the 0.0-4.9 percent column of total constituency

variation. On a proportional basis, somewhere in the area of 80

ridings should have total constituency variation scores of less than

4.9 percent instead of the 55 reported here. This differential

proportion reflects another feature of this table that merits

comment: of a total of 263 ridings, 75 (28.5 percent) have total

constituency variation scores greater than 10.0 percent, and the

overwhelming majority of these constituencies are found in the

two provinces of Ontario and Quebec (85.3 percent) which have 60.8

percent of the total ridings under analysis. The two other provinces

with a noticeable concentration of constituencies with high total

constituency variation scores are Nova Scotia and Newfoundland, with

Table 17

Distribution of Constituencies by Total Constituency Variation in Turnout and Province (Percentages).

	Total Constituency Variation						
	0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25+	N
Ontario	36.5	31.8	20.0	7.0	4.7		85
Quebec	29.3	21.3	21.3	13.3	2.7	12.0	75
Nova Scotia	58.3	16.7	8.4	16.7			12
New Brunswick	80.0	10.0	10.0				10
Newfoundland	28.6	42.8	28.6				7
Prince Edward Island	100.0						4
Manitoba	85.7	14.3					14
Saskatchewan	52.9	35.3	5.8		5.8		17
Alberta	52.9	41.2		5.8			17
British Columbia	86.4	4.5	9.1				22
Total	46.8	24.9	15.9	7.2	2.7	3.4	263

randomly distributed across the country. Of the total of 70 ridings located in the four western provinces only five (7.1 percent) - Prince Albert and Saskatoon in Saskatchewan, Peace River in Alberta, and Kootenay West and Skeena in British Columbia - have total constituency variation scores greater than 10.0 percent, while in the eastern half of the country 70 seats have high total constituency variation scores out of a total of 193 ridings (36.2 percent).

While there is a spatial quality to the location of these constituencies, we must also be concerned over whether or not there is any other systematic character to the constituencies noted for high total constituency variation scores.

It might be argued that there would be a systematic relationship between high constituency variation scores and volatility, as measured by the number of times the constituency changed hands, either on the assumption that such constituencies would be more competitive, which would encourage greater local interest and participation, or on the basis that the changeover reflected the impact of differential mobilization of the constituency's electorate over time. Table 18 below tests this possibility by showing the relationship between total constituency variation and the number of times the constituency changed hands during the six elections of the analysis period.

Table 18

Total Constituency Variation Scores for Turnout by Number of Times Constituency Changed Hands, Quebec, 1953-1965

		Total Constituency Variation					
		0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25+	N
	0	7	0	4	4	0	0	15
Number of Times Constituency Changed Hands	1	1	3	2	1	1	1	9
	2	9	8	7	4	1	5	34
	3	3	4	1	1	0	1	10
	4	2	1	2	0	0	2	7
	N	22	16	16	10	2	9	75

The dispersion of the various constituencies throughout the table indicates the lack of any systematic relationship between the two variables. However, it is difficult, if not foolhardy, to utilize any statisitcal measures of association because of the relatively low number of cases in so many of the table's cells. In order to afford some test of the strength of the relationship between the two variables both were collapsed to create a two-by-two matrix, as follows in Table 19:

Table 19

Relationship between Collapsed High Total
Constituency Variation in Turnout Scores by
Number of Times Constituency Changed Hands,
Quebec, 1953-1965.

Total Constituency Variation

		Less Than 9.9	More Than 10.0	N
Number of Times Constituency Changed Hands	0-1	11	13	24
	2-4	27	24	51
		38	37	75

Yule's Q = -.14   Epsilon = -.06

There are obviously a number of ways in which the
various cut-off points or breaks could be made; in this and sub-
sequent tables the strategy will be to use breaks that distribute
cases more or less on an equal basis into each of the two columns.

In this particular case there is a weak negative
relationship between the variables of total constituency variation
in turnout and political competitiveness; indeed, the negative
scores for Yule's Q and Epsilon indicate that those constituencies
with relatively low total constituency variation scores are

slightly more likely to have had greater changes in the winning

party than are those constituencies which have had greater

stability in terms of winners and losers.

Inspection of the various constituencies with very high

total constituency variation scores (that is, greater than 25.0

percent) reveals that 7 of these 9 ridings (all of which are found

in Quebec) are essentially rural in nature (that is to say, most

of the people living in the riding are on farms or in small villages

and there is no population centre of at least 25,000 inhabitants

in the riding) and 1 seat contains a population centre of from

25,000 to 49,999 people (Saint Maurice-Lafleche). Only one

constituency is located within a large urban area (Saint Laurent-

Saint Georges on Montreal Island). It should be noted that 6 of

these rural ridings are in the vicinity of Montreal and 4 of them

lie in a band south of Montreal across the St.Lawrence River.

However, consideration of all constituencies in the Province of

Quebec along the dimension of community size within the

constituencies, as shown in Table 20 below, indicates that there is

only a moderate negative relationship between these two variables.

Table 20

Relationship Between Community Size and
Constituencies with High Total Constituency
Variation in Turnout Scores, Quebec 1953-1965.

Total Constituency Variation

Community Size	0-4.9	5.0-9.9	10.0-14.9	15.0-19.9	20.0-24.9	25.0+	N
Rural	8	10	8	4	1	7	38
25,000-49,999	2	1	3	1	0	1	8
50,000-99,999	1	0	1	1	1	0	4
100,000-299,999	3	1	0	0	0	0	4
300,000-499,999	0	0	0	0	0	0	0
500,000+	8	4	4	4	0	1	21
N	22	16	16	10	2	9	75

Again, because so many cells in the table contain so few cases, it is necessary to collapse some of the categories in order to provide some test of the relationship between the two variables; this is done in Table 21 below.

Table 21

Relationship between Collapsed Community Size and Total Constituency Variation in Turnout Scores: Quebec, 1953-1965.

Total Constituency Variation

Community Size		Less Than 9.9	Greater Than 10.0	N
	Rural to 99,999	22	28	50
	100,000 +	16	9	25
	N	38	37	75

Yule's Q = -.13   Epsilon = -.07

In other words, while there is some tendency for large urban constituencies in the province to have relatively low total constituency variation scores, there are also a number of essentially rural and small-town seats in Quebec which exhibit the same tendency; or, while 36 percent of large urban constituencies have high total constituency variation scores almost one-third of the rural and small-town ridings have such scores, a percentage difference

of not much consequence.

A similar kind of situation exists in the case of Ontario; 3 of the 4 ridings with very high total constituency variation scores are essentially rural in character (the urban exception is the Toronto constituency of Eglinton, which had been fiercely contested by the Progressive-Conservatives and Liberals, especially in the three elections of the nineteen sixties.[3] When the same test is applied to Ontario as was done for Quebec, a contrary result is produced.

Table 22

Relationship between Collapsed Community Size
and Total Constituency Variation in Turnout
Scores: Ontario, 1953-1965.

		Total Constituency Variation		
		Less Than 14.9	Greater Than 15.0	N
Community Size	Rural to 99,999	41	16	57
	100,000 +	17	11	28
	N	58	27	85

Yule's Q = +.25   Epsilon = +.11

The relationship between community size and total constituency variation is moderately negative; there is some tendency for urban constituencies to have high total constituency variation

scores and some tendency for rural and small-town constituencies

to have low total constituency variation scores.

Table 23 below shows the collapsed matrix for pol-

itical competitiveness and constituency variation scores in

Ontario.

Table 23
Relationship between Collapsed Total Constituency Variation in Turnout Scores by Number of Times Constituency Changed Hands, Ontario,1953-1965

Total Constituency Variation

Number of Times Constituency Changed Hands		Less Than 9.9	More Than 10.0	N
	0-1	35	19	54
	2-4	23	8	31
	N	58	27	85

Yule's Q = -.22   Epsilon = -.10

As was the case for Quebec, there is a weak negative

relationship between the variables of political competitiveness

and constituency variation scores in Ontario; that is to say,

constituencies with the lower rate of electoral turnover are more

likely to have high constituency variation scores than are ridings

with a higher rate of electoral change.

Indeed, in three of the four cases negative relationships

were found, indicating that there is not a strong systematic quality

in the hypothesized direction in the distribution of constituencies

within the provinces of Ontario and Quebec in terms of the variables

of political competitiveness and community size.

It is not possible to perform these tests for the

other provinces since, as is evident from Table 17, there is little dispersion in the total constituency variation scores obtained.

The third possible characteristic of those ridings with high total constituency variation scores which we are able to test is that the various constituency movements represent a response to sub-provincial regions which in the analysis so far would appear as constituency movements. One such possibility was alluded to earlier when it was mentioned that four of the Quebec ridings with such scores were located in a band across the St.Lawrence River south of Montreal. In general, however, constituencies with high total constituency variation scores cannot be said to have a clear spatial dimension: in Ontario, for example, the four constituencies with high (20.0 plus) total constituency variation scores are located in diverse parts of the province (Algoma East - Lester Pearson's seat - in Northern Ontario; Leeds in central Eastern Ontario; Glengarry-Prescott in Eastern Ontario on the Quebec border; and Eglinton in Metropolitan Toronto).

It may be that by focusing on those ridings with high total constituency variation scores we miss some general sub-provincial regional movements. In order to allow for this possibility sub-provincial regions in the three largest provinces were created. Ontario was divided into four regions: 11 constituencies in Northern Ontario; 21 ridings in Eastern Ontario; 17 seats in the Toronto-centred region; and 36 constituencies in South-Western

Ontario. Five regions were formed in Quebec: 11 ridings in North-Centre Quebec; 14 seats in the Gaspesia-Northern Quebec area; 6 constituencies in North-West Quebec; 19 ridings in the Eastern Townships; and 25 seats in the Montreal-centred region. British Columbia was divided into two regions: Metropolitan Vancouver with its 12 constituencies and Coastal-Interior British Columbia with 10 ridings. Table 23 shows the constituency variation proportions for the three new regions with the highest regional component for the analysis period plus the Montreal region.

Table 23

New Regions with Low Constituency Variation in Turnout Proportions, And Montreal Region, by Election Year.

	Toronto	Vancouver	Gaspesia-Northern Quebec	Montreal
1953	.06	.15	.34	.95
1957	.26	.49	.99	.96
1958	.90	.06	.74	.60
1962	.18	.93	.84	.93
1963	.13	.10	.59	.97
1965	.22	.41	.42	.74
Average	.29	.36	.65	.86

While the two regions with the lowest average constituency proportion (meaning that they have the largest regional component) are urban in nature, the Montreal-centred region, which is the most

urbanized area of Canada, is in sharp contrast with its very

high constituency proportion. This proportion makes Montreal

resemble the four non-Toronto Ontario regions, all of which have

constituency proportions in the range from .84 to .89, while the

other Quebec regions are in the range from .65 to .77. Toronto

and Vancouver are quite clearly sub-provincial regions of political

significance, particularly when it is noted that the election

years when there was a high constituency proportion - 1958 for

Toronto and 1962 for Vancouver - were the two years with the

lowest total regional variation, indicating that after the removal

of the national effect for that year there was little local

impact in total upon the turnout pattern. Of the remaining regions,

all of which showed high constituency proportions, two - Gaspesia-

Northern Quebec and North-West Quebec - had definite declines in

the constituency proportions in the elections of the 1960's; the

assumption that this trend necessarily points to increased de-

regionalization in Quebec may be too easily taken, as is evident

from Table 24 below.

Table 24

Constituency Variations in Turnout Proportions
for New Regions of Gaspesia-Northern Quebec,
North-Western Quebec and Coastal-Interior
British Columbia by Election Year.

	Gaspesia-Northern Quebec	Western Quebec	Coastal-Interior British Columbia
1953	.34	.86	.76
1957	.99	.80	.90
1958	.74	.99	.78
1962	.84	.73	.62
1963	.59	.63	.38
1965	.42	.54	.97
	.65	.76	.74

The non-Vancouver region of British Columbia had a
steady decline from a constituency proportion of .90 in 1958 to
.38 in 1963 and then a great increase in 1965 to a constituency
proportion of .97; this region also tended to have the smallest
amount of regional variation in each election year and did have the
smallest overall.

This chapter has examined the pattern of movements in turnout in Canada from 1953 to 1965: evidence was presented which indicates that a considerable proportion of the total variation in voter turnout can be attributed to sub-national political forces, which are best seen as being local or constituency in origin. Moreover, when those constituencies which can be identified as having high constituency components are examined, little in the way of systematic relationships can be detected. For over a quarter of the country's ridings, local political forces - which necessarily must remain unmeasured and unexamined in this work - seem to have an important determining influence upon the changes in turnout. As was indicated at the beginning of this chapter, there was considerable fluidity in the overall pattern of turnout in Canada from 1953 to 1965, especially when compared to electoral periods before and after this set of elections. In the next chapters the patterns of party vote movements will be analyzed, which, since there is considerably more variation present than was the case for turnout, should afford us a better picture of sub-national political environments in Canada.

Footnotes

1. All of the contrary regional movements, compared to the
    nation, are:

1958-1962				1962-1963			
Nation	80.07-79.78	=	-.29	Nation	79.78-79.56	=	-.22
Ontario	79.98-80.46	=	+.38	Ontario	80.46-81.31	=	+.85
Prairies	78.60-79.26	=	+.66	Prairies	79.26-79.91	=	+.65
B.C.	75.99-77.28	=	+1.29	B.C.	77.28-80.06	=	+2.78

All of the contrary provincial movements, compared to the
nation, are:

1953-1957				1962-1963			
Nation	68.86-74.96	=	+6.12	Nation	79.78-79.56	=	-.27
Nfl.	57.20-51.34	=	-5.86	Ontario	80.46-81.31	=	+.85
				Manitoba	77.16-77.32	=	+.16
				Alberta	75.28-79.13	=	+3.85
				B.C.	77.28-80.06	=	+2.78

1958-1962				1963-1965			
Nation	80.07-79.7	=	-.29	Nation	79.56-75.56	=	-4.00
Ontario	79.98-80.46	=	+.38	N.S.	82.73-83.24	=	+.51
N.S.	84.77-84.97	=	+.20	P.E.I.	84.67-87.92	=	+3.25
P.E.I.	88.10-89.75	=	+1.65				
Sask.	81.38-84.96	=	+3.58				
Alberta	74.51-75.28	=	+.77				
B.C.	75.99-77.28	=	+1.29				

It should be noted that the above proportions vary slightly from
those reported by the Chief Electoral Officer (data which were
used in the initial pages of this chapter); this discrepancy
is accounted for by rounding errors and the addition to this
analysis, by the procedures outlined in the previous chapter, of
those seats where the Liberals and/or Progressive Conservatives
failed to nominate candidates.

2. Stokes, in commenting about the variance components of turnout in the United States, makes the following observations: "Fully 86 percent of the variance of turnout is due to national effects...(which)...shows that the great contests for the presidency have extraordinary importance in getting people to the polls...". Later, he notes that "the magnitudes of the national and state turnout components make clear that vast numbers of people are drawn to the polls (or kept away) by statewide or presidential races...". Donald E. Stokes, "A Variance Components Model of Political Effects," in John M. Claunch, ed., Mathematical Applications in Political Science, I (Dallas, 1969), 76,77.

3. See Brian Land, Eglinton: The Election Study of a Federal Constituency (Toronto, 1965); also Denis Smith, "The Campaign in Eglinton," in John Meisel, ed., Papers on the 1962 Election (Toronto, 1964), 68-90.

Chapter Five

Variance Components of Liberal and Progressive
Conservative Share of Two-Party Vote in Canadian
General Elections, 1953-1965.

In this chapter, the pattern of movement in the vote

received by the two largest Canadian political parties - the Liberals

and the Progressive Conservatives - will be analyzed through the

application of the analysis of variance model to the vote

proportions for the parties in the Canadian general elections from

1953 to 1965. A general comparison of the relationship between

the regions and the provinces and the nation as a whole will be

followed by a specific presentation of the results produced by

the application of the model.[1]

From 1953 to 1965, the Liberal and Progressive

Conservative proportions of the two-party vote showed an impressive

amount of volatility: the Liberal vote ranged from a low of

38.5 percent in 1958 to a high in 1953 of 63.6 percent, while the

Conservative vote ranged from 36.4 percent in 1953 to 61.5

percent in 1958, a range for each party of 25.1 percent. This

amount of variation in the vote proportions should be contrasted

with the comparable figures for the elections before and after

this period of electoral history. In the four elections from 1935

to 1949, the range in the two-party vote was 3.0 percent; even in

1921 to 1930, when the Canadian political system was feeling the
sudden emergence of parties which challenged the electoral
dominance of the Liberals and Conservatives, the range was only
11.2 percent; and the range for all 8 elections from 1921 to
1949 was 16.7 percent. In the three elections from 1968 to 1974,
the range was 6.7 percent.

Clearly, then, the six elections from 1953 to 1965
were characterized by considerable fluctuation in the vote. It
remains to be seen whether or not the total variation in the
two-party vote can be attributed to national political forces or
to lower-order levels of the political system. If there is a
relative weakness in the influence of national political forces -
over time and/or compared to the experiences of other political
systems - the concern shifts to what areas of the country seemed
to have greater and lesser impact on the overall variation in
two-party vote. Specifically the question is whether or not these
sub-national political forces can be best conceptualized as arising
out of the various regions or provinces or constituencies of the
political system. And is there reason to argue that during the
period of analysis there has been an increase or decrease in the
weights given to national political forces and lower-order political
forces?

The general relationship between the regions and the

provinces and the nation as a whole in the movements in the two-party vote proportions is expressed in Figures 1 and 2 which show the proportions respectively for regions and the nation and provinces and the nation for the analysis period. Generally speaking, the movements of the various sub-national levels correspond to the national movement in that when the nation as a whole is falling so are the provinces and the regions, and when the national proportion is rising so are the proportions for regions and provinces.[2]

While it is apparent that there is a high degree of parallelism between the national movement and the movements for regions and provinces, it is also the case, since so many of the lines in Figures 1 and 2 cross over each other, that there have been a number of important changes from 1953 to 1965 in the spatial nature of party competition in Canada, changes which are more fully shown in Tables 1 and 2 below.

Figure

Liberal Share of Two-Party Vote by Nation and Regions in Six Canadian
General Elections, 1953-1965.
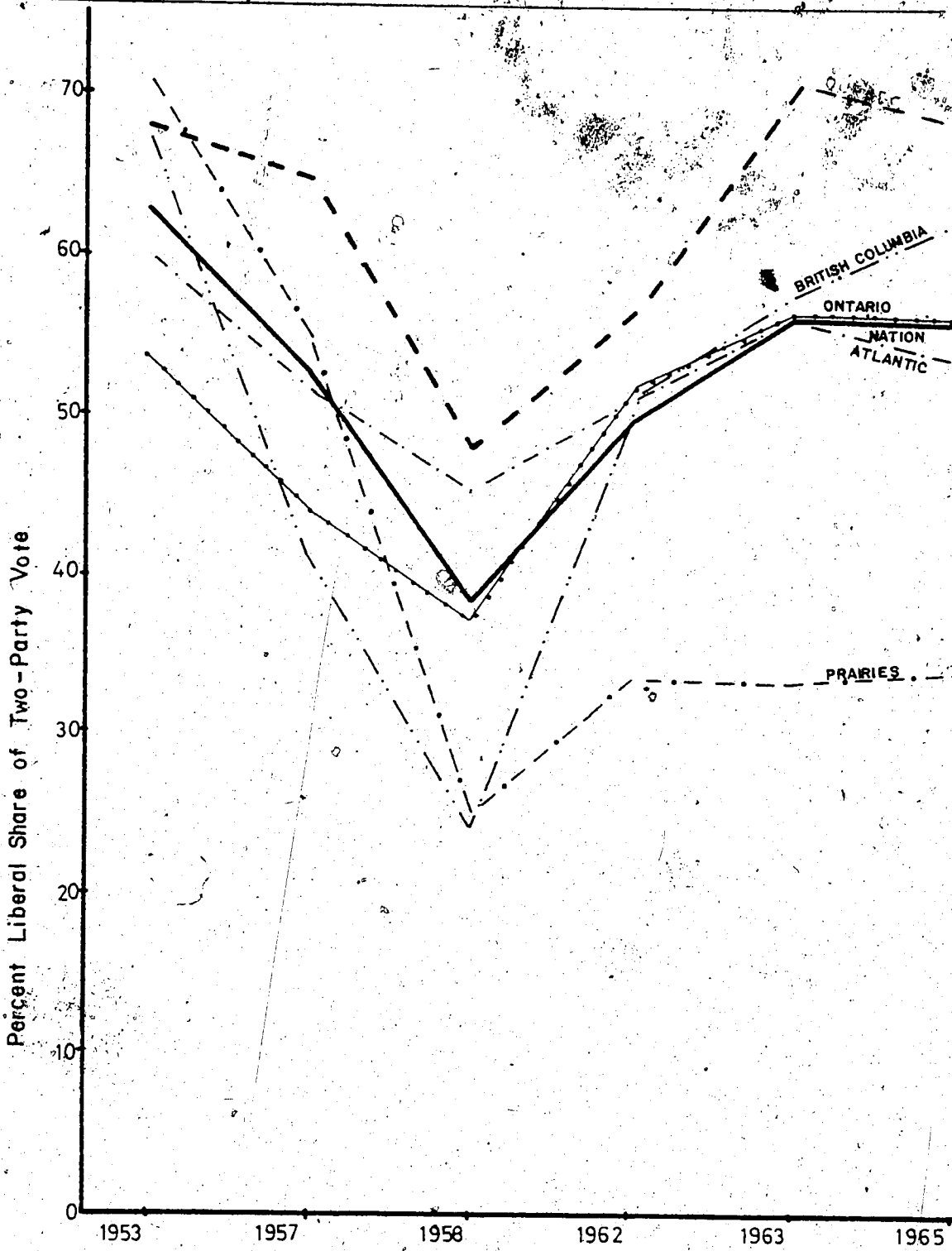
Figure 2

Liberal Share of Two-Party Vote by Nation and Provinces in Six Canadian General Elections, 1953-1965.
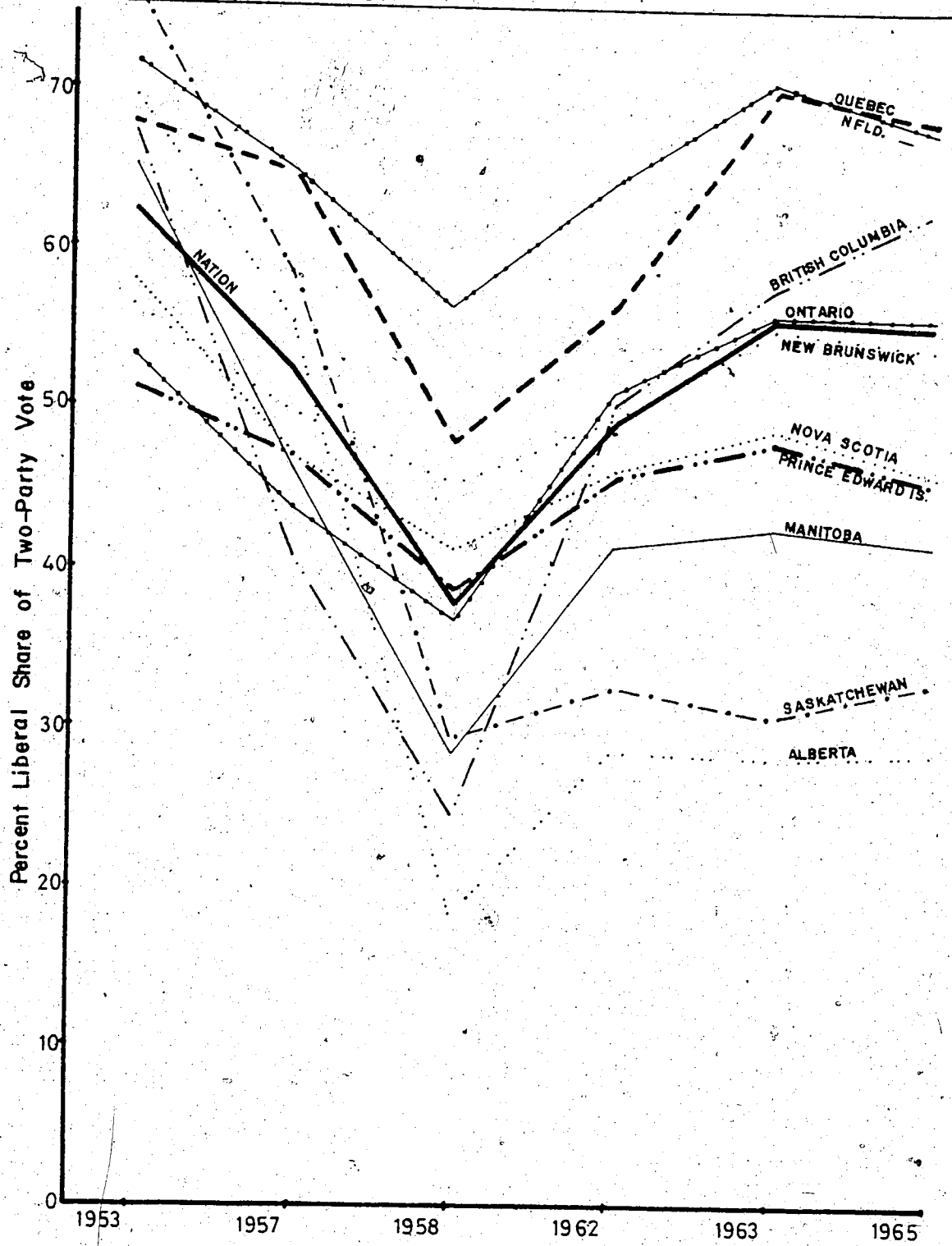
Table 1

Ranking of Regions by Liberal Proportion of
Two-Party Vote, by Election Year and Overall

	1953	1957	1958	1962	1963	1965	Overall
1	Pra.	Que.	Que.	Que.	Que.	Que.	Québec
2	Que.	Pra.	Atl.	Atl.	B.C.	B.C.	Atlantic
3	B.C.	Atl.	Ont.	Ont.	Ont.	Ont.	British Columbia
4	Atl.	Ont.	Pra.	B.C.	Atl.	Atl.	Ontario
5	Ont.	B.C.	B.C.	Pra.	Pra.	Pra.	Prairies
	8	6	4	2	4	4	Summation of Each Unit's Deviation in Election Year from Overall Rank
		6	4	2	4	0	Summation of Each Unit's Change in Rank in Election Year Compared to Previous Rank

Table 2

Ranking of Provinces by Liberal Proportion of
Two-Party Vote, by Election Year and Overall.

1953	1957	1958	1962	1963	1965	Overall
Sask.	Que.	Nfl.	Nfl.	Nfl.	Que.	Newfoundland
Nfl.	Nfl.	Que.	Que.	Que.	Nfl.	Quebec
Alta.	Sask.	N.S.	Ont.	B.C.	B.C.	New Brunswick
Que.	Alta.	N.B.	B.C.	Ont.	Ont.	British Columbia
B.C.	N.B.	P.E.I.	N.B.	N.B.	N.B.	Ontario
Man.	N.S.	Ont.	N.S.	N.S.	N.S.	Nova Scotia
N.S.	P.E.I.	Sask.	P.E.I.	P.E.I.	P.E.I.	Prince Edward Island
N.B.	Man.	Man.	Man.	Man.	Man.	Manitoba
Ont.	Ont.	B.C.	Sask.	Sask.	Sask.	Saskatchewan
P.E.I.	B.C.	Alta.	Alta.	Alta.	Alta.	Alberta
						Summation of Each
34	26	16	4		6	Unit's Deviation
						in Election Year
						from Overall Rank
						Summation of Each
	20	22	16	2	2	Unit's Change in
						Rank in Election
						Year Compared to
						Previous Rank

The bottom two lines of each table indicate that there
is greater variability between provinces than there is between
regions, especially in the first three elections of the analysis
period. In the regional table what is particularly noteworthy is
the fall of the Prairie region from an area of Liberal strength to
weakness and a relative increase in Liberal strength in British
Columbia from 1957 to 1965. The provincial table shows these
trends even more dramatically, particularly in the case of the
provinces of Saskatchewan and Alberta where the Liberals in the
early 1950's could claim an overwhelming percentage of the two-
party vote, but this dominance dissipated under the electoral
onslaught of John Diefenbaker, somewhat in 1957 and especially in
1958, so that by the 1960's these two provinces were the poorest
support areas for the Liberals in Canada. In both provinces, the
Liberal proportion of the two-party vote dropped some 40 to 45
points from 1953 to the elections of the 1960's. Liberal support,
on the other hand, increased in British Columbia from a low of
40.7 percent in 1957 to 62.2 in 1965.

The argument was made in the previous chapter that in
the case of turnout the national/regional format tended to obscure
important differential movements below the level of the region. One
test of this claim was a comparison between the regions and
provinces with the lowest and highest turnout proportions, which

indicated that there was far greater variability or spread in the
case of provinces than for regions.

Table 3

Percentage Differences Between Highest and Lowest
Units, by Regions and Provinces, by Election Years
and Overall Elections, by Turnout and Liberal
Proportion of Two-Party Vote.

Turnout

	1953	1957	1958	1962	1963	1965	Overall
Province	26.1	34.2	13.6	18.0	16.4	22.6	21.2
Region	7.2	2.5	8.0	5.2	4.1	6.9	4.4
	18.9	31.7	5.6	12.8	12.3	15.7	16.8

Liberal Proportion of Two-Party Vote

	1953	1957	1958	1962	1963	1965	Overall
Province	22.9	24.2	38.3	36.1	43.0	40.0	24.7
Region	17.2	23.2	13.5	33.6	37.0	34.4	20.9
	5.7	1.0	24.8	2.5	6.0	5.6	3.8

While provinces represent the greatest amount of spread

between highest and lowest units, the difference between regions and

provinces for the Liberal proportion of the two-party vote is

considerably less than was produced in the case of turnout, with

the exception of the 1958 election, where there was the least amount

of difference between regions and provinces in the turnout proportions

and the greatest amount in the Liberal vote.

The general picture that can be drawn of the relationship

between the nation as a whole and its regions and provinces is that while there is a considerable degree of parallelism in the movements of the Liberal proportion of the two-party vote, especially as measured by the number of contrary movements which occurred during this period, at the same time, a number of important shifts took place in the relative rankings of regions and provinces in the proportion of the two-party vote taken by the Liberal party. However, we have not yet been able to attach any weight to the impact of these non-parallel movements and shifts in the relative placement of provinces and regions: in order to accomplish this end the analysis now will focus upon the results of the application of the analysis of variance model to changes in the Liberal proportion of the two-party vote from 1953 to 1965. Table 4 shows the variance components in the Liberal two-party vote from 1953 to 1965 for the national, provincial, and constituency levels of the political system.

Table 4

Components of Variance of Liberal Proportion of
Two-Party Vote in Six Canadian Elections from
1953-1965, by Nation, Province and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	67.0715	8.1897	.37
Province	56.8981	7.5431	.31
Constituency	56.8593	7.5405	.31
			.99

The three levels of the political system account for
almost equal proportion of the total variation in the Liberal
share of the two-party vote, with the level of the nation being
able to account for slightly more than one-third of the total
variation and the provinces and the constituencies each accounted
for 31 percent. The national-regional-constituency format for the
Liberal share of the two-party vote produced almost similar.
proportions for the three levels of the political system as the
national-provincial-constituency format in this case and all
other cases of the party vote tables; for ease of reading these
tables will not be reproduced here.

When the Canadian case is compared to the American and
British examples, as analyzed by Stokes, and the Australian case,
as studied by Aitkin, a different pattern emerges. Tables 5 to 7
show the data reported by Stokes and Aitkin.

Table 5

Components of Variance of Republican Percent of Two-Party Vote for the American House of Representatives from 1952-1960, by Nation, State and District.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	9.32	3.05	.32
State	5.32	2.31	.19
District	13.98	3.74	.49
			1.00

Source: Donald E. Stokes, "Variance Components Model of Political Effects," in John M. Claunch, ed., Mathematical Applications in Political Science, 1 (Dallas, 1969), 76.

Table 6

Components of Variance of Conservative Percent of Two-Party Vote for the Six British General Elections from 1950-1966, by Nation, Region, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	5.13	2.26	.47
Region	1.42	1.19	.13
Constituency	4.45	2.11	.40
			1.00

Source: Donald E. Stokes, "Parties and the Nationalization of Political Forces," in W.N.Chambers and W.D.Burnham, eds., The American Party System: Stages of Political Development (New York, 1967), 188.

Table 7

Components of Variance of Labour Percent of Two-Party Vote for the
Five Australian Federal Elections from 1955-1966, by Nation,
State, and Division.

Political Level	Variance Componer	Normalized Variance Component
▶ Nation	9.04	.38
State	4.24	.18
Division	10.49	.44
		1.00

Source: Don Aitkin, "Electoral Forces in Federal Politics,"
paper presented to the Tenth Annual Meeting of the Australasian
Political Studies Association, University of Tasmania, August,
1968.

Only in the case of the United Kingdom does the nation

as a whole represent the largest single source of variation in

the two-party vote. In the case of Australia and, even more so,

of the United States, constituency-level political forces are

apparently of greater consequence, although the range in the

constituency-level proportions in the United States, Australia,

and the United Kingdom is less than 10 percentage points. Of

the four political system for which we have comparable data, the

constituency level in Canada has the lowest proportion of the total

variation in two-party vote. However, what is particularly

noteworthy is that the provinces in Canada constitute the middle-

level of all the political systems which accounts for the largest

proportion of the total variation. The relatively large magnitudes
in the Canadian case reflect, of course, the enormous transformation
of the Canadian party system brought about by the rise of John
Diefenbaker to power in the elections of 1957 and 1958. What is
not clear, however, from what has been presented so far is whether
or not the nation can be considered to be a relatively weak source
of political influence in the pattern of party vote movements for
the entire analysis period. Tables 8 and 9 below report the
variance components for the Liberal percent of the two-party
vote, by nation, province, and constituency, from 1953-1958,
and 1962 to 1965, respectively.

Table 8

Components of Variance of Liberal Percent of Two-Party Vote in
Three Canadian Federal Elections from 1953-1958, by Nation,
Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	152.1181	12.3336	.62
Province	50.8729	7.1325	.21
Constituency	41.7147	6.4587	.17
			1.00

Table 9

Components of Variance of Liberal Percent of Two-Party Vote in Three Canadian Federal Elections from 1962-1965, by Nation, Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	12.7873	3.5759	.25
Province	9.0048	3.0008	.18
Constituency	29.6546	5.4456	.58
			1.01

These tables indicate that there was a clear and startling difference in the nature of electoral politics in Canada in the 1950's compared to the three elections of the 1960's. In the first decade, the national level was accountable for a large proportion of the total variation, to a much greater extent than was reported for any other system, greater than reported for turnout in Canada from 1953-1965, and exceeded only by the nation's contribution to the total variation in turnout in the United States from 1952-1960 and the national share of the total variation in turnout in Canada from 1953-1958.[3] In stark contrast to the pre-eminence of the nation in the 1950's is the importance of constituency level factors - which are able to claim 58 percent of the variation in two-party vote -- and the relative impotence of the nation - which is able to account for only one-quarter of the

variation and is followed closely by the level of provinces. It might be argued that constituency level forces become proportionately more important in times of relative political stability and maintenance of existing patterns of behaviour, as is evidenced in Canada during the three elections of the 1960's by the relatively low amount of total variation in the Liberal share of the two-party vote; conversely, in times of considerable movements in behaviour that the influence of higher-order levels of the political system become more influential. Or, in other words, in the absence of c⬛⬛⬛n from the events, issues, and personalities involved in⬛⬛⬛nal political life, then the electorate becomes inf⬛⬛⬛by those things which have less in common with other parts of the country, those things which are idiosyncratic and particular to the local ridings. It should be noted, however, without attempting to test this argument, that the United Kingdom (Table 6) has the lowest amount of total variation recorded by any scholar using this type of statistical analysis, and has in relative terms a large proportion of the total variation attributed to the national level of the political system.

This pattern of relative weakness of the nation upon movements in the two-party vote and increasing de-nationalization from the 1950's to the 1960's is similar to what was reported previously for turnout, except that the national share of the.

partitioning of the total variation tends to be lower in the case

of the two-party vote analysis. It is now necessary to provide

more specific backing to the contention that sub-national areas

constitute significant political environments. This will be done

in a number of different ways. Since our concern is with those

areas - regions and provinces - which acted in highly congruent

or non-isomorphic ways , compared to the national movement, the

covariance terms, which were discussed in greater detail in

Chapter Three, will be used to indicate those regions or provinces

which are disproportionately attracted or repelled by the

political forces arising from the higher level of the political

system. Table 10 below gives the covariance scores for regions

and provinces which indicate the greatest amount of attraction and

repulsion.

Table 10

Covariance Scores for Liberal Percent of Two-Party Vote for the
Six Canadian General Elections from 1953-1965, by Regions and
Provinces.

Regional/National		Provincial/National	
Atlantic	-30.7703	New Brunswick	-35.8681
Ontario	-17.2537	Prince Edward Island	-34.9272
Prairies	+32.5503	Nova Scotia	-29.0542
British		Newfoundland	-24.0544
Columbia	+53.2511		
		Manitoba	+19.0987
		Saskatchewan	+31.1276
		Alberta	+45.0504
		British Columbia	+53.2511

The four easternmost provinces and the four western-most provinces - which show increasing positive covariance scores from Manitoba to Britsh Columbia - seem to be in two different worlds: The Atlantic provinces, both individually and collectively, show a strong tendency to be divergent from the time-specific national trend and the four western provinces show a strong contrary trend (although there is considerable distance between them, even if the three prairie provinces are considered separately from British Columbia). The various movements that constitute these covariance scores are shown in Figures 3 and 4 which give the regional/national and provincial/national time-specific movements respectively.

Figures 3 and 4 show the highly differentiated movements at specific points in time for the various regions and provinces. It bears noting that the Atlantic region and the province of Nova Scotia both exhibit consistently con-tradictory or non-congruent time-specific two-party move-ments: the other three Atlantic provincial time-specific movements were compatible with the national time-specific movements in only one election of the six under analysis. How-ever, the other provinces - particularly the 3 Prairie prov-inces have quite distinctive time-specific movements in the 1950's and 1960's, as is shown in Table 11, which gives the

Figure 3

National-Regional Time-Specific Values for Liberal Share of Two-Party Vote in Six Canadian General Elections, 1953-1965.

-163-
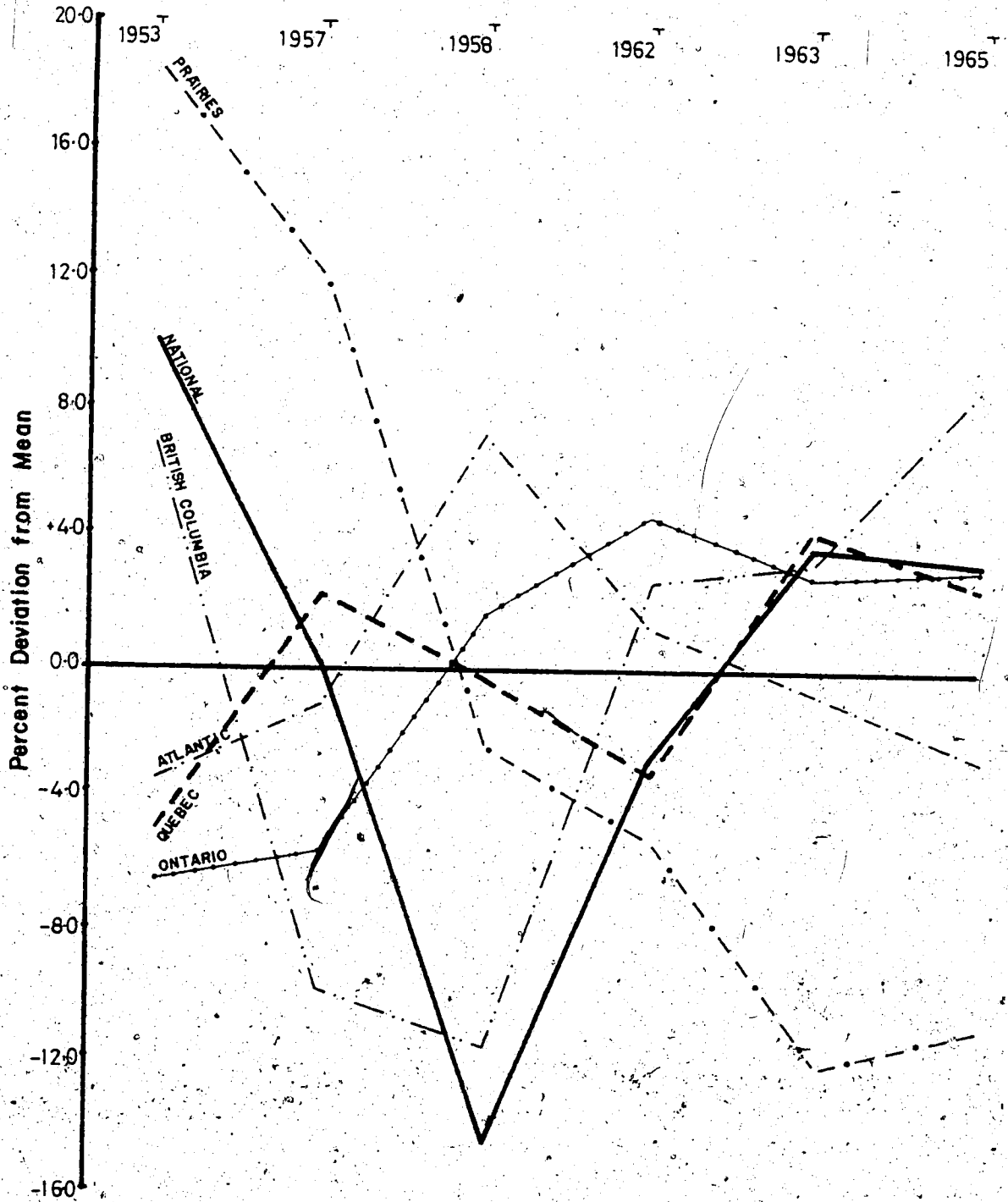
Figure 4

National-Provincial Time-Specific Values for Liberal Share of Two-Party
Vote in Six Canadian General Elections, 1953-1965.
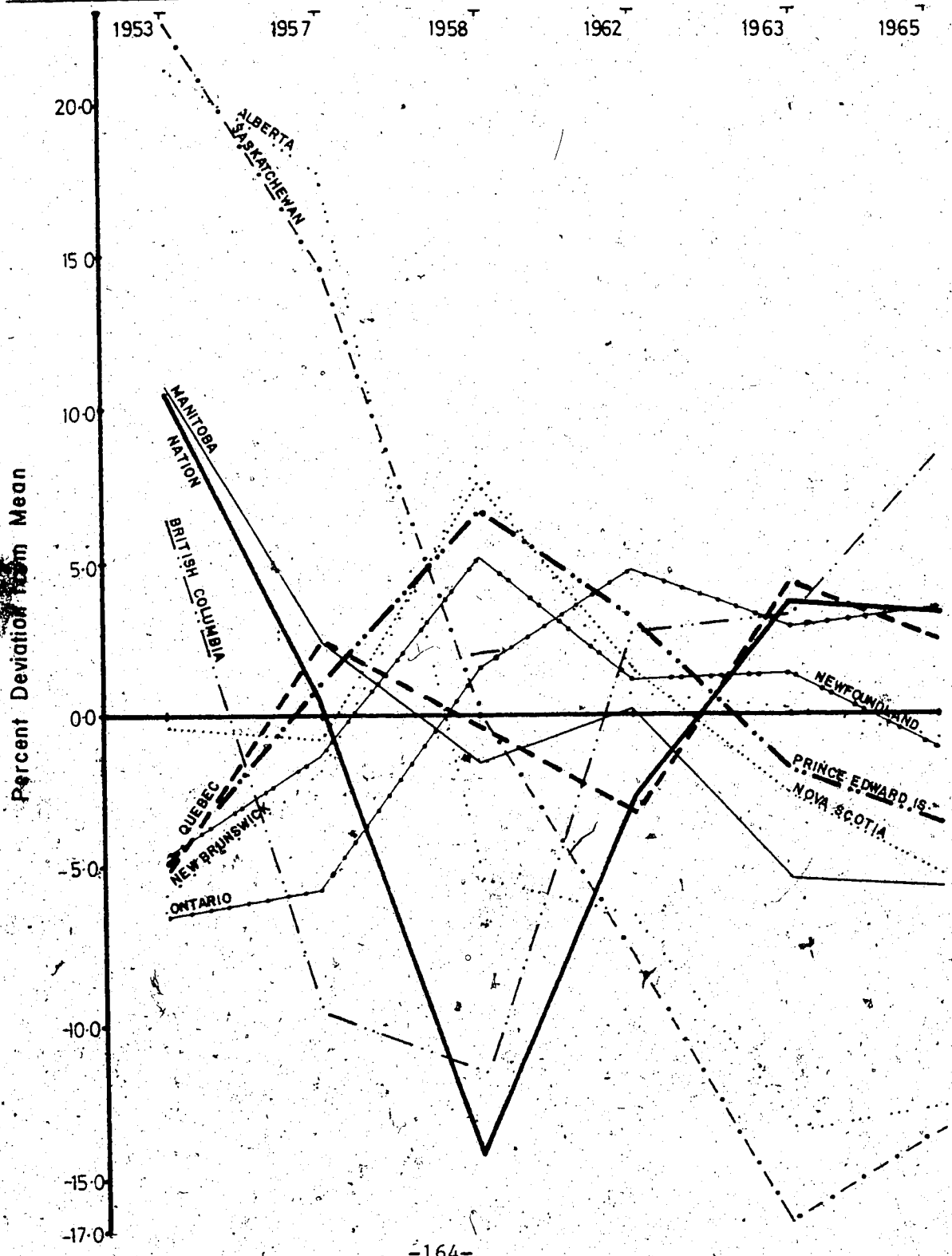
covariance scores for regions. and provinces by the election time-periods of the 1950's and 1960's.

Table 11

Covariance Scores for Liberal Percent of Two-Party Vote for the Three Canadian General Elections from 1953-1958 and 1962-1965, by Regions and Provinces.

	1953-1958		1962-1965
		Regional/National	
Atlantic	-67.1727	Prairies	-13.7244
Ontario	-52.9757	Atlantic	- 6.5530
Quebec	-26.1727		
		Ontario	- 3.5366
British Columbia	+108.1999	British Columbia	+ 6.2193
Prairies	+131.5978	Quebec	+13.8510

		Provincial/National	
New Brunswick	-87.4513	Saskatchewan	-15.2431
P.E.I.	-71.9438	Alberta	-13.8349
Newfoundland	-59.1441	P.E.I.	-12.1221
Nova Scotia	-53.3669	Manitoba	-11.7461
Ontario	-52.9757	Nova Scotia	-10.9234
Quebec	-26.3707		
		Ontario	- 3.5366
Manitoba	+73.7185	New Brunswick	- 2.0482
British Columbia	+108.1999	Newfoundland	- 2.3140
Saskatchewan	+141.5469	British Columbia	+6.2193
Alberta	+169.1999	Quebec	+13.8510

There is a substantial difference, in the magnitudes of the covariance scores for the 1950's to the 1960's: the highest covariance score in the latter time-period is less than the lowest score in the former set of elections, indicating a strong

tendency for the regions and provinces not to have highly

differentiated movements from the national level.

The other important feature of these covariance scores

is the reversal that has occurred in the relationship between

regions and provinces and the nation. While the Prairie Liberal

time-specific movement in the 1950's followed strongly the

national Liberal time-specific movement, the region's movement

in the 1960's considerably less in magnitude, is now

negatively connected with the national movement. The Quebec

region has a similar pattern of reversal, except that the change

is from a negative to a positive relationship: In the case of

the Prairie provinces, all three followed the regional pattern of

changing from having a strongly positive connection with the

national time-specific movement to having a negative association

with the nation.

The analysis to this point has been in terms of the

nation as a whole and the various regions and provinces. Nothing

has been said about particular constituencies; yet these must be

regarded as being of great consequence, especially in the 1960's,

given that such a large proportion of the total variation in the

Liberal share of the two-party vote has been attributed to this

level of the political system. This constituency level analysis

will begin with the relationship between the constituencies of the

Atlantic and Prairie regions and the nation, then to the

constituencies and all the provinces, their characteristics, and,

finally, the pattern of movements in the regional analyses for the

provinces of Ontario, Quebec, and British Columbia.

Figures 5 and 6 indicate the time-specific movements

in the Liberal vote for randomly selected constituencies in the

Atlantic and Prairie regions of Canada after the removal of

national political forces. In other words, the curves show the

influence of regional and lower-order (provincial and constituency)

factors. When this analysis was done in the case of turnout, the

image created was of pervasive heterogeneity in the various

constituency movements indicating a very low regional factor or

influence on turnout. The case of the two-party pattern, however,

is somewhat different, particularly in the case of the Prairie

region, as the constituency movements exhibit some degree of

parallelism, which is taken to be evidence of a regional factor.

Th s regional movement in the Prairie provinces is further evidenced

by an examination of the overall time-specific regional movement

and the various time-specific constituency movements which indicate

that only three constituencies — Winnipeg South, Winnipeg South

Centre, and Calgary South - of the 48 Prairie ridings moved in a

direction generally contradictory to the region as a whole, as is

evident from their respective constituency-region covariance scores

of -56.9623, -66.6087, and -80.0761. The other riding with a

Figure 5

Regional Variance Component Moderate: Movements in Liberal Share of,
Two-Party Vote for Randomly Selected Constituencies in Atlantic
Region (after Removal of National Effects) in Six Canadian General
Elections, 1953-1965.
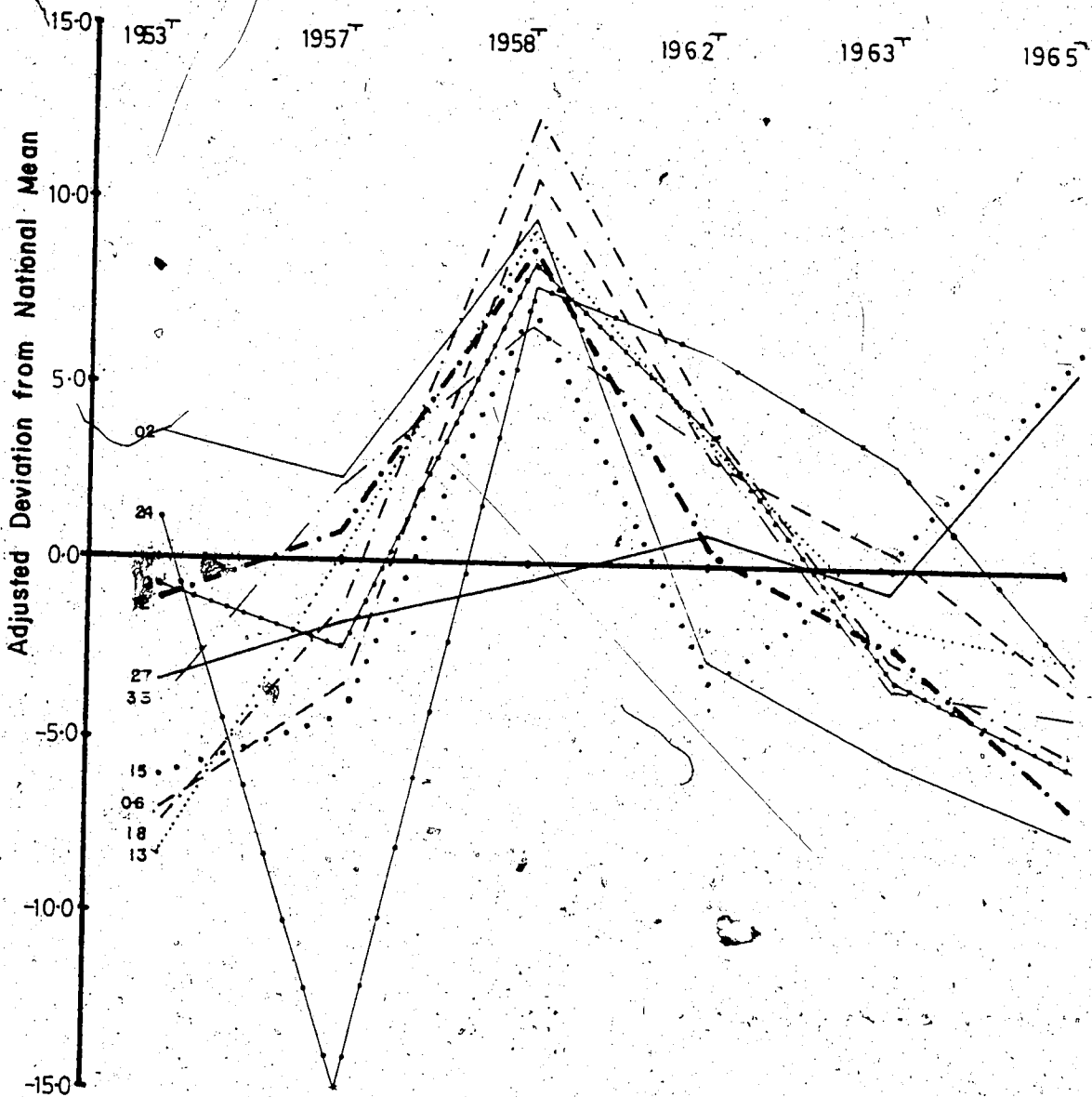
Figure 6

Regional Variance Component Large: Movements in Liberal Share of Two-Party Vote for Randomly Selected Constituencies in Prairie Region (After Removal of National Effects) in Six Canadian General Elections, 1953-1965.
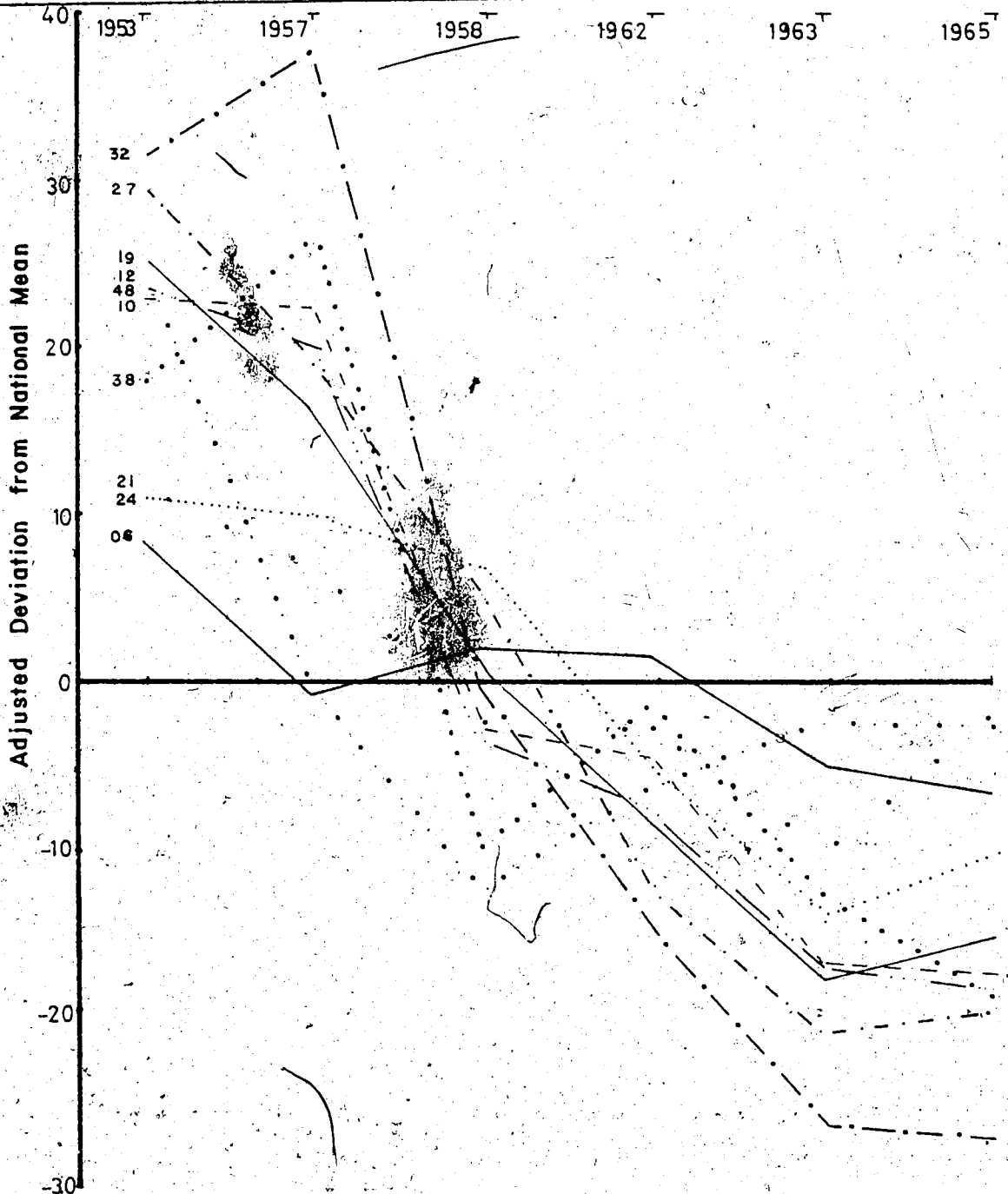
noticeable tendency - although not as consistent as the previous

three cases - to deviate from the regional trend was Calgary North,

with its covariance score of -42.4284. This tendency for some

urban constituencies in the Prairies to give greater support to

the Liberals while the region as a whole was moving away did not

extend to the three urban constituencies of Edmonton-Edmonton East,

Edmonton Strathcona, and Edmonton West - which had covariance

scores of +241.1152, +88.2497 and +91.9841 and the two large

urban centres of Saskatchewan - Regina and Saskatoon - which had

covariance scores, respectively of +192.2619 and +83.5332; in

sum, then, while some of the large urban ridings of the Prairie

provinces moved in the direction of greater proportional support

for the Liberals, other constituencies, similar at least in terms

of the degree of urbanization, moved in the direction of greater

support for the Progressive Conservatives.

Tables 12 and 13 below show the overall relationship

between the Atlantic and Prairie regions and their ridings for the

six elections from 1953-1965.

Table 12

Total Regional and "Constituency" Variation in Liberal Proportion
of Two-Party Vote for Atlantic Region,1953-1965

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953	231.5	153.0	.66
1957	116.7	107.7	.92
1958	401.5	68.5	.17
1962	53.8	42.7	.79
1963	112.8	107.6	.95
1965	157.8	101.5	.64
			.69

Table 13

Total Regional and "Constituency" Variation in Liberal Proportion
of Two-Party Vote for Prairie Region,1953-1965

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953	4645.9	1318.2	.28
1957	2830.9	1425.6	.50
1958	284.7	234.9	.82
1962	622.5	361.9	.58
1963	2186.8	763.4	.35
1965	1799.5	619.9	.34
			.48

Other than for the exception of the 1958 election,
the Atlantic Region's movement was dominated by forces arising
from below the region as a whole. The impact of the region is
much more evident in the Prairies where, except for the 1958
election, constituency and provincial political forces tended to
be weaker than was found in the Atlantic region: indeed, in five
of the six elections under analysis the "constituency" proportion
recorded for the Prairie region did not reach the lowest
proportion given for the Atlantic region. Moreover, since the
1958 election, there has been a decline in the weight of
constituency-level forces, although not to a level below that
recorded for 1953. What is particularly interesting about the
presence of these regional political forces, particularly in the
Prairie provinces, is that the comparable analysis for turnout
revealed quite a different set of results, namely, the relative
absence of regional forces and the predominance of provincial and
constituency influences. In other words, while the region as a
whole had little to do with whether or not people turn out to vote
it was very influential in determining the direction of the vote
once they arrived at the polling station.

Just as there was considerable range in the proportion
of the variation within a province that could be attributed to
provincial-level forces in the case of turnout, there were a
number of important differences between the provinces in the case
of the Liberal share of the two-party vote. Table 14 gives the

Table 14

Proportion of Total Variation in Liberal Percent of Two-Party Vote Within Provinces Attributable to Constituency-Level Factors, 1953-1965.

	Quebec	Manitoba	Nfl.	New Brunswick	Ontario	B.C.	Nova Scotia	Alta.	Sask.	PEI
1953	.80	.50	.47	.24	.44	.66	.99	.24	.13	.06
1957	.94	.94	.92	.78	.46	.37	.81	.38	.18	.78
1958	.99	.92	.32	.14	.86	.24	.12	.30	.99	.04
1962	.77	.99	.86	.93	.33	.81	.80	.48	.13	.001
1963	.85	.57	.79	.99	.79	.80	.44	.36	.10	.41
1965	.94	.55	.96	.93	.77	.41	.17	.32	.17	.20
Overall	.88	.78	.72	.67	.61	.55	.54	.35	.28	.22

proportion of the total variation of the Liberal vote within the
various provinces that is ascribed to the constituency level of
the political system (the difference from unity equals, of course,
the provincial component of the total variation).

There is very little evidence in Table 14 of secular
changes in the pattern of constituency - and provincial-level
political forces. Manitoba showed a decline in the impact of
constituency forces in the last two elections of the 1960's from
the elections of 1958, 1962, and 1963 (but still failed to reach
the low mark of .50 recorded in 1953). Newfoundland and Ontario
to a lesser extent during the course of the six elections, seemed
to be more and more influenced by constituency-level forces.
Nova Scotia had a long-term (that is from 1953-1965) decline in
constituency forces from .99 to .17, but also recorded a
proportion of .80 in 1962. Alberta, Saskatchewan, and Prince
Edward Island generally all adhered to a pattern of dominance by
provincial forces. Although Alberta was the only province never
to have a constituency proportion greater than .50, British
Columbia showed a moderate decline in the weight of constituency
forces from 1953 to 1965, but the trend was drastically broken in
the 1962 and 1963 elections. Quebec maintained the most consistent
pattern by holding to a very high level of constituency proportions
during the six elections with the smallest range of all 10 provinces
(followed by Alberta). Indeed, the overall pattern is of considerable

fluidity in the relative dominance of constituency - and provincial-level political forces as the other eight provinces had ranges for the constituency proportions of at least 50 points while Quebec and Alberta had ranges of 22 and 24 points respectively.

A comparison of Table 14 with Table 16 in Chapter Four, as presented below in Table 15, indicates that there is little relationship between the rank-order placement of the provinces by average constituency proportion of the variation within the province for turnout and Liberal percent of the two-party vote.

Table 15

Rank-Order of Provinces by Proportion of Variation Attributable to Constituency Level Factors for Turnout and Liberal Percent of Two-Party Vote, Overall Elections.

	Constituency-Proportion	
	Turnout	Liberal Percent of Two-Party Vote
Ontario	(1) .94	(5) .61
Quebec	(2) .82	(1) .88
Saskatchewan	(3) .67	(9) .28
Nova Scotia	(4) .62	(7) .54
British Columbia	(5) .58	(6) .55
New Brunswick	(6) .52	(4) .67
Manitoba	(7) .52	(2) .78
Alberta	(8) .47	(8) .35
Newfoundland	(9) .39	(3) .72
P.E.I.	(10) .37	(10) .22

Spearman's Rank-Order Coefficient = +.22

Four sets of scores show great differences in proportions across the two dimesnions: Ontario and Saskatchewan show a great drop in the weight attached to constituency-level forces for Liberal share of the two-party vote compared to turnout while Newfoundland and Manitoba exhibit contrary movements, as is evident from Figure 6, which gives the association between the two dimensions in terms of the actual proportions.

In sum, since the Pearson correlation coefficient shows a weak to moderate relationship, meaning that there is not a great tendency for the amount of variation within a province along one dimension that can be attributed to the level of the constituency (or, for that matter, the level of the province) to be similar - whether measured by ranks or proportions - to the other dimension. Indeed, only Prince Edward Island and Alberta at the low constituency-proportion end and Quebec at the high constituency end show great constancy across both dimensions.

Figure 8 shows the frequency distribution of all the ridings by the total variation in constituency effect for the Liberal percent of the two-party vote from 1953 to 1965. It is immediately apparent that a considerable number of ridings (35, or 13.3 percent) have very high constituency variation scores and that only 93 (35.4 percent) have scores lower than 19.9. The riding with the highest total constituency variation

Figure 7

Relationship between Constituency Proportion of Turnout and Constituency
Proportion of Liberal Share of Two-Party Vote, by Province, Over Six
Canadian General Elections, 1953-1965.
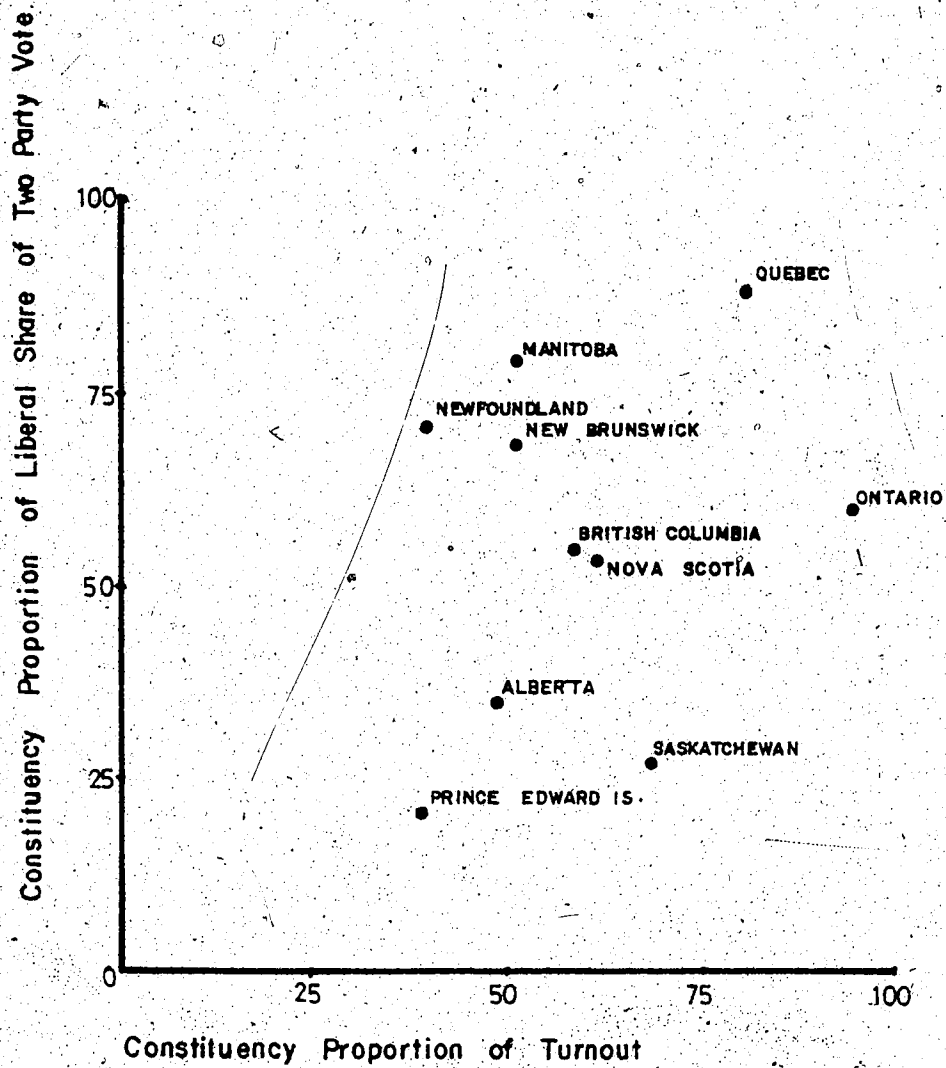
PEARSON CORRELATION COEFFICIENT (r) = +0.23

Figure 8

Frequency Distribution for all Constituencies of Total Variation in
Constituency Effect Scores for Liberal Share of Two-Party Vote in
Six Canadian General Elections, 1953-1965.
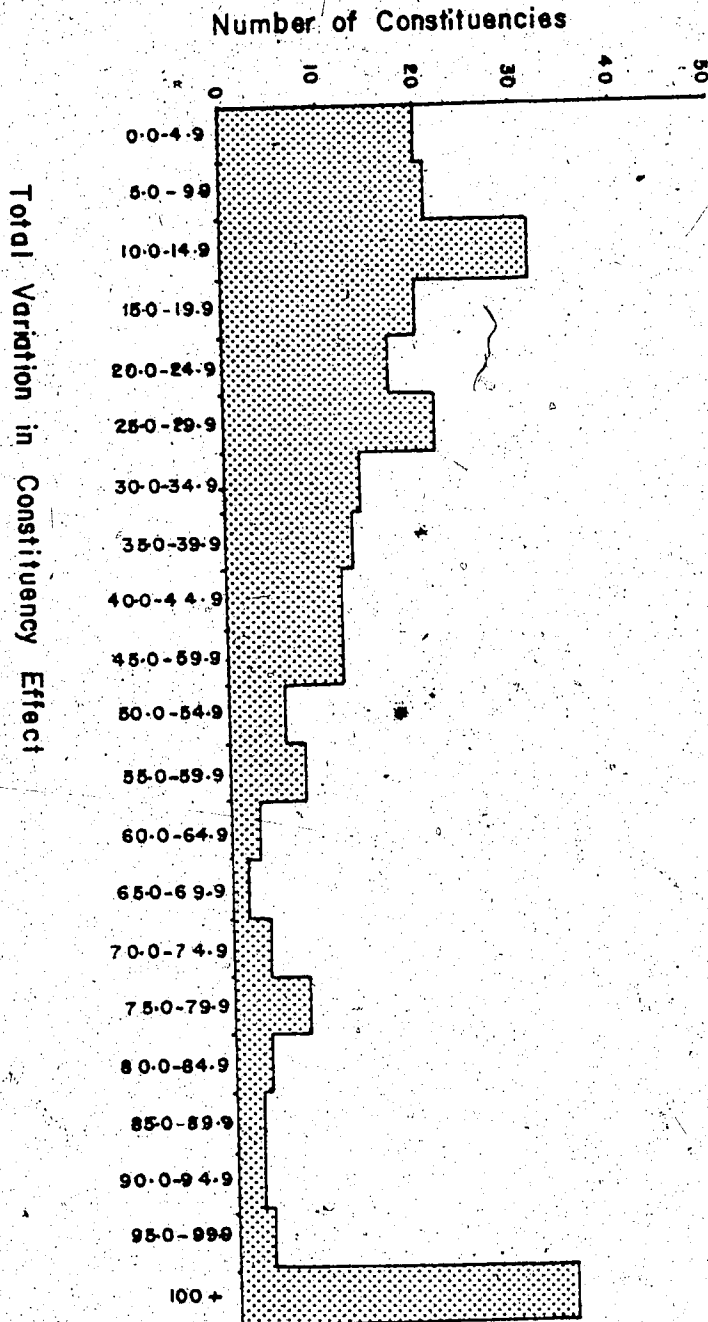
was the Quebec seat of Saint Hyacinthe-Bagot (670.2). Even, then,

after the removal of national and provincial effects almost two-

thirds' of the total constituencies in Canada can be considered to

constitute environments with some significant influence in the

proportions of the two-party vote obtained by the Liberal and

Progressive Conservative parties. The distribution of these

constituencies is not random, that is, they are concentrated in

certain provinces, as is evident in Table 16, which gives the

distribution by provinces of total constituency variation scores.

Table 16

Distribution of Total Variation in Constituency Effect, Liberal Percent of Two-Party Vote, by Province, 1953-1965 (Horizontal Percentages).

	Total Constituency Variation						
	0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100.0+	N
Ontario	43.5	36.5	10.6	5.9	3.5	0	85
Quebec	16.0	26.7	17.3	5.3	8.0	26.7	75
Nova Scotia	91.7	0	8.3	0	0	0	12
New Brunswick	80.0	10.0	10.0	0	0	0	10
Newfoundland	71.4	0	28.6	0	0	0	7
P.E.I.	100.0	0	0	0	0	0	4
Manitoba	42.8	0	21.4	7.1	0	28.5	14
Saskatchewan	29.4	23.5	17.6	17.6	0	11.8	17
Alberta	11.8	29.4	11.8	0	17.6	29.4	17
British Columbia	13.6	22.7	22.7	9.1	13.6	18.2	22
Total	35.4	25.0	14.8	5.7	5.7	13.2	263

The great majority of constituencies in the Atlantic region have relatively low total constituency variation scores (reflecting, perhaps, the great attachment to party loyalties in that region). Manitoba and Ontario tend to be similar in their distribution of constituencies, while the three westernmost provinces - particularly Alberta and British Columbia - tend to be similar to Quebec inasmuch as a large proportion of their ridings have total variation in constituency effect scores which are in the high range. It should also be noted that Quebec has 20 of the 35 seats (57.1 percent) which have constituency variation scores of over 100.00 points.

As in the case of turnout, these constituency scores are examined in light of political competitiveness (as measured by the number of times the constituency changed hands during the six elections) and the size of the communities which dominate the ridings. Table 17 below shows the relationship between political competitiveness and constituency variation scores for Liberal share of the two-party vote in the Province of Quebec.

Table 17

Constituency Variation Scores for Liberal Percent of the Two-Party Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100.0+	N
Number of Times Constituency Changed Hands	0	5	4	2	1	2	1	15
	1	0	1	1	1	1	5	9
	2	5	10	8	2	0	10	35
	3	2	3	1	0	3	1	10
	4	0	2	1	0	0	3	6
		12	20	13	4	6	20	75

The large number of cells with few or no cases means that the categories must be collapsed in some fashion before any measure of association can be used. This is done in Table 18.

Table 18

Relationship between Collapsed Total Constituency Variation Scores for Liberal Percent of the Two-Party Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		Total Constituency Variation		
		0.0-39.9	40.0+	N
Number of Times Constituency Changed Hands	0-1	10	14	24
	2-4	22	29	51
	N	32	43	75

Yule's Q = -.03   Epsilon = -.01

The virtual absence of any relationship between the variables of political competitiveness and constituency variation scores for Liberal share of the two-party vote in Quebec matches the   finding reported in Chapter four for the relationship between political competitiveness and turnout constituency variation scores for the province of Quebec.

Table 19 below shows the distribution of Quebec constituencies by size of community and total constituency variation scores.

Table 19

Total Constituency Variation Scores for Liberal Percent of the
Two-Party Vote by Community Size, Quebec, 1953-1965.

	Total Constituency Variation						
Community Size	0-0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100.0+	N
0-24,999	4	10	7	1	4	12	38
25,000-49,999	0	3	1	1	0	3	8
50,000-99,999	1	0	1	1	0	1	4
100,000-299,999	1	1	0	0	1	1	4
300,000-499,999	0	0	0	0	0	0	0
500,000+	6	6	4	1	1	3	21
N	12	20	13	4	6	20	75

What is immediately apparent is that while there is some
diffusion through the various community-size categories, a majority
of ridings with very high constituency variation scores (100.0+) are
found in essentially rural constituencies, and there is also some
tendency for those ridings with low total constituency variation
(less than 19.9) to come from the very large urban area of Montreal.
Table 20 below gives the two-by-two matrix for total constituency
variation scores and community size.

Table 20

Relationship between Collapsed Constituency Variation Scores
for Liberal Percent of the Two-Party Vote by Community Size,
Quebec, 1953-1965.

	Total Constituency Variation		
Community Size	0.0-39.9	40.0+	N
0-99,999	18	31	49
100,000+	14	12	26
N	32	43	75

Yule's Q = -.33   Epsilon = -.16

In other words, the moderately negative relationship between the two variables means that the rural and small-town constituencies have a greater proportion of ridings with high total constituency variation scores than do the seats dominated by the more populous communities of the province. This relationship is similar to but stronger than was reported earlier for the case of turnout.

Table 21 below shows the relationship between constituency variation scores for Liberal percent of the two-party vote by political competitiveness for the province of Ontario.

Table 21

Constituency Variation Scores for Liberal Percent of the Two-Party Vote by Number of Times Constituency Changed Hands, Ontario, 1953-1965.

		Constituency Variation Scores					
		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0+	N
	0	18	8	2	0	0	28
Number of times Constit- uency Changed Hands	1	5	15	2	2	2	26
	2	12	7	5	1	1	26
	3	2	1	0	1	0	4
	4	0	0	0	1	0	1
	N	37	31	9	5	3	85

When this table is collapsed, the following two-by-two matrix is created.

Table 22

Collapsed Constituency Variation Scores for Liberal Percent of the Two-Party Vote by the Number of Times Constituency Changed Hands, Ontario, 1953-1965.

		Constituency Variation Scores		
		0.0-19..9	20.0+	N
Number of Times Constituency Changed Hands	0-1	23	31	54
	2-4	14	17	31
	N	37	48	85

Yule's Q = -.08   Epsilon = -.04

As was the case for the province of Quebec, there is in Ontario virtually no relationship between constituency variation scores and political competitiveness, that is to say, those constituencies which had few changes in the winning party during the analysis were slightly more likely than ridings with a greater degree of electoral change to have higher total constituency variation scores.

Table 23 below gives the relationship between the uncollapsed constituency variation scores for the Liberal share of the two-party vote in Ontario in terms of community size.

Table 23

Constituency Variation Scores for Liberal Percent of the Two-Party
Vote by Community Size, Ontario, 1953-1965.

		0.0– 19.0	20.0– 39.9	40.0– 59.9	60.0– 79.9	80.0 +	N
	0– 24,999	18	15	3	1	1	38
	25,000– 49,999	3	3	0	1	0	7
	50,000– 99,999	8	2	2	0	0	12
Community Size	100,000– 299,999	5	1	1	0	0	7
	300,000– 499,999	0	3	0	0	0	3
	500,000– +	3	7	3	3	2	18
	N	37	31	9	5	3	85

Again, the low number of cases in the various cells
necessitates that the two categories be collapsed in order to
allow for some measure of the relationship; this is done in
Table 24.

Table 24

Relationship between Collapsed Constituency Variation Scores
for Liberal Percent of the Two-Party Vote by Community Size,
Ontario, 1953-1965.

	Constituency Variation Scores		
Community Size			N
0- 99,999	29	28	57
100,000+	8	20	28
N	37	48	85

Yules Q = +.44 Epsilon = +.20

There is quite a strong relationship in the case of

Ontario between total constituency variation in the Liberal share

of the two-party-vote and community size. Rural and small-town

constituencies are more likely to have relatively low constituency

variation scores than do the more urbanized constituencies of the

province: conversely, the more urban ridings have a tendency to

have relatively high total constituency variation scores compared to

the rural and small-town seats. This relationship is contrary to

what was reported for the Province of Quebec, where the rural and

small-town constituencies had a tendency to have high total

constituency variation scores compared to the more urban ridings.

A number of difficulties are encountered in attempting

to analyze the relationship between political competitiveness or

community size and the total constituency variation in the Liberal

share of the two-party vote for some of the other provinces because of either little variation in the variables of political competitiveness and/or community size or because there is only a slight range in the total constituency variation scores; analysis is made more problematic because of the relatively low number of constituencies in some of the Atlantic provinces, namely Newfoundland and Prince Edward Island. Table 25 give the Yule's Q and Epsilon scores for the relationship between the dichotomized variable of political competitiveness and the dichotomized variable of total constituency variation scores.[4]

Table 25

Yule's Q and Epsilon Values for Collapsed Constituency Variation Scores for Liberal Percent of the Two-Party by Number of Times Constituencies Changed Hands (Political Competitiveness); New Brunswick, Nova Scotia, Manitoba, and British Columbia, 1953-1965.

	Political Competitiveness by Constituency Variation Scores		
	Yule's Q	Epsilon	Dichotomized Constituency Variation Scores
New Brunswick	-.75	-.35	0-9.9/10.0+
Nova Scotia	-.67	-.38	0-9.9/10.0+
Manitoba	+.87	+.58	0-59.9/60.0+
British Columbia	-.86	-.52	0-59.9/60.0+

In three of the provinces - New Brunswick, Nova Scotia, and British Columbia - there is a negative relationship between the

variables of political competitiveness and total constituency variation in the Liberal proportion of the two-party vote (and considerably stronger than was reported for either Ontario or Quebec); in other words, for these provinces, those constituencies which underwent a relatively high number of changes in the winning party tended to have relatively low total constituency variation scores, while a very strong and contrary relationship occurs in Manitoba, where the stable seats have relatively low total constituency variation in the Liberal share of the two-party vote.

One of the chief concerns of this work is the argument that sub-national political environments constitute significant influences upon the pattern of voter turnout and party vote. Evidence has been presented to the effect that provinces and constituencies can be considered as environments that counteract national political forces in sufficient weight to produce provincial or constituency deviations from higher-order proportions. The question that now arises is whether or not there is a high degree of constancy from 1953-1965 between those ridings which recorded high total constituency variation scores for turnout and those seats which had high total constituency variation scores for the Liberal proportion of the two-party vote. This relationship is tested in Table 26 which gives the Pearson Correlation coefficient (r) for total constituency variation scores for turnout and Liberal share of the two-party vote for each constituency by province.

Table 26

Relationship between Total Constituency Variation Scores for
Turnout and Liberal Percent of the Two-Party Vote for All
Constituencies by Province, 1953-1965

	r	N
Prince Edward Island	+0.9289	4
Saskatchewan	+0.6077	17
Nova Scotia	+0.5137	12
New Brunswick	+0.3780	10
British Columbia	+0.3417	22
Quebec	+0.3084	75
Ontario	-0.0954	85
Manitoba	-0.2424	14
Alberta	-0.3587	17
Newfoundland	-0.5210	7

In six of the provinces - ranging from Prince Edward
Island to Saskatchewan, Nova Scotia, New Brunswick, British
Columbia, and Quebec - there is a positive association between the
total constituency variation scores for turnout and Liberal per-
cent of the two-party vote: in other words, those constituencies
which had relatively high total constituency variation scores for
turnout were very likely to have relatively high total constituency
variation scores for the Liberal share of the two-party vote. In
three provinces - Newfoundland, Alberta, and Manitoba - there is a
negative relationship between the two variables, and in Ontario
there is a weak negative relationship. The strongest result, that of
Prince Edward Island's, is misleading inasmuch that the double-
member constituency of Queens was divided into two ridings, which,
in this instance, would inflate the obtained r value.

In order to allow for the possibility that high total constituency variation scores may obscure the presence of sub-provincial regions within the provinces of Quebec, Ontario, and British Columbia, each province was partitioned into a number of sub-provincial regions. Table 27 below gives the constituency variation proportions within each region for the three new regions with the highest regional component over all six elections plus the Montreal region.

Table 27

New Regions with Low Constituency Variation Proportions, and Montreal Region, by Election Year.

	Toronto	Vancouver	Eastern Ontario	Montreal
1953	.13	.76	.21	.91
1957	.04	.12	.50	.84
1958	.22	.20	.22	.94
1962	.14	.33	.36	.61
1963	.07	.37	.92	.85
1965	.11	.27	.96	.99
	.12	.34	.53	.86

The two metropolitan regions of Toronto and Vancouver have relatively low constituency proportions indicating the presence of a sub-provincial regional factor in these areas; it is interesting to note that only in the election of 1953 in Vancouver

did the constituency proportion exceed .50; Montreal, Canada's

largest urban area, on the other hand, has relatively high

constituency proportions. No test of whether or not this high

proportion can be accounted for by English-French differences in

the Montreal metropolitan area will be reported here.

The total constituency variation scores for the Liberal

share of the two-party vote can be examined in one more manner:

the covariance scores - which relate the time-specific movements

of one level to the time-specific movements of another level -

provide a summary measure of whether or not, say, the constituency

and the nation can be seen as moving in highly congruent or highly

divergent directions or if the two time-specific movements are

not systematically related. The three possible sets of movements

are shown respectively in Figures 9, 10, and 11 which give the

time-specific movements for two Ontario constituencies compared to

the national time-specific movement in the Liberal percent of the

two-party vote.

The curves in Figure 9 clearly show that the time-

specific movements for the constituencies of Hamilton East and

Spadina are closely related to the national movement: generally

speaking, when the national deflection in the Liberal share of

the two-party vote is positive or negative, so are the time-

specific movements for the constituencies. A contrary image

is struck in Figure 10 where the time-specific movements for Algoma

East and Renfrew North generally are in the opposite direction of the

Figure 9

Two Examples of High Positive Nation-Constituency Covariance Scores
for Liberal Share of Two-Party Vote (Hamilton East and Spadina,
Ontario), for Six Canadian General Elections, 1953-1965.
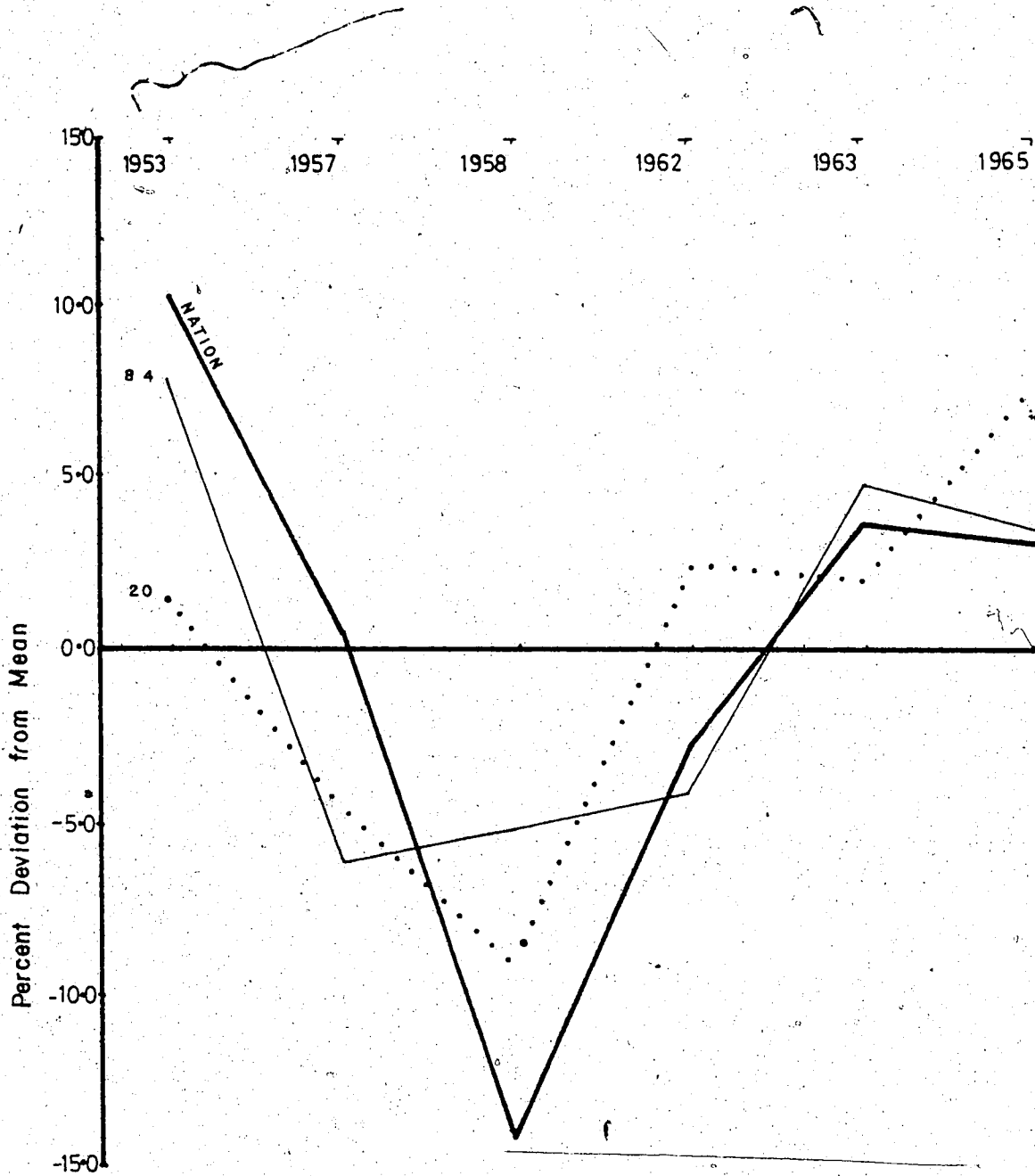
Figure 10

Two Examples of High Negative Nation-Constituency Covariance Scores
for Liberal Share of Two-Party Vote (Algoma East and Renfrew North,
Ontario), for Six Canadian General Elections, 1953-1965.
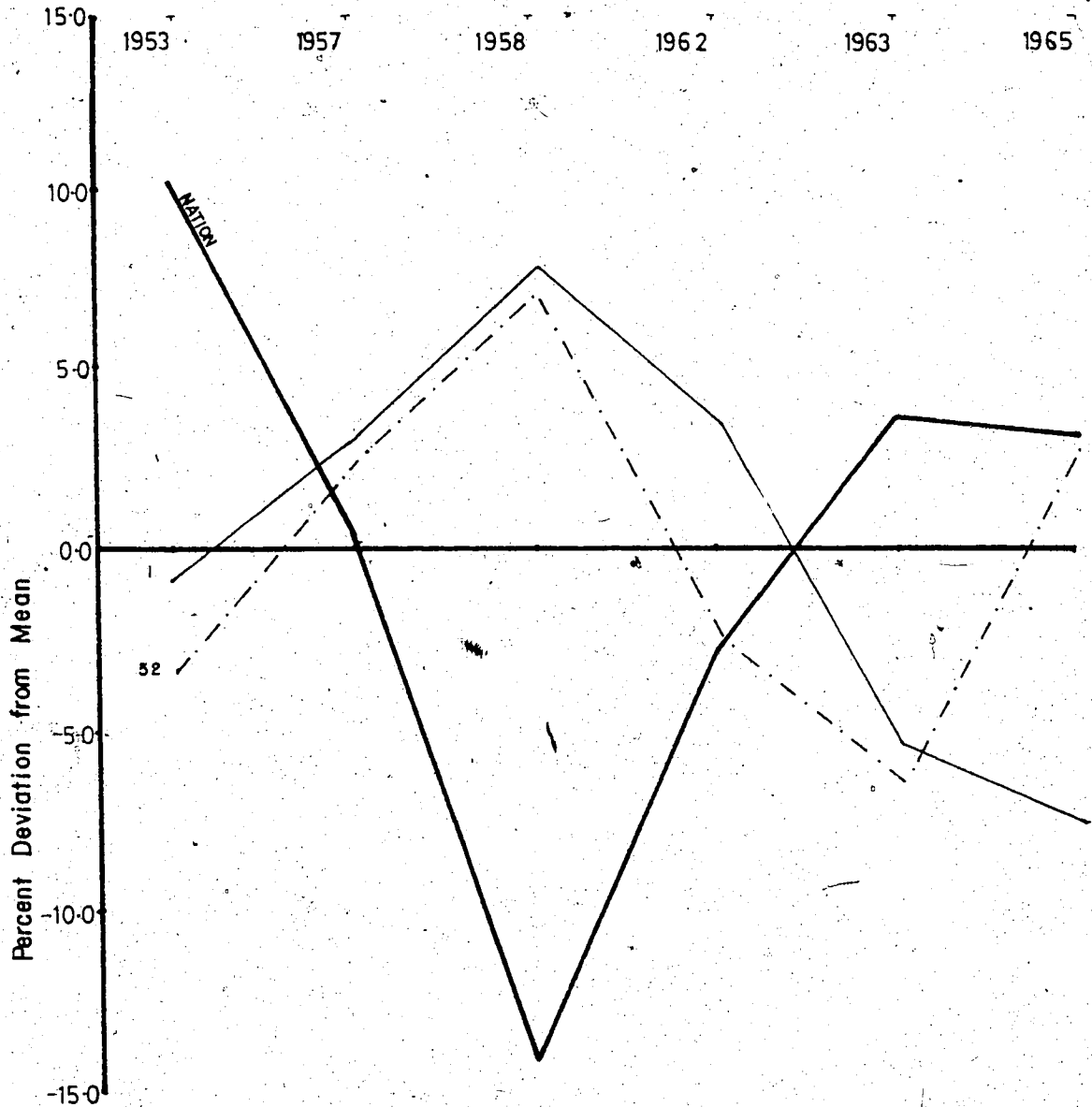
Figure 11

Two Examples of Low Nation-Constituency Covariance Scores for Liberal Share of Two-Party Vote (Perth and Fort William, Ontario), for Six Canadian General Elections, 1953-1965.
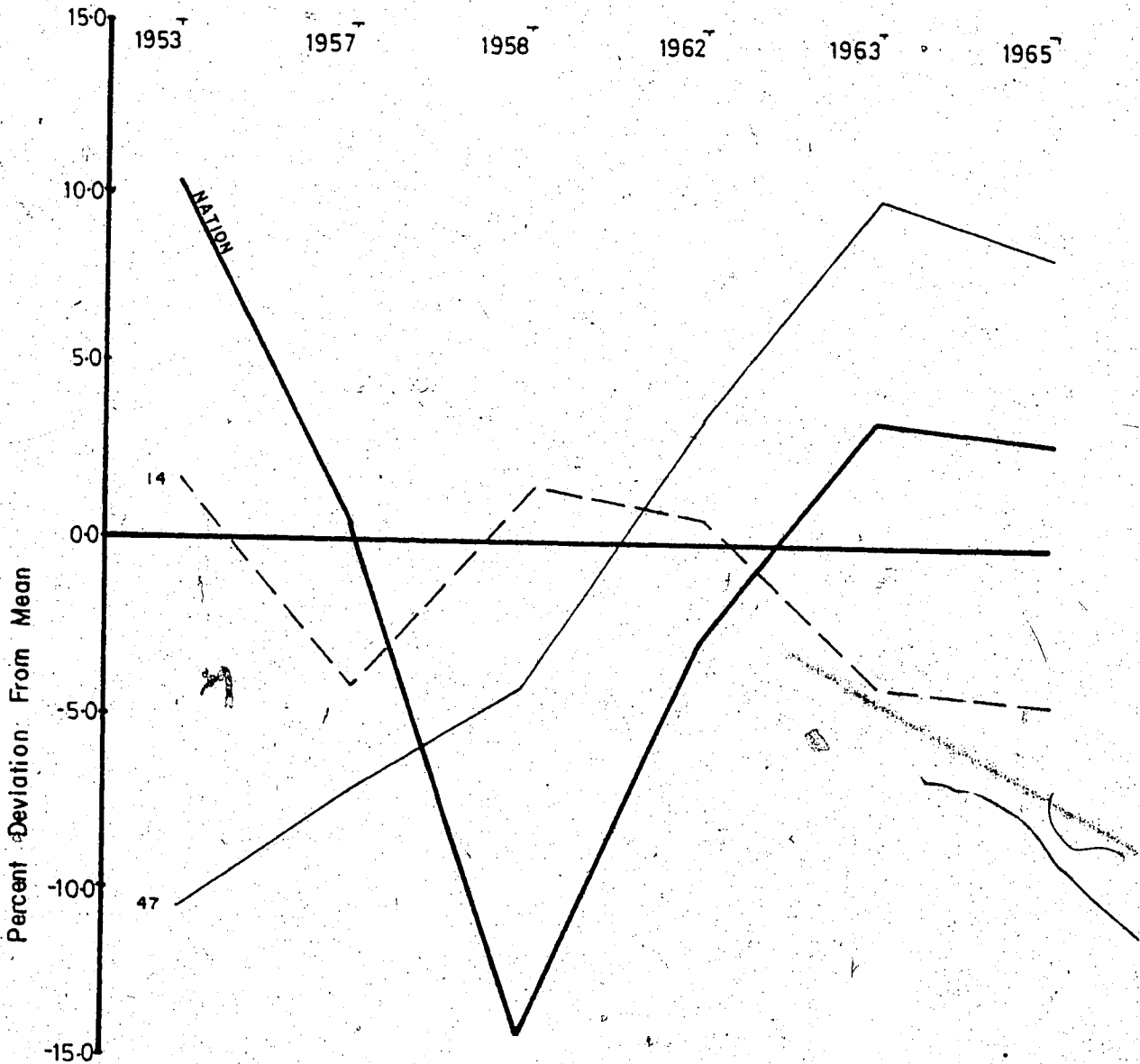
national time-specific movement; while the constituencies of

Figure 9 seem to be attracted by the national movement, the

constituencies of Figure 10 seem to be repulsed by what occurs at

the higher level of the political system.

Figure 11 represents the kind of curves for those

constituencies whose time-specific movements vary, in relation to

the national time-specific movement, randomly rather than

systematically over time. These constituencies have two general

types of movement: the first, which is represented by the example

of Fort William, have very small deviations, compared to the

national movement, which, with the pattern of random covariance,

produces a low covariance score; the second type of movement is

exemplified by Perth, which has much stronger movements, compared

to the case of Fort William, but which, again, since they do not

co-vary with the national time-specific movement, produce a low

score which is a summation of a number of relatively high negative

and positive time-specific scores.

Time-specific movements and covariance scores have the

following characteristics: first, the sum of each riding's time-

specific movements will be zero, that is to say, the sum represents

the average of the deflection in, say, the Liberal proportion of

the two-party vote, after the removal of the provincial time-

specific effect and the deletion of the difference between the

timeless constituency effect less the timeless provincial effect,

which leaves, for each election year, the variation around the

constituency proportion; second, the sum of the set of covariance

scores obtained for each province for the interaction between, say,

the nation and the constituencies of the province, will be zero;

moreover, there will be a equal distribution around this sum (or

mean of zero), so that there will be more or less 50 percent

positive scores and 50 negative scores. It is this approximation

of the normal curve distribution that leads Stokes to expect that

the covariance scores will not vary from zero more than one would

expect by chance.[5]

In order to ascertain if this assumption of normality

holds (conversely - and more substantively - to ascertain which

ridings have covariance scores - positive or negative - greater

than would be expected by chance), a series of tests were applied

to each province's constituency-nation covariance scores. The

results appear in Table 28.

Table 28

Constituences Which Have Constituency-Nation Covariance Scores Which Vary from Zero More Than Would Be Expected by Chance, by Province.

Province	Constituency	Constituency-Nation Covariance
Ontario >33.9 (Z,.05)	Algoma East	-33.99
	Hamilton East	+34.3
	Hamilton West	+35.1
	Spadina	+36.6
Quebec 43.7 (Z,.05)	Saint-Jean-Iberville-Napierville	-51.6
	Quebec West	-56.0
	Berthier-Maskinongé-Delanaudière	+63.9
	Kamouraska	+93.4
Nova Scotia 14.25 (t,.05)	Cape Breton South	+52.3
	Colchester-Hants	-20.5
	Digby-Annapolis-Kings	-20.5
New Brunswick 12.2 (t,.05)	Charlotte	-13.2
	Royal	-22.1
	Restigouche	+36.7
Newfoundland 17.4 (t,.05)	Bonavista-Twillingate	-33.0
	St.John's East	+20.4
Prince Edward Island 13.0	none	
Manitoba 18.20 (t.05)	Winnipeg South Centre	-23.1
	Winnipeg South	-26.6
	St.Boniface	-36.0
	Brandon-Souris	-38.5
	Springfield	+18.99
	Selkirk	+31.80
	Winnipeg North	+37.6

Table 28 (cont'd)

Province	Constituency	Constituency-National Covariance
Manitoba (Cont'd)	Winnipeg North Centre	+68.4
Saskatchewan 13.7 (t,.05)	Qu'Appelle	-38.8
	Assiniboia	-42.6
	Prince Albert	-50.1
	Humboldt-Melfort-Tisdale	+16.0
	Mackenzie	+38.7
	The Battlefords	+39.2
	Regina City	+39.7
Alberta 10.2 (t,.05)	Jasper-Edson	-10.4
	Athabasca	-12.2
	Macleod	-22.1
	Calgary North	-25.1
	Calgary South	-35.6
	Vegreville	+10.6
	Lethbridge	+22.8
	Red Deer	+29.9
	Medicine Hat	+40.1
British Columbia 16.4 (t,.05)	Coast-Capilano	-24.1
	Okanagan-Revelstoke	-29.3
	Kootenay East	-31.2
	Vancouver South	-50.4
	Esquimalt-Saanich	-75.6
	Kamloops	-76.6
	Burnaby-Coquitlam	+20.3
	Fraser Valley	+25.8
	Comox-Alberni	+29.0
	Vancouver East	+33.1
	Vancouver Centre	+33.8
	Burnaby-Richmond	+37.0
	New Westminster	+37.5
	Kootenay West	+41.8

In conclusion, the evidence has been strong that the
factors underlying the movement in the two-party vote have strong
sub-national political spatial origins, particularly in the 1960's;
moreover, the important areas of differentiation were the
provinces and the constituencies. However, while this pattern is
similar to - and stronger than - what was reported for the
movements in turnout, on the whole there is only a moderate
relationship between these sub-national areas which diverged
strongly from the national pattern on one dimension and those
sub-national areas which diverged strongly on the other. In other
words, while both dimensions considered separately have movements
and variance component scores which create an image of a lack of
nationalization in the forces underlying the Canadian political
system, it is still the case that the impact of sub-national
political environments, when both dimensions are considered
together, is not so pervasive and consistent that one can speak
of a seriously de-nationalized political system. The electoral
behaviour of Canadians is much more complex - although not as
dramatic - as suggested by the simple consideration of the spatial
nature of turnout or the two-party vote. On the other hand, it
must also be recognized that the magnitudes of the total variation
for turnout and two-party vote are substantially different; to
the extent that movements in the two-party vote pattern can be
considered as evidence of significant political differences between
Canadians, and to the extent that the differences in magnitude

reflect those differences, then Canada can be considered to have

a de-nationalized political system.

In the next chapter, a similar analysis to the kind

conducted in this and the previous chapter will be done for the

movements in the Liberal and Progressive Conservative proportions

of the total vote from 1953-1965.

Chapter Five

Footnotes

1. Since the results for the two parties will mirror each other,
    the analysis in this chapter will, for the most part be
    restricted to the Liberal party.

2. All of the Contrary Regional Movements, Compared to the
    Nation, in Liberal Percent of Two-Party Vote, Are:

    1963-1965

    | National | 56.0 - 55.5 = + .5 |
    | Prairies | 33.2 - 33.8 = - .6 |
    | British Columbia | 57.2 - 62.2 = - 5.0 |

    All of the Contrary Provincial Movements, Compared to the
    Nation, in Liberal Percent of Two-Party Vote, Are:

    1958-1962

    | National | 38. - 49.4 = -11.4 |
    | Nova Scotia | 4 . - 46.5 = +0.1 |

    1963-1965

    | National | 56.0 - 55.5 = +.5 |
    | Saskatchewan | 30.5 - 32.9 = -2.4 |
    | Alberta | 27.9 - 28.2 = -0.3 |
    | British Columbia | 57.2 - 62.2 = -5.0 |

    1962-1963

    | National | 49.4 - 56.0 = -6.6 |
    | Saskatchewan | 32.4 - 30.5 = +1.9 |
    | Alberta | 28.1 - 27.9 = +0.2 |

3. Professor Dennis Wrong, writing after the 1958 election,
    wondered whether the 1957 and 1958 elections marked the
    beginning of the nationalization of the Canadian party
    system, that is to say, the diffusion of the pattern of
    two-party competition in an increasing larger number of
    areas, that is to say, constituencies; see Dennis H.
    Wrong, "Parties and Voting in Canada: A Backward and
    Forward Glance in the Light of the Last Election,"
    Political Science Quarterly, LXXIII, No. 3 (September,
    1958), 408-11. Professor Murray Beck advanced a similar

argument, to the effect that since the pattern of party
vote was "virtually uniform across the country, national
rather than regional or local factors must be regarded as
the primary determinant." J.M. Beck, Pendulum of Power:
Canada's Federal ELections (Scarborough,1968),323. Peter
Regenstreif interpreted the 1958 election as pointing to
the nationalization of federal politics: see Peter
Regenstreif, The Diefenbaker Interlude: Parties and Voting
in Canada (Toronto,1965),32.

4. It is not possible to perform these tests in the case of
Newfoundland, Alberta, Saskatchewan, and Prince Edward
Island because of either the relative lack of variation
in the political competitiveness of the constituencies
or the low number of ridings.

5. Donald E. Stokes, "A Variance Components Model of Political
Effects," in John M. Claunch, ed.., Mathematical Applications
in Political Science, I (Dallas,1969),75.

Chapter Six

Variance Components of Liberal and Progressive Conservative Share
of Total Vote in Canadian General Elections, 1953-1965.

The analysis to this point has been only in terms of

the movements in the proportions obtained by the Liberal and

Progressive Conservative parties. While a number of substantive

claims about the nature of the Canadian political system can be

made solely on the basis of the ebb and flow in the two-party

vote and the relative weight of sub-national political forces

upon the movements in the proportions of the vote obtained by the

two parties, it is readily admitted that such a mode of analysis

neglects a fundamental characteristic of Canadian politics: since

the election of 1921 Canada has had a multi-party system. Only

in five of the seventeen elections since that year have the "third"

parties received less than 20 percent of the total votes cast.

While there have been changes in both the nomenclature and nature

of third parties since 1921, nonetheless this relative constancy

in electoral strength cannot be discounted or ignored. This is

especially the case in post-World-War II Canada as the third

parties in total have obtained less than 20 percent of the vote

only in the 1958 election. This chapter, then, is given to an

examination of the movements in the vote proportions received by

the Liberals and Progressive Conservatives out of the total votes

cast from 1953-1965.[1]

During this period, the Liberal share of the total vote

ranged from a low of 33.6 percent in 1958 to a high of 48.8 percent

in 1953, for an overall range of 15.2 percent; the Progressive

Conservative vote fluctuated from a low of 31.0 percent in 1953

to a high of 53.6 percent in 1958 (a range of 22.6 percent); and

the third parties in total obtained a low in 1958 of 12.8 percent

and a high of 27.5 percent in 1965 (a range of 14.7 percent).

These fluctuations in the vote proportions received

by the various political parties are more or less comparable to

the movements recorded during the elections before and after the

six-election set with which we are primarily concerned. From 1921

to 1949, the Liberal vote had a range of 11.6 percent, the

Conservative share of the total vote moved in the range of 21.4

percent, and the third parties had a range of 25.8 percent; more

stability in the parties' vote shares is evident in the four-

election period from 1935-1949, when the Liberals, Conservatives,

and third parties had ranges respectively of 11.6 percent, 3.3

percent, and 14.0 percent. The three elections from 1968-1974

are characterized by the greatest amount of stability in the votes

given to the parties: the Liberal vote ranged from 38.5 in

1972 to 45.5 in 1968 for a range of 7.0 percent, the Progressive

Conservative vote moved in the range of 31.4 in 1968 to 35.4 in

1974 - a range of 4.0 percent , and the third party vote had a

low of 21.4 percent in 1974 and a high of 26.5 in 1972 for a range

of 5.1 percent.

In relative terms, then, the various parties' share of

the total vote from 1953-1965 showed a considerable degree of

movement, especially when compared to the three or four elections

immediately preceding or succeeding the analysis period. As in

the previous chapters, the concern is to ascertain what proportion

of the total vote can be attributed to national political forces

and what proportion can be ascribed to sub-national areas of the

country, and what areas-regions, provinces, or constituencies

seem to have greater impact upon the variation in the party vote.

Lastly, is there constancy in the relative weights attached to

the various levels of the political system in their influence

upon the movements of the vote or have there been any significant

shifts over time?

The format of this chapter will match the previous

two chapters: a general comparison of the relationship between

the regions, provinces, and the nation as a whole will precede

the discussion of the results produced by the application of the

analysis of variance model.

The relationship between the nation and its regions and

provinces in terms of the movements of the Liberal share of the

total party vote is shown in Figures 1 and 2 respectively. As

was the case for the two-party vote analysis, the movements of

the various sub-national political units correspond to the national

movement to a high degree: as the nation falls and rises so do the

Figure 1

Liberal Share of Total Party Vote by Nation and Regions in Six
Canadian General Elections, 1953-1965.
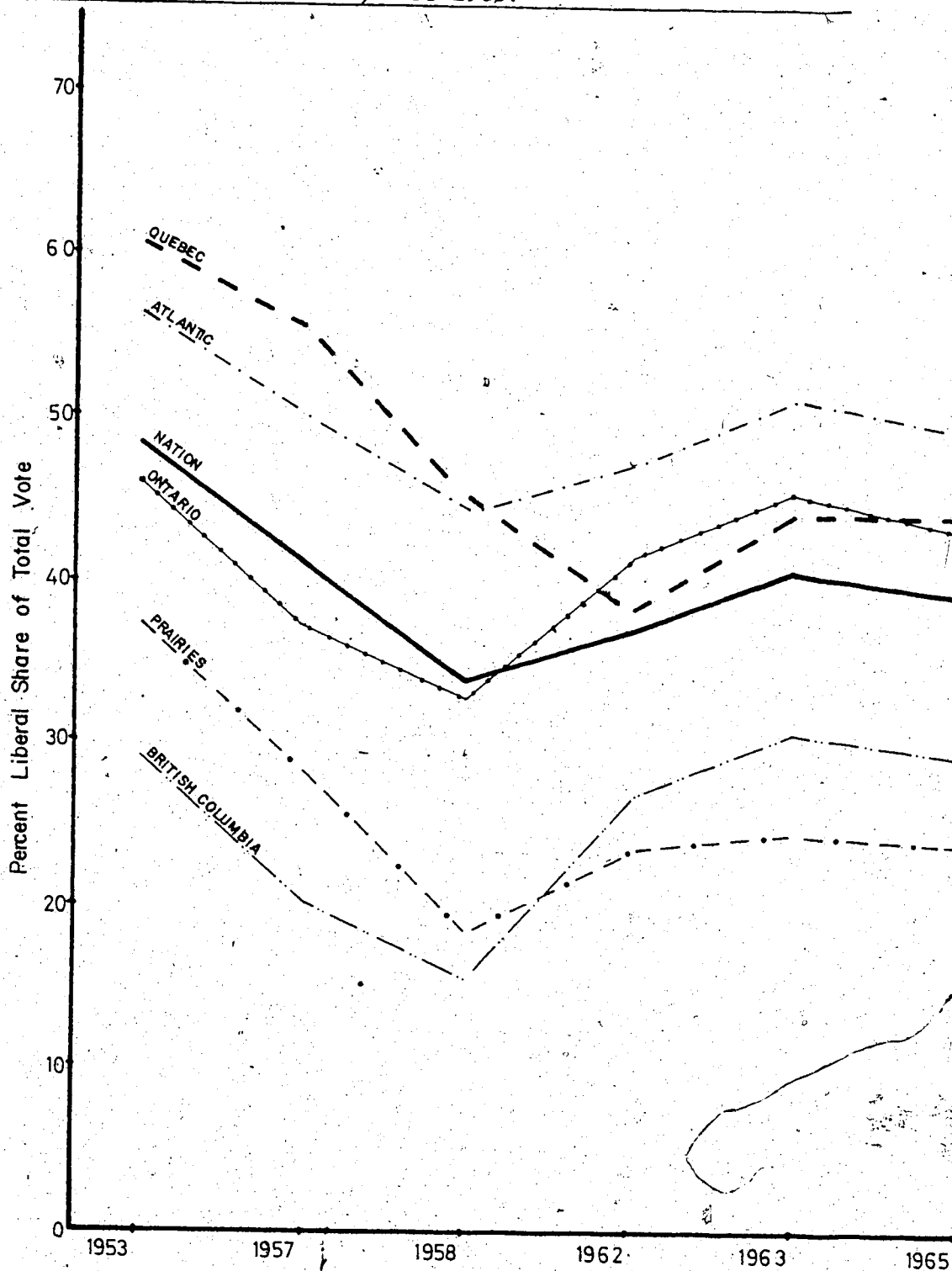
Figure 2

Liberal Share of Total Party Vote by Nation and Provinces in Six
Canadian General Elections, 1953-1965.
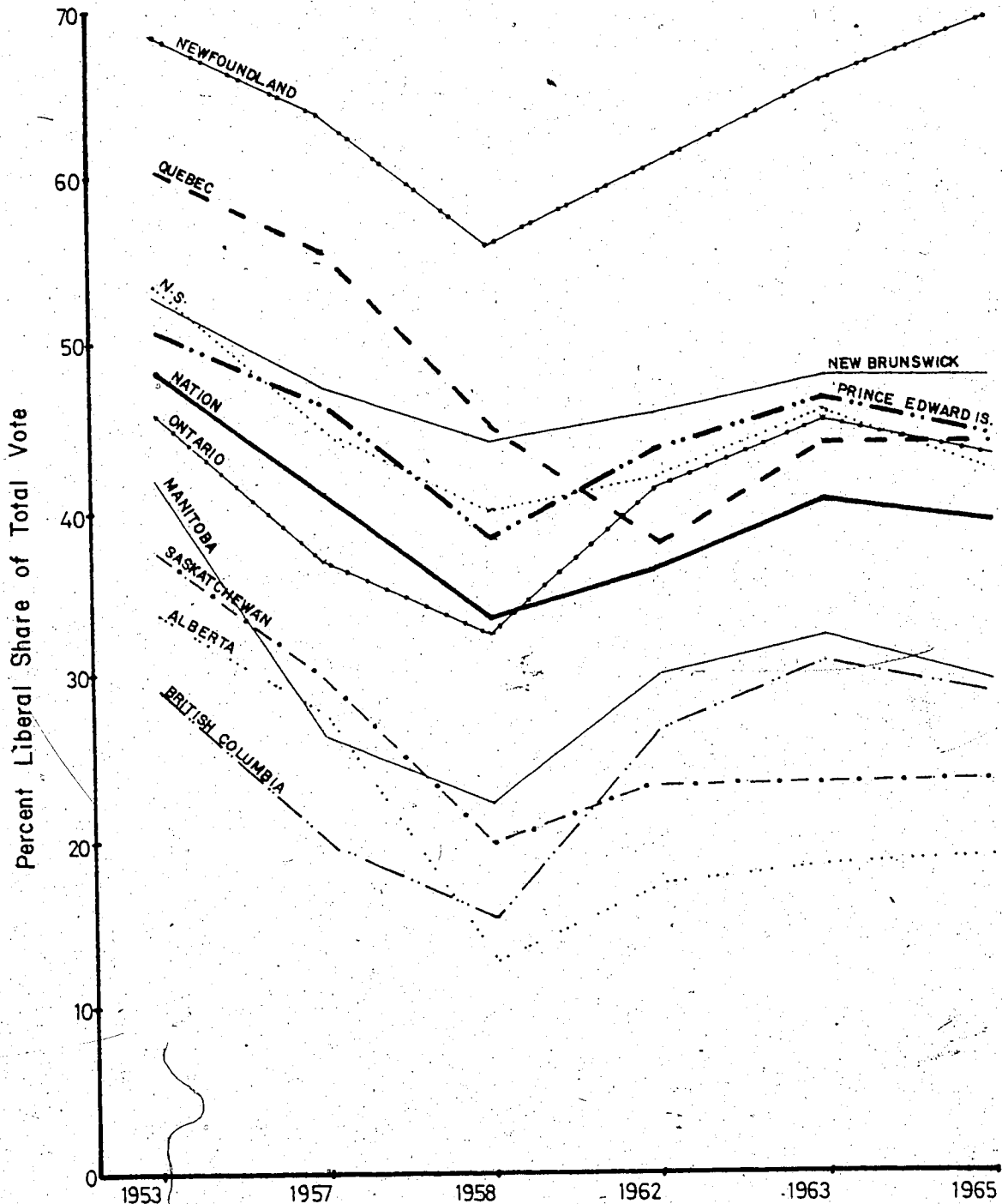
regions and provinces.[2]

Figures 1 and 2 clearly indicate that the nation, the regions, and the provinces have highly congruent movements in the Liberal proportion of the total vote. However, it is also apparent that the various regions and provinces, particularly the latter, do not maintain over the analysis period their relative rank position as there are a number of instances where the lines cross over each other (or, in other words, while there is a high degree of parallelism in the movements, the magnitudes of the movements tend to be dissimilar). Table 1 and 2 below summarize these differences.

Table 1

Ranking of Regions by Liberal Proportion of Total Vote by Election Year and Overall.

	1953	1957	1958	1962	1963	1965	Overall
1	Que.	Que.	Que.	Alt.	Atl	Atl.	Atlantic
2	Atl.	Alt.	Atl.	Ont.	Ont.	Que.	Quebec
3	Ont.	Ont.	Ont.	Que.	Que.	Ont.	Ontario
4	Pra.	Pra.	Pra.	B.C.	B.C.	B.C.	Prairies
5	B.C.	B.C.	B.C.	Pra.	Pra.	Pra.	British Columbia
	2	2	2	4	4	2	Summation of Each Unit's Deviation in Election Year from Overall Rank
		0	0	6	0	2	Summation of Each Unit's Change in Rank in Election Year Compared to Previous Rank

Table 2

Ranking of Provinces by Liberal Proportion of Total Vote, by
Election Year and Overall.

	1953	1957	1958	1962	1963	1965	Overall
1	Nfl.	Nfl.	Nfl.	Nfl.	Nfl.	Nfl.	Newfoundland
2	Que.	Que.	Que.	N.B.	N.B.	N.B.	Quebec
3	N.S.	N.B.	N.B.	PEI	PEI	PEI	New Brunswick
4	N.B.	PEI	N.S.	N.S.	N.S.	Que.	Prince Edward Island
5	PEI	N.S.	PEI	Ont.	Ont.	Ont.	Nova Scotia
6	Ont.	Ont.	Ont.	Que.	Que.	N.S.	Ontario
7	Man.	Sask.	Man.	Man.	Man.	Man.	Manitoba
8	Sask.	Alta.	Sask.	B.C.	B.C.	B.C.	Saskatchewan
9	Alta.	Man.	B.C.	Sask.	Sask.	Sask.	British Columbia
10	B.C.	B.C.	Alta.	Alta.	Alta.	Alta.	Alberta
	6	6	2	10	10	8	Summation of Each Unit's Deviation in Election Year from Overall Rank
		10	8	10	0	4	Summation of Each Unit's Change in Rank in Election Year Compared to previous rank.

The values reported at the bottom of Tables 1 and 2

indicate that there is greater variability between provinces than

there is between regions, though the degree of variability tends

to be greater in the case of the two-party movements, as was

discussed in the previous chapter.

Figures 3 and 4 show the movements for the Progressive

Conservative proportion of the total vote for regions and provinces

respectively. Again, the movements of the various sub-national

units follow closely the national movement.

Figure 3

Progressive Conservative Share of Total Party Vote by Nation and Regions in Six Canadian General Elections, 1953-1965.
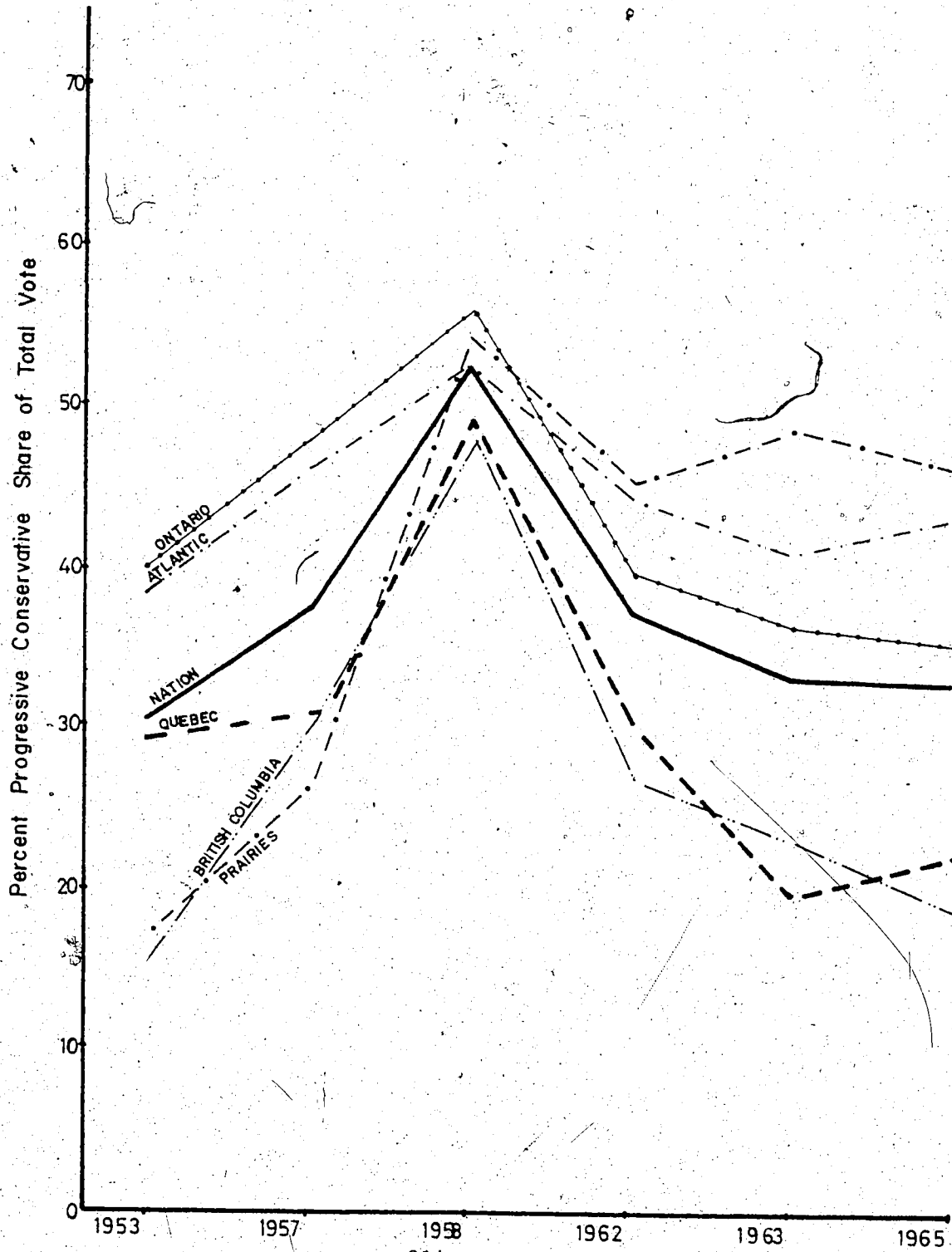
Figure 4

Progressive Conservative Share of Total Party Vote by Nation and
Provinces in Six Canadian General Elections, 1953-1965.
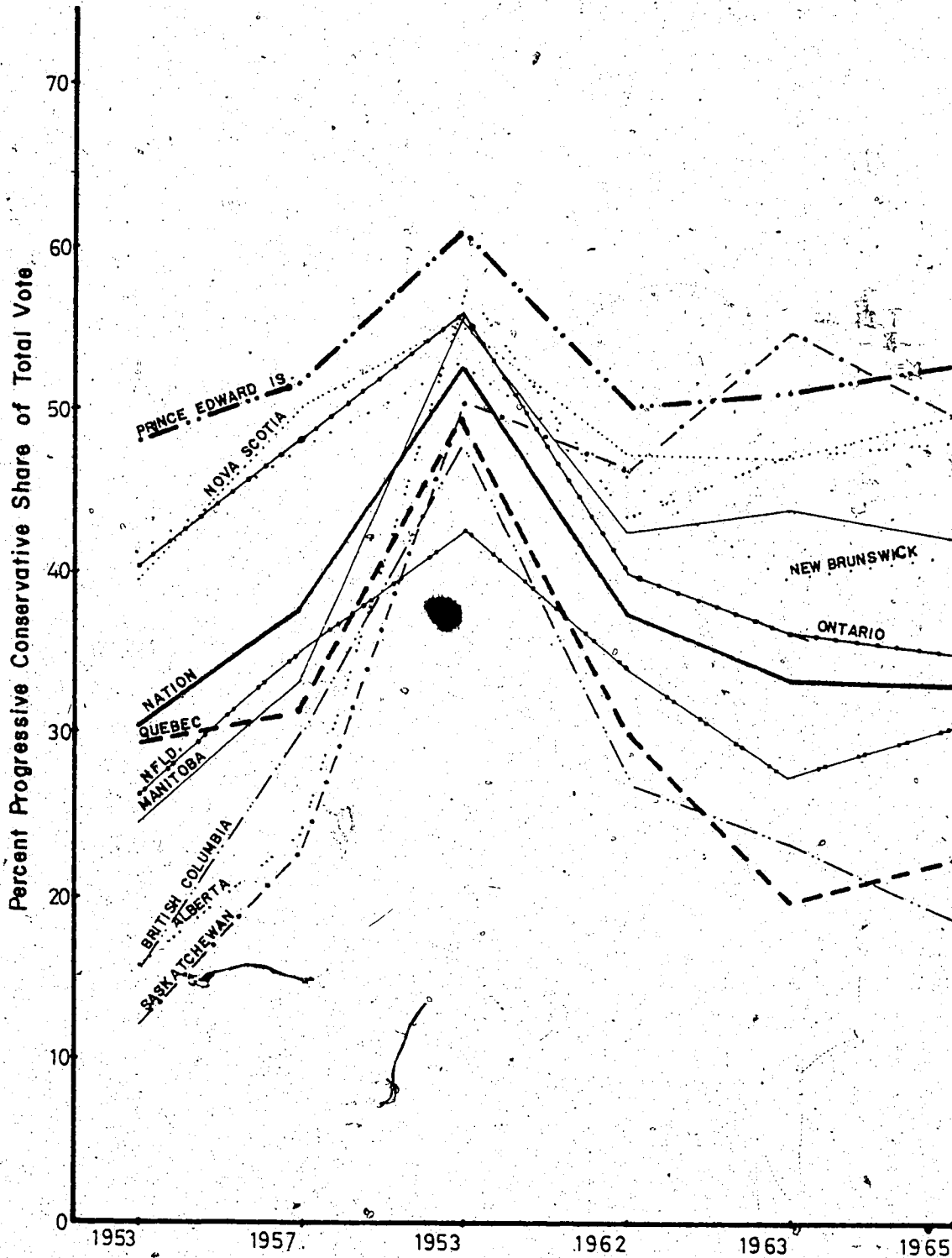
As was the case with the Liberal proportion of the

total vote, although there is a high degree of congruity between

the nation and the various regions and provinces, there are also

considerable differences in the magnitudes of the movements. Tables

3 and 4 show these differences in the relative ranks of the regions

and provinces.

Table 3

Ranking of Regions by Progressive Conservative Proportion of Total Vote by Election Year and Overall.

	1953	1957	1958	1962	1963	1965	Overall
1	Ont.	Ont.	Ont.	Pra.	Pra.	Pra.	Ontario
2	Atl.	Atl.	Pra.	Atl.	Atl.	Atl.	Atlantic
3	Que.	Que.	Atl.	Ont.	Ont.	Ont.	Prairies
4	Pra.	B.C.	Que.	Que.	B.C.	Que.	Quebec
5	B.C.	Pra.	B.C.	B.C.	Que.	B.C.	British Columbia
	4	6	6	4	6	4	Summation of Each Unit's Deviation in Election Year from Overall Rank
		2	6	4	2	2	Summation of Each Unit's Change in Rank in Election Year Compared to Previous Rank

Table 4

Ranking of Provinces by Progressive Conservative Proportion of
Total Vote by Election Year and Overall.

	1953	1957	1958	1962	1963	1965	Overall
1	PEI	PEI	PEI	PEI	Sask.	PEI	Prince Edward Island
2	N.B.	N.S.	Alta.	Sask.	PEI	N.S.	Nova Scotia
3	Ont.	Ont.	Ont.	N.S.	Alta.	Sask.	New Brunswick
4	N.S.	N.B.	Man.	N.B.	N.S.	Alta.	Ontario
5	Que.	Nfl	N.S.	Alta.	Man.	Man.	Manitoba
6	Nfl	Man.	N.B.	Man.	N.B.	N.B.	Saskatchewan
7	Man.	Que.	Sask.	Ont.	Ont.	Ont.	Alberta
8	Alta.	B.C.	Que.	Nfl	Nfl	Nfl	Newfoundland
9	B.C	Alta.	B.C.	Que.	B.C.	Que.	Quebec
10	Sask.	Sask.	Nfl	B.C.	Que.	B.C.	British Columbia
	18	16	16	12	20	12	Summation of Each Unit's Deviation in Election Year from Overall Rank
		10	24	22	10	8	Summation of Each Unit's Deviation in Rank in Election Year Compared to Previous Rank

Tables 3 and 4 indicate, as was the case with the

Liberal proportion of the total vote, that there is greater

variability between provinces than between regions in the

movements of the Conservative share of the total vote; there is

also greater variability with the Conservative proportions compared

to the Liberal proportions, for both regions and provinces,

indicating that in the case of the Progressive Conservative party,

there has been a greater change in its areas of relative strength

and weakness.

It must be pointed out, however, that the differences in

the regional and provincial party vote movements are in a sense more

apparent than real, partially because of the lack of control over the number of potential changes in the ordering of the ranks. Table 5 below shows the average intercorrelation of ranks (coefficient of agreement) for the two types of party vote analysis by regions and provinces over all elections.

Table 5

Average Intercorrelation of Ranks for Regional and Provincial Movements in Liberal Percent of Two-Party Vote, Liberal Percent of Total Vote, and Progressive Conservative Percent of Total Vote, Over All Six Canadian General Elections, 1953-1965

Liberal Percent of Two-Party Vote:	Coefficient of Agreement
Regions	.43
Provinces	.47
Liberal Percent of Total Vote:	
Regions	.80
Provinces	.90
Progressive Conservative Percent of Total Vote:	
Regions	.47
Provinces	.50

The coefficient's values range from +1.0 to 0.0. where the former denotes complete lack of movement in the ranks and the latter represents a total lack of stability. In each case, the regional scores are somewhat lower than the provincial scores, indicating that over the six elections there was a slight tendency for regions to be more variable than provinces. What is also striking are the high values obtained for both levels of aggregation in the case of the Liberal share of the total party vote: clearly the Liberal vote in the regions and provinces, relative to each other over the analysis period, is considerably more stable than is the

Progressive Conservative party vote.

Another aspect of the argument that regional analyses tend to hide important provincial movements is the comparison between the percentage difference between highest and lowest units. Previously it was argued that regional analyses for turnout obscured differences much more than did regional analyses for the Liberal percent of the two-party vote. Table 6 gives the comparable figures for the cases of the Liberal and Progressive Conservative proportions of the total vote along with the percentage differences between regions and provinces for the Liberal share of the two-party vote.

Table 6

Percentage Differences Between Highest and Lowest Units of Regions and Provinces, by Election Years and Overall Elections, by Liberal and Progressive Conservative Proportions of Total Vote, and by Liberal Proportion of Two-Party Vote.

Liberal Percent of Total Vote

	1953	1957	1958	1962	1963	1965	Overall
Province	39.5	43.7	43.1	43.6	47.5	44.6	41.8
Region	21.1	25.6	29.5	24.0	26.7	25.8	24.5
	18.4	18.1	13.6	19.6	20.8	18.8	17.3

Progressive Conservative Percent of Total Vote

	1953	1957	1958	1962	1963	1965	Overall
Province	35.7	28.8	18.1	23.6	34.0	34.1	25.2
Region	24.4	21.5	8.0	18.2	28.9	17.5	17.1
	11.3	7.3	10.1	5.4	5.1	16.6	8.1

Liberal Percent of Two-Party Vote

	1953	1957	1958	1962	1963	1965	Overall
Province	22.9	24.2	38.3	36.1	43.0	40.0	24.7
Region	17.2	23.2	13.5	33.6	37.0	34.4	20.9
	5.7	1.0	24.8	2.5	6.0	5.6	3.8

While in the case of the Liberal percent of the two-
party vote, with the exception of the 1958 election, there were
relatively low differences between highest and lowest units for
regions and provinces, the total vote sets indicate a high degree
of differences, particularly in the case of the Liberal share of
the total vote; moreover, the differences in the Liberal case
are much more constant than are the Conservative differences
(Liberal range is 7.2 and the Conservative range is 11.5).

In conclusion, the overall relationship between the
nation as a whole and the various regions and provinces is
that while there is a high degree of parallelism in the movements
of the Liberal and Progressive Conservative proportions of the
total vote, there are also a significant number of contrary
movements between the national trend and the regional and
provincial trends, and a considerable number of changes in the
relative ranking of units throughout the entire analysis period,
especially in the case of the Conservative share of the total
vote. It should also be noted that there is a considerable
difference in the amount of variation in the national effect
for the two parties from 1953-1965, as is given in Table 7.

Table 7

Variation in National Effect for Liberal and Progressive
Conservative Proportions of Total Vote Overall Elections,
1953-1965.

Variation in National Effect

Liberal   24.8353

Progressive Conservative   62.9175

In other words, the Progressive Conservative vote had a
greater variability than did the Liberal vote around their
respective overall or grand means. The analysis now turns to
the analysis of variance results in an attempt to describe and
understand the movements - and the influence of sub-national
political environments - which account for these patterns of
variation.

Table 8

Components of Variance of Liberal Percent of Total Vote in Six
Canadian Federal Elections from 1953-1965, by Nation, Region,
and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	24.0638	4.9055	.30
Region	19.8244	4.4525	.25
Constituency	35.7856	5.9821	.45
			1.00

The nation is only able to account for 30 percent of the
variation in the Liberal share of the total vote (compared to
36 percent in the case of the two-party vote analysis), and the

lower-order levels of the political system account for the

remainder, with the constituency level claiming almost one-

half of the total variation, the highest proportion of all three

levels. This constituency level, as was explained earlier, takes

in all of the variation that occurs below the level of the region,

thus encompassing whatever contribution to the total variation

is made by the provinces. Table 9 gives the variance components

by nation, provinces, and constituency.

Table 9

Components of Variance of Liberal Percent of Total Vote in Six
Canadian Federal Elections from 1953-1965, by Nation, Province,
and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	23.9721	4.8961	.31
Province	18.6637	4.3201	.24
Constituency	35.2371	5.9361	.45
			1.00

The nation, of course, still accounts for almost 30

percent of the total variation. The other two levels show little

movement between the two tables, with only a slight decline in the

proportion of the total variation given to the middle level of

provinces in Table 9. Since this pattern of only slight decline

in the impact of the middle level is found in the other regional-

provincial contrasts (but always in the same direction), subsequent

tables will report values for only the national-provincial-constituency

format.

Table 10 and Table 11 give the variance components for the Liberal share of the total vote from 1953-1958 and 1962-1965 respectively.

Table 10

Components of Variance of Liberal Percent of Total Vote in Three Canadian Federal Elections from 1953-1958, by Nation, Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	53.7463	5.7709	.59
Province	3.9663	1.9915	.04
Constituency	33.3033	5.7709	.37
			1.00

Table 11

Components of Variance of Liberal Percent of Total Vote in Three Canadian Federal Elections from 1962-1965, by Nation, Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	3.8380	1.9591	.20
Province	1.3551	1.1641	.07
Constituency	14.3442	3.7874	.73
			1.00

A similar kind of pattern to what was reported for the Liberal share of the two-party vote is apparent in the above two

tables in that there has been a dramatic shift from the first

election set of the second in the relative weight ascribed to the

national level of the political system: the nation in the three

elections from 1953-1958 accounts for almost 60 percent of the

total variation, but from 1962-1965 is able to claim only 20

percent of the variation; most of this shift has been in the

direction of the constituency level, which had an increase of

100 percent, that is,from 37 to 73 percent of the total variation,

with the provincial level increasing only from 4 to 7 percent.

One other contrast with the results reported for the Liberal two-

party vote analysis must be drawn: the total vote tables show

'relatively little contribution to the total variation by the

provinces while the two-party vote total variation had a steady

provincial contribution in the area of 20 percent; Liberal voters

in the 1960's,then, apparently were not influenced by province-

wide factors, but were greatly moved by what was happening in

the constituencies and to a much lesser extent what was happening

at the national level of the system.

In order to test for the relative abilities of the

Liberal and Progressive Conservative parties to act as nationalizing

agencies within the Canadian political system, Table 12 shows

the variance components for the Conservative proportion of the

total vote cast.

Table 12

Components of Variance of Conservative Percent of Total Vote in Six Canadian Federal Elections from 1953-1965, by Nation, Province, and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	61.6801	7.8537	.40
Province	48.2803	6.9484	.31
Constituency	45.8397	6.7705	.29
			1.00

When the above table is compared to Table 9, which gives the comparable variance components for the Liberal percent of the total vote, some strong contrasts become evident. First, while the strongest source of influence for the Liberal party from 1953 to 1965 was the level of the constituencies, the single most source of influence for the Conservatives during the same period of time was the level of the nation, which was able to account for 40 percent of the total variation. Second, the level of the provinces and constituencies, compared to the Liberal case, change positions, so that the former become slightly more influential upon the direction of the vote than do the latter.

However, the nationalizing abilities of the Conservatives, as limited as they are, are not entirely clear-cut, as is indicated by Tables 13 and 14, which show the variance components for the Conservative vote in terms of the elections of the 1950's and 1960's respectively.

Table 13

Components of Variance of Conservative Percent of Total Vote in
Six Canadian Federal Elections from 1953-1958, by Nation, Province,
and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	127.7988	11.3048	.69
Province	27.5513	5.2489	.15
Constituency	29.3531	5.4178	.16
			1.00

Table 14

Components of Variance of Conservative Percent of Total Vote in
Six Canadian Federal Elections from 1962-1965, by Nation, Province,
and Constituency.

Political Level	Variance Component	Square Root of Variance Component	Normalized Variance Component
Nation	5.2512	2.2916	.15
Province	7.5510	2.7579	.22
Constituency	21.5515	4.6381	.63
			1.00

While the Progressive Conservative vote in the first three elections is greatly influenced by the national level - and by a greater proportion (almost 10 points) of the total variation than was reported for the Liberals - the national level in the 1960's becomes the weakest of the three levels of the political system in accounting for the variation in the Conservative vote (and is 5 points lower than the Liberal national variance component proportion for the same three elections). However, both parties, especially the Liberals, in the 1960's were greatly influenced by the level of the constituencies; and the Progressive Conservative vote also was influenced significantly by the provincial level, which surpassed the nation in being able to account for the variation in the party's vote.

Clearly, then, during the period of the 1950's, when there was a strong movement towards the Conservatives (and another movement, albeit weaker, away from the Liberals), as is indicated by the relatively high variance components, the vote was primarily a national tide, particularly for the Tories. The 1960's were marked by indecision or, better, the absence of pervasive national influences and the domination of the political system by lower-order - particularly constituency-level - forces. This pattern of relative weakness of the nation's impact upon the variation in the vote and the increasing de-nationalization of the system from the 1950's to the 1960's is similar to what was reported previously for turnout and the two-party vote patterns.

In our attempt to describe and understand the nature
of the movements in the proportions of the vote received by the
Liberals and Conservatives, we now turn to a discussion of the
covariance scores which, as has been explained previously, show
those regions or provinces which are disproportionately attracted
or repelled by the political forces arising from the higher level
of the political system. Table 15 gives the covariance scores
which indicate the greatest amount of attraction and repulsion.

Table 15

Covariance Scores for Liberal and Progressive Conservative Percent
of Total Vote for the Six Canadian General Elections from
1953-1965, by Regions and Provinces.

Liberal Percent of Total Vote

Regional/National		Provincial/National	
British Columbia	- 7.7122	New Brunswick	- 9.7515
Ontario	- 6.6589	British Columbia	- 7.7122
Atlantic	- 5.0127	Ontario	- 6.6589
Prairies	+ 6.7672	Prince Edward Island	- 4.9513
Quebec	+ 7.6842	Newfoundland	- 4.5870
		Nova Scotia	+ 1.3324
		Manitoba	+ 4.5020
		Saskatchewan	+ 4.5898
		Quebec	+ 7.6842
		Alberta	+10.8099

Progressive Conservative Percent of Total Vote

Regional/National		Provincial/National	
Atlantic	-25.6088	Prince Edward Island	-30.0608
Ontario	- 7.1410	Nova Scotia	-28.4706
Prairies	+ 0.3314	New Brunswick	-26.2972
Quebec	+11.3149	Newfoundland	-17.1757
British Columbia	+26.7152	Saskatchewan	-11.8996
		Ontario	- 7.1410
		Manitoba	+ 1.8662
		Alberta	+11.2981
		Quebec	+11.3149
		British Columbia	+26.7152

In the case of the Liberal share of the total vote the
regional/national covariances are not very large nor do they differ
from each other very much. A similar pattern holds for the
provincial/national covariance terms, except for the provinces of
New Brunswick and Alberta, which have strong negative and positive
relationships with the national trend. The Progressive Conservative
percent of the total vote covariance terms show considerably more
divergence than was the case for the Liberal party. The regional/
national covariances show that two regions in particular - the
Atlantic region and British Columbia - differ greatly from each
other in their relationship to the national movement in the
Conservative vote. In the case of the provincial/national
covariances there are a number of high covariance scores,
especially when compared to the Liberal case; in particular,
Prince Edward Island, Nova Scotia, New Brunswick, Newfoundland, and
British Columbia have been either strongly repelled or attracted by
the national trend in the Progressive Conservative vote. What is
also interesting is the divergent pattern indicated by the negative
and positive covariance scores for Saskatchewan and Alberta
respectively. The time-specific movements which were used in the
calculation of the covariance scores reported in Table 15 are
shown in Figures 5, 6, 7, and 8.

It was pointed out earlier that the pattern of movement
in the total vote for the two parties was different in the 1950's
and 1960's.   order to have a better understanding of these movements

Figure 5

National-Regional Time-Specific Values for Liberal Share of Total
Party Vote in Six Canadian General Elections, 1953-1965.
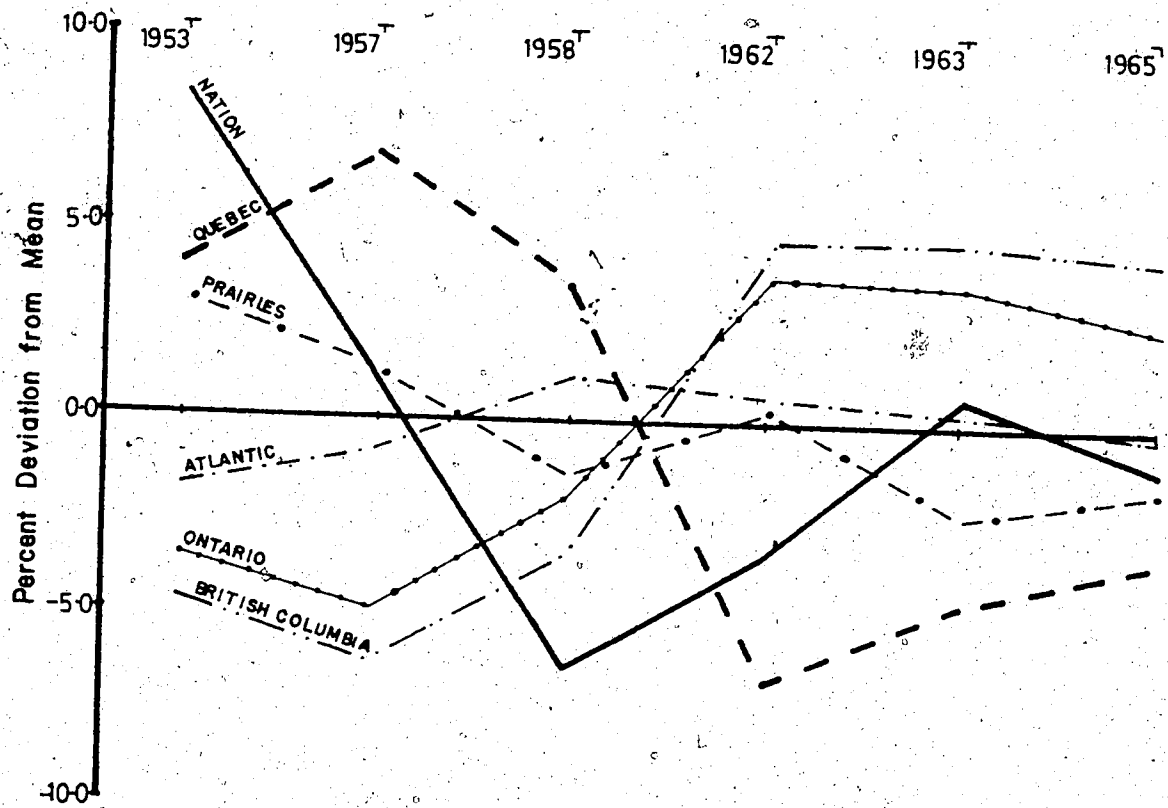
Figure 6

National-Regional Time-Specific Values for Progressive Conservative
Share of Total Party Vote in Six Canadian General Elections, 1953-1965.
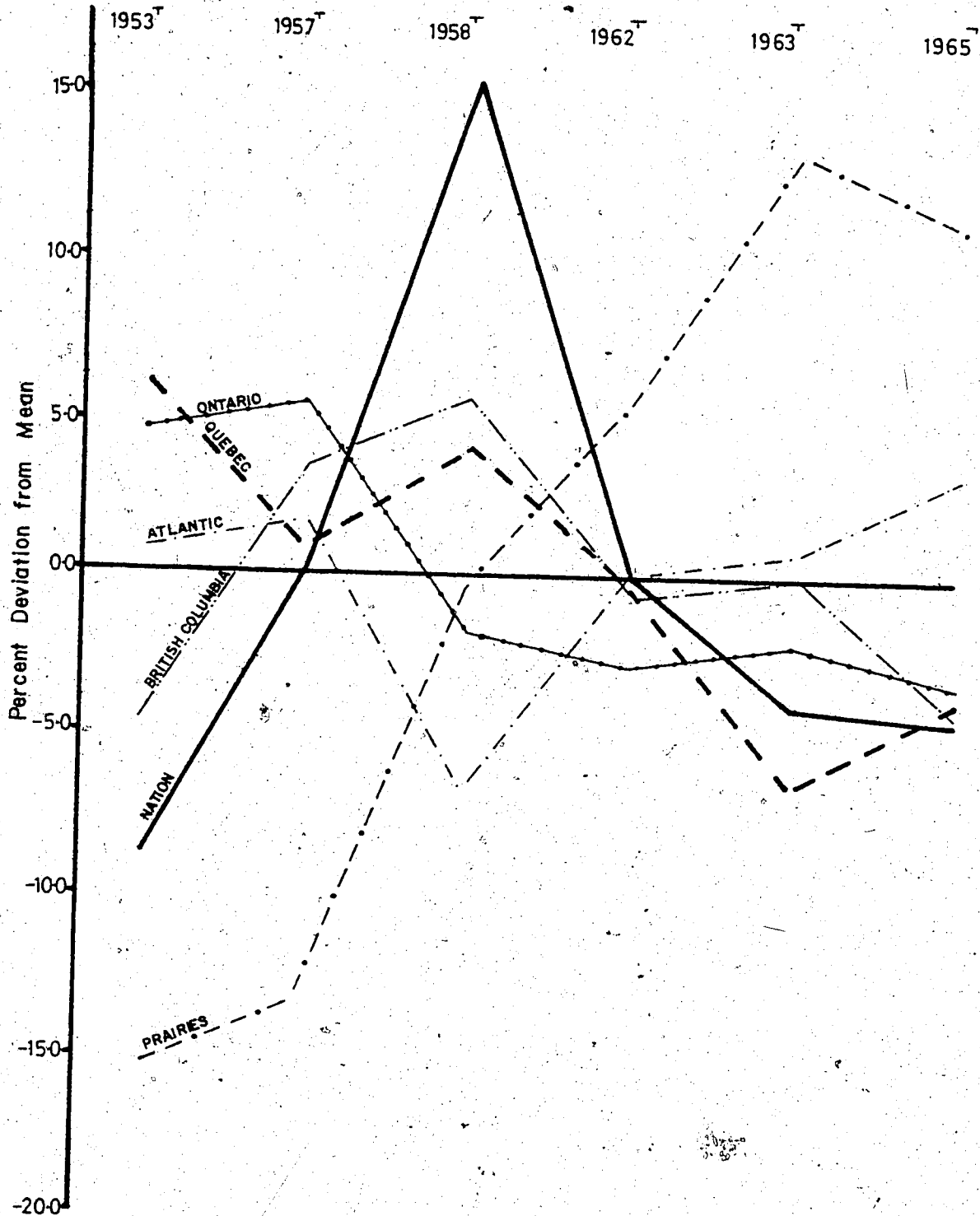
Figure 7

National-Provincial Time-Specific Values for Liberal Share of Total Vote in Six Canadian General Elections, 1953-1965.
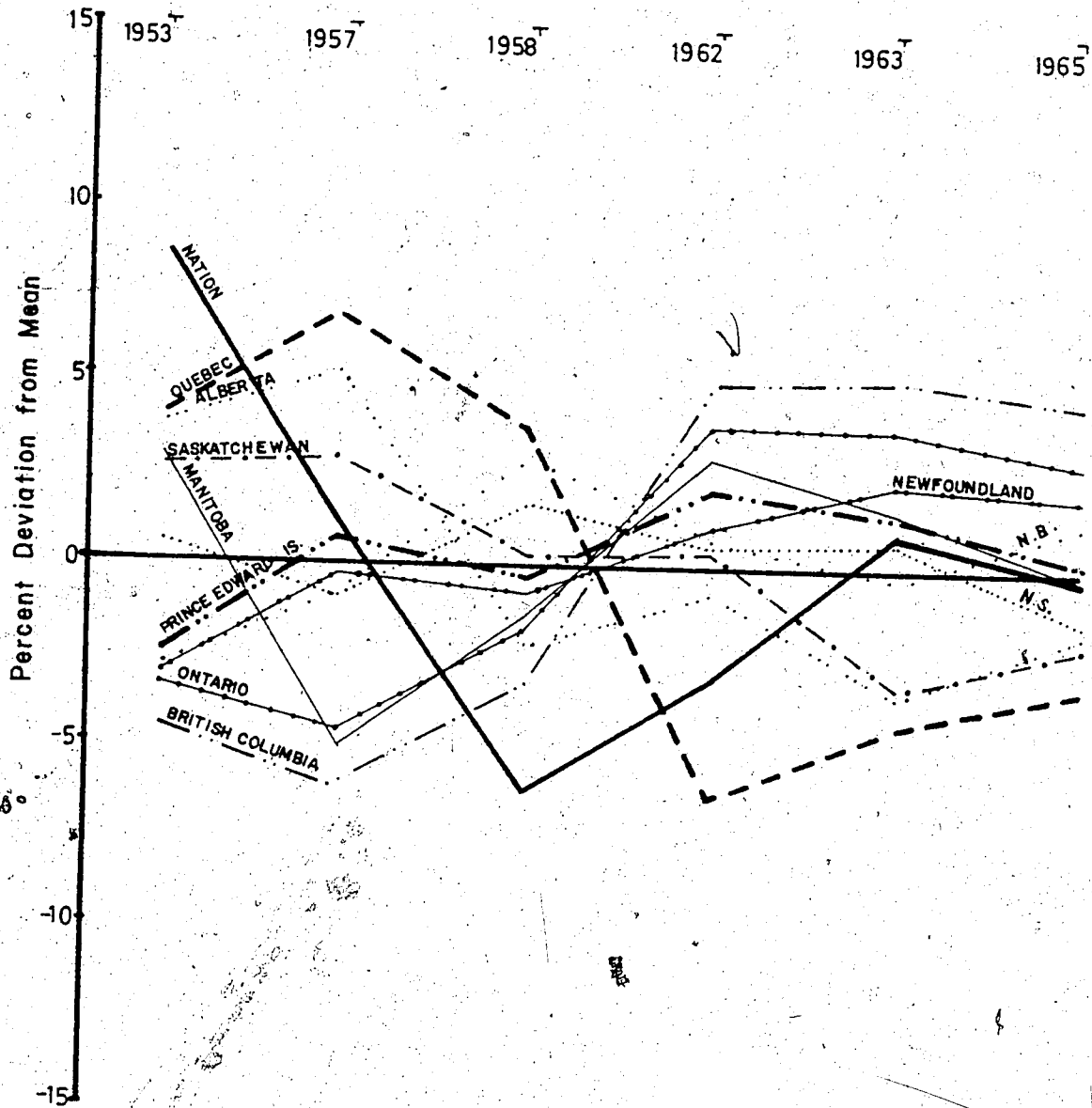
Figure 8

National-Provincial Time-Specific Values for Progressive Conservative Share of Total Party Vote in Six Canadian General Elections, 1953-1965.
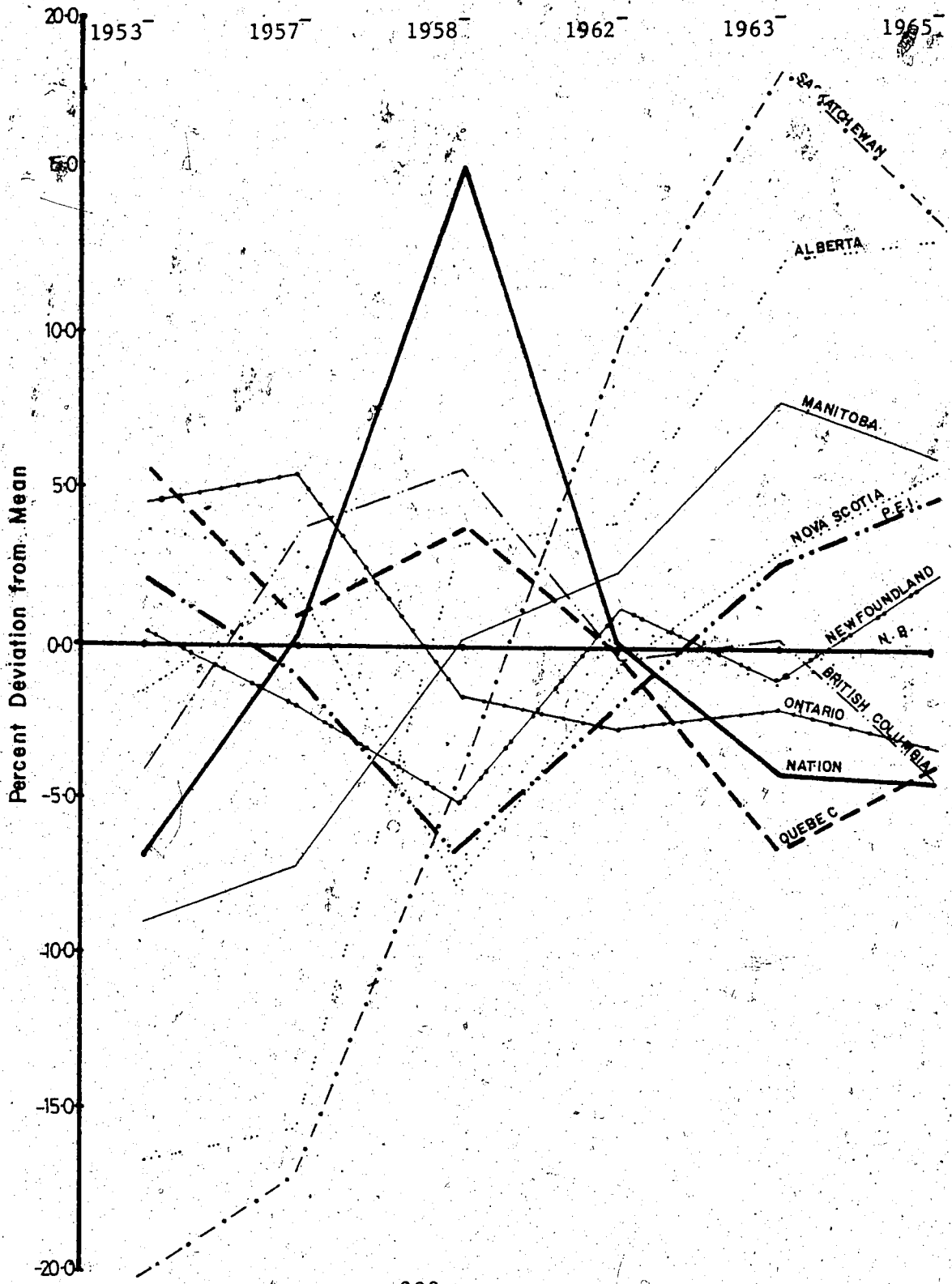
Table 16 gives the regional/national and provincial/national

covariance scores for the Liberal and Progressive Conservative

shares of the total vote for each set of three elections.

Table 16

Covariance Scores for Liberals and Progressive Conservative Percent of Total Vote for the Three Canadian General Elections from 1953-1958 and 1962-1965, by Regions and Provinces.

Liberal Percent of Total Vote

1953-1958   **1962-1965**

Regional/National

1953-1958		1962-1965	
Prairies	+16.5816	Quebec	+ 2.5891
Quebec	+ 1.6271	British Columbia	- 0.1332
British Columbia	- 4.4817	Atlantic	- 0.2772
Ontario	- 5.4394	Ontario	- 0.4589
Atlantic	-10.8143	Prairies	- 2.9810

Provincial/National

1953-1958		1962-1965	
Alberta	+22.6227	Quebec	+ 2.5891
Manitoba	+17.5694	Newfoundland	+ 1.3788
Saskatchewan	+ 9.7267	British Columbia	- 0.1332
Quebec	+ 1.6271	Ontario	- 0.4589
Nova Scotia	- 3.8253	Nova Scotia	- 0.5454
British Columbia	- 4.4817	New Brunswick	- 0.7202
Ontario	- 5.4394	P.E.I.	- 1.2633
Newfoundland	- 7.8900	Manitoba	- 2.2138
P.E.I.	- 7.9600	Alberta	- 2.5585
New Brunswick	-22.3898	Saskatchewan	- 4.0352

Progressive Conservative Percent of Total Vote

1953-1958   **1962-1965**

Regional/National

1953-1958		1962-1965	
Atlantic	-49.3845	Prairies	- 9.0676
Ontario	-39.5687	Atlantic	- 3.0646
Quebec	- 7.2996	Ontario	- 0.1617
British Columbia	+52.3625	British Columbia	+ 2.4834
Prairies	+91.4314	Quebec	+ 6.6073

Provincial/National

1953-1958		1962-1965	
New Brunswick	-65.3493	Alberta	-12.1626
P.E.I.	-52.0084	Saskatchewan	- 8.1098
Nova Scotia	-42.6698	P.E.I.	- 8.0221
Ontario	-39.5687	Nova Scotia	- 7.1698
Newfoundland	-36.5893	Manitoba	- 6.4724
Quebec	- 7.2996	Ontario	- 0.1617
British Columbia	+52.3615	Newfoundland	+ 0.4575
Manitoba	+54.3021	New Brunswick	+ 1.3832
Alberta	+120.0769	British Columbia	+ 2.4834
Saskatchewan	+ 93.3622	Quebec	+ 6.6073

In the case of the Liberal percent of the total vote

for the three elections of the 1950's, the Atlantic and Prairie

regions have quite markedly different covariance scores. However,

this pattern of divergence is not as strong as are the national/

regional covariance scores for all regions, except Quebec, in the

case of the Progressive Conservative vote for the same three

elections. A similar pattern of higher national/provincial

covariance scores for the Progressive Conservative movements than

for the Liberal movements is also evident. In fact, all of the

provinces, except Quebec, show markedly divergent relationships

with the national trend in the Progressive Conservative vote. In

other words, while there was an increase both nationally and in all

of the provinces in the Progressive Conservative share of the

total vote in the 1950's, some provinces lagged considerably

behind the national increase while others were far in advance of it.

For the three elections of the 1960's, generally speaking,

the covariance scores are much lower than in the 1960's; and,

again, the Progressive Conservative covariance scores are larger than

the Liberal scores. What is noteworthy about these covariance scores

is that the Prairie region lagged behind the movement away from the

Progressive Conservatives, while Quebec moved more strongly away from

the Conservatives, and, of the provinces, Alberta was the slowest

to move away from the Progressive Conservative party.

The analysis to this point has avoided the question of the

movements of particular constituencies: the discussion of the variance

components model for the total vote of the major Canadian political

parties, however, made it apparent that constituency level

political forces, particularly in the 1960's,were very influential.

We now turn, then, to an examination of these constituencies: this

will be done, as was the case in the two previous chapters, by

discussing the relationship between the ridings of the Atlantic

and Prairie regions, the relationship between the constituencies

of the provinces and the nation, and, lastly, the pattern of movements

in the case of the constituencies in the various sub-provincial

regions of Ontario, Quebec, and British Columbia.

Tables 17 and 18 below give the relationship between

the Atlantic and Prairie regions and their constituencies for all

elections from 1953-196 in terms of the proportion of the

variation in the Liberal and Progressive Conservative shares of

the total vote within the region that is attributable to

"constituency" level forces. In other words, after the national

component has been removed from the total regional variation, it is

possible to ascertain the extent to which the regions can be said

to be influenced by regional-level forces, which, as argued before,

are indicated by low percentages in the amount of regional variation

that can be ascribed to provinces or constituencies within the

region.

Table 17

Total Regional and "Constituency" Variation in Liberal and
Progressive Conservative Proportion of the Total Vote for
Atlantic Region, 1953-1965.

Liberal Percent of Total Vote

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953		117.8	.85
1957	119.2	1	.97
1958	59.8	51.3	.86
1962	55.4	51.7	.93
1963	50.8	47.7	.94
1965	95.6	95.5	.99
			.92

Progressive Conservative Percent of Total Vote

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953	156.0	151.1	.97
1957	144.4	122.6	.85
1958	383.9	71.1	.18
1962	42.6	42.5	.99
1963	162.9	158.1	.97
1965	181.8	108.2	.60
			.76

Table 18

Total Regional and "Constituency" Variation in Liberal and Progressive Conservative Proportion of the Total Vote for Prairie Region, 1953-1965.

Liberal Percent of Total Vote

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953	462.8	365.0	.79
1957	321.5	306.2	.95
1958	89.5	73.4	.82
1962	97.6	94.2	.97
1963	261.6	216.4	.83
1965	178.6	154.5	.87
			.87

Progressive Conservative Percent of Total Vote

	Total Regional Variation	Total "Constituency" Variation	Percent "Constituency" Variation
1953	2965.1	606.7	.20
1957	2519.2	788.3	.31
1958	257.6	255.4	.99
1962	538.1	251.2	.47
1963	2281.6	640.8	.28
1965	1699.2	529.7	.31
			.43

Only in one of the four sets (that is to say, only in
the case of the Progressive Conservative vote in the Prairie
region) is there a regional factor underlying the movement in the
vote; the variation in the Liberal vote for both regions seems
to be highly influenced by constituency-level forces, as the
lowest constituency proportion recorded is 79 percent in the
Prairie region in 1953. It should also be noted that in the
election of 1958, there was a strong regional factor behind the
movement in the Progressive Conservative vote in the Atlantic
region (indeed the proportion of 18 percent attributed to
constituenc~ level variation is the lowest found in both tables).
The very high constituency proportion found in the 1958 election
for the Progressive Conservative share of the total vote might
seem strange, given what has been argued previously about the
spatial nature of the vote for the Tories in the Prairie region.
It must be remembered, however, that what is being examined is the
movement in the proportions of the vote over time and at specific
points in time; in the case of the 1958 election in the Prairies
the constituencies in Saskatchewan moved strongly towards the
Progressive Conservatives, while Manitoba to some extent and
Alberta to a great extent, while clearly moving towards the Tories,
did not move as strongly; the differences in the magnitudes were
sufficient to result in a high constituency proportion. One simple
test which exemplifies these movements is that in the 1958 election
in the Prairie region there were 23 ridings with positive time-

specific scores and 25 with negative time-specific scores while in

the Atlantic region in the 1958 election there were 31 constituencies

with positive time-specific scores in the movement of the Progressive

Conservative vote and only 2 with negative time-specific scores.

The discussion now turns to an examination of the

relationship between the constituencies and the provinces of the

nation. Tables 19 and 20 below give the proportions of the

total variation for the Liberal and Progressive Conservative share

of the total vote within the province that can be partitioned out

to the level of constituencies within the province.

It is quite apparent that the two tables are

characterized by a general lack of constancy in the level of

proportions: only four provinces - Newfoundland and Nova Scotia

in the Liberal case (with British Columbia being an ambiguous case)

and Quebec and Saskatchewan in the Progressive Conservative case -

have in all elections constituency-level proportions on the same

side of 50 percent. In the case of the Liberal vote, only in the

Province of British Columbia is the overall constituency proportion

lower than 50 percent while four provinces - Nova Scotia, Alberta,

Prince Edward Island, and Saskatchewan - in the Progressive

Conservative table have overall constituency proportions less than

50 percent. The last characteristic of these constituency proportions

is the absence of many clear-cut instances of secular change in the

constituency proportions; only Manitoba and Alberta in the case of

the Progressive Conservative vote showed any steady trend, and that

was a decline in the constituency proportion from 1958-1965;   and

New Brunswick showed an increase in the constituency proportion from

48 percent in 1953 to 94 percent in 1965, broken only by the low

mark of 32 percent in the 1957 election.

Table 19

Proportion of Total Variation in Liberal Percent of Total Vote Within Provinces Attributable to Constituency-Level Factors, 1953-1965.

	Nfl.	N.S.	N.B.	Sask.	Alta.	Man.	Que.	Ont.	PEI	B.C.
1953	.76	.99	.48	.78	.73	.84	.86	.74	.19	.50
1957	.99	.86	.93	.52	.49	.26	.66	.46	.99	.32
1958	.91	.69	.32	.99	.59	.69	.69	.82	.83	.46
1962	.96	.98	.91	.99	.89	.50	.48	.42	.01	.26
1963	.81	.95	.99	.46	.67	.90	.66	.66	.76	.44
1965	.88	.75	.94	.66	.85	.99	.78	.77	.99	.42
Overall	.89	.87	.76	.73	.70	.70	.69	.64	.63	.40

Table 20

Proportion of Total Variation in Progressive Conservative Percent of Total Vote Within Provinces Attributable to Constituency-Level Factors, 1953-1965.

	Nfl.	Que.	N.B.	B.C.	Ont.	Man.	N.S.	Alta.	PEI	Sask.
1953	.99	.75	.54	.60	.53	.44	.88	.14	.28	.05
1957	.91	.99	.70	.75	.46	.52	.64	.33	.69	.07
1958	.36	.64	.22	.34	.83	.99	.09	.75	.05	.38
1962	.88	.99	.89	.99	.56	.82	.82	.59	.03	.04
1963	.92	.60	.98	.99	.84	.43	.31	.37	.19	.04
1965	.85	.86	.96	.46	.70	.42	.07	.31	.01	.13
Overall	.82	.80	.72	.69	.65	.60	.48	.42	.21	.12

Figures 9 and 10 show the frequency distribution in the
total variation in constituency effect for the Liberal and
Progressive Conservative share of the total vote for all constituencies
from 1953-1965. Two particular patterns are worthy of comment.
First, there is a higher proportion (11.0 percent) of constituencies
with very high (100+) total constituency variation in the
Progressive Conservative vote than for the Liberal vote (6.8 percent).
Second, there are more constituencies with low (less than 19.9)
total constituency variation in the Liberal vote (50.6 percent) than
for the Progressive Conservative vote (43.7 percent).

Tables 21 and 22, which follow Figures 9 and 10, give
the distribution in total constituency variation for the Liberal and
Progressive Conservative parties by provinces. In general terms,
the pattern in the spread of the constituencies is similar to what
was reported for the cases of turnout and the Liberal share of the
two-party vote. Quebec, in both tables, has the great majority of
constituences which have high total constituency variation scores;
the four Atlantic provinces tend to have very few ridings with total
constituency variation scores greater than 19.9 for both the Liberal
and Conservative vote; a pattern of low constituency variation is
found in the four western provinces for the Liberal vote, but there
tends to be greater variation in the Tory vote for the constituencies
of the west; Ontario has a very similar pattern in the distribution
of constituencies by total constituency variation for both political
parties.

Figure 9

Frequency Distribution for all Constituencies of Total Variation
in Constituency Effect for Liberal Share of Total Party Vote in
Six Canadian General Elections, 1953-1965

Number of Constituencies

Total Variation in Constituency Effect
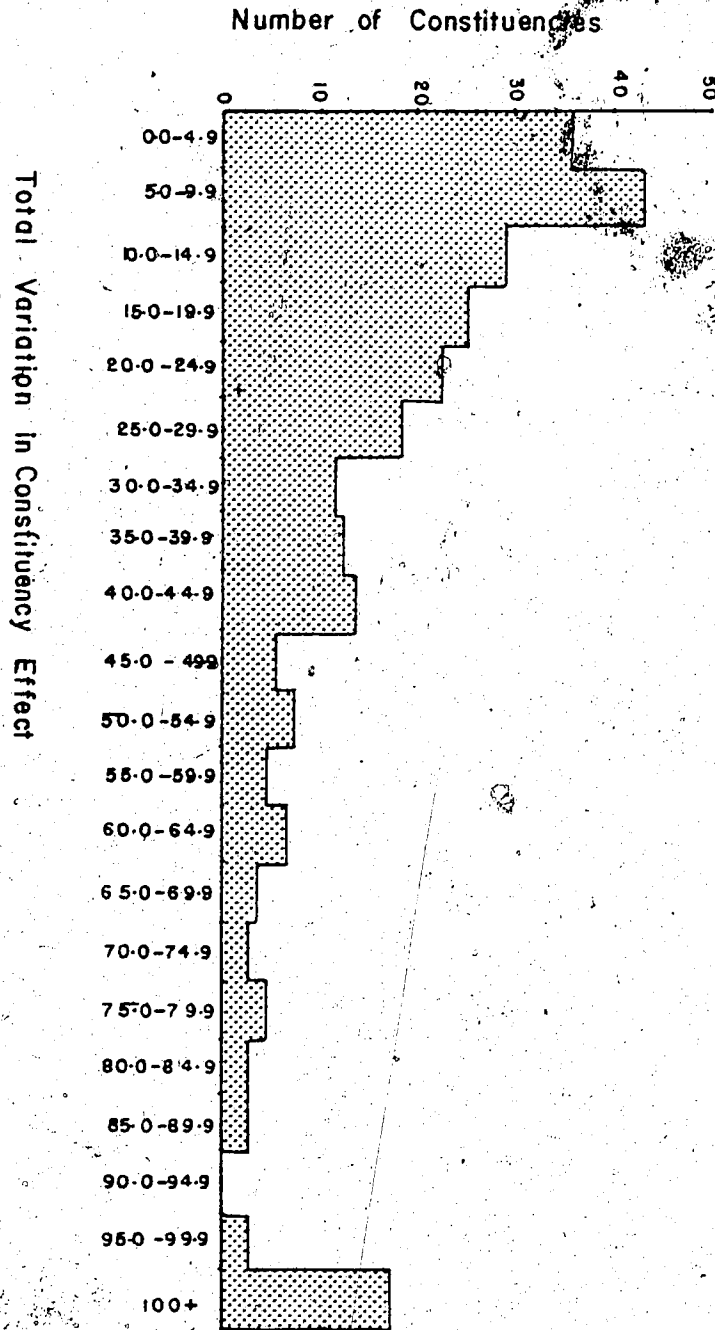
Figure 10

Frequency Distribution for all Constituencies of Total Variation in
Constituency Effect for Progressive Conservative Share of Total Party
Vote in Six Canadian General Elections, 1953-1965.

Number of Constituencies

Total Variation in Constituency Effect

(y-axis categories: 0·0-4·9, 5·0-9·9, 10-14·9, 15·0-19·9, 20·0-24·9, 25·0-29·9, 30·0-34·9, 35·0-39·9, 40·0-44·9, 45·0-49·9, 50·0-54·9, 55·0-59·9, 60·0-64·9, 65·0-69·9, 70·0-74·9, 75·0-79·9, 80·0-84·9, 85·0-89·9, 90·0-94·9, 95·0-99·9, 100+)
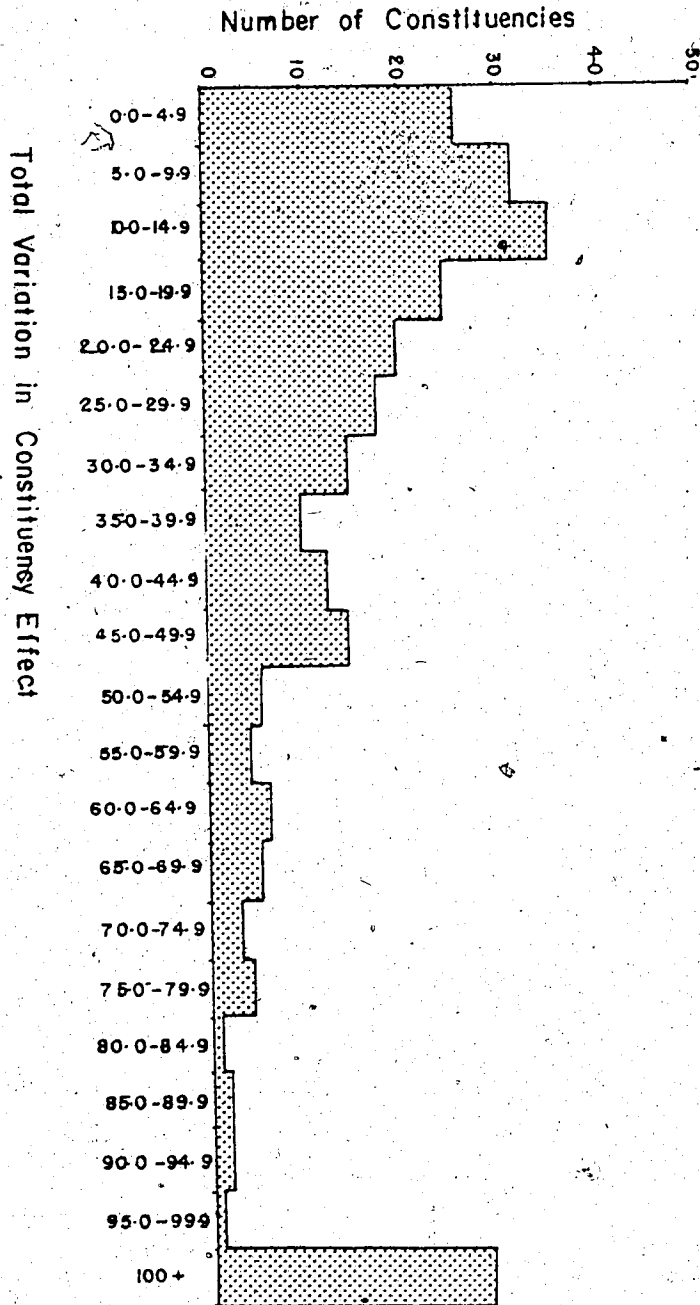
Table 21

Distribution of Total Variation in Constituency Effect, Liberal
Percent of Total Vote, by Province, 1963-1965 (Horizontal Percentages).

	0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Ont.	52.9	31.2	5.9	7.0	1.2	1.2	85
Que.	20.0	20.0	24.0	9.3	6.7	20.0	75
N.S.	83.3	16.7	0	0	0	0	12
N.B.	100.0	0	0	0	0	0	10
Nfl.	28.6	28.6	28.6	14.3	0	0	7
P.E.I.	100.0	0	0	0	0	0	4
Man.	57.1	28.6	14.3	0	0	0	14
Sask.	64.7	35.2	0	0	0	0	17
Alta.	70.6	5.9	17.6	0	0	5.9	17
B.C.	72.7	22.7	0	4.5	0	0	22
Total	50.6	23.5	11.5	5.8	2.3	6.5	263

Table 22

Distribution of Total Variation in Constituency Effect, Progressive
Conservative Percent of Total Vote, by Province 1953-1965.

	0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Ont.	52.9	39.4	10.6	7.0	0	0	85
Que.	18.7	21.3	13.3	9.3	5.3	32.0	75
N.S.	91.7	8.3	0	0	0	0	12
N.B.	80.0	0	10.0	0	0	10.0	10
Nfl.	42.8	28.6	28.6	0	0	0	7
P.E.I.	100.0	0	0	0	0	0	4
Man.	42.8	21.4	0	14.3	14.3	7.1	14
Sask.	58.8	29.4	11.8	2	0	3	17
Alta.	23.5	29.4	17.6	11.8	0	17.6	17
B.C.	64.7	9.1	36.4	4.5	0	0	22
Total	44.1	22.4	13.3	6.8	2.3	11.0	263

Tables 23 and 24 below show the distribution of constituencies in Quebec in terms of the total constituency variation scores and the number of times the constituency changed hands (that is, the degree of political competitiveness) for the Liberal and Progressive Conservative share of the total vote.

Table 23

Total Constituency Variation Scores for Liberal Percent of Total Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		Total Constituency Variation					
	0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Number of Times Constituency Changed Hands	0	4	3	3	0	1	4	15
	1	2	2	0	1	0	4	9
	2	8	5	11	3	4	4	35
	3	1	4	3	1	0	1	10
	4	0	1	1	1	1	2	6
N		15	15	18	6	6	15	75

Table 24

Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		Total Constituency Variation					
	0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Number of Times Constituency Changed Hands	0	5	5	1	1	2	1	15
	1	0	0	1	1	0	7	9
	2	6	8	6	3	1	11	35
	3	2	4	0	1	1	2	10
	4	0	0	2	1	0	3	6
N		13	17	10	7	4	24	75

The number of cells with few cases forces the collapsing of the two variables in order to allow for the testing of the association between them; this is done in Tables 25 and 26 below.

Table 25

Collapsed Total Constituency Variation Scores for Liberal Percent of Total Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		Total Constituency Variation		
		0.0-39.9	40.0+	N
Number of Times Constituency Changed Hands	0-1	11	13	24
	2-4	19	32	51
	N	30	40	75

Yule's Q =+.17
Epsilon =+.07

Table 26

Collapsed Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Number of Times Constituency Changed Hands, Quebec, 1953-1965.

		Total Constituency Variation		
		0.0-39.9	40.0+	N
Number of Times Constituency Changed Hands	0-1	10	14	24
	2-4	20	31	51
	N	30	45	75

Yule's Q =+ .05
Epsilon =+ .02

In both cases, there is little relationship between the variables of political competitiveness and the total variation in constituency effect; this lack of association follows the pattern established earlier in chapters four and five for the variables of political competitiveness, total constituency variation in turnout, and total constituency variation in the Liberal share of the two-party vote, in the province of Quebec.

Tables 27 and 28 below give the relationship between political competitiveness and total constituency variation in the Liberal and Progressive Conservative shares of the total vote for the province of Ontario.

Table 27

Total Constituency Variation Scores for Liberal Percent of Total Vote by Number of Times Constituency Changed Hands, Ontario, 1953-1965.

		Total Constituency Variation						
		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Number of Times Constituency Changed Hands	0	17	8	1	1	0	1	28
	1	9	11	2	4	0	0	26
	2	17	5	2	1	1	0	26
	3	2	2	0	0	0	0	4
	4	0	1	0	0	0	0	1
	N	45	27	5	6	1	1	85

Table 28

Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Number of Times Constituency Changed Hands, Ontario, 1953-1965.

		Total Constituency Variation						
		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
Number of Times Constituency Changed Hands	0	17	8	1	1	0	1	28
	1	9	11	2	4	0	0	26
	2	17	4	2	1	1	1	26
	3	2	2	0	0	0	0	4
	4	0	1	0	0	0	0	1
	N	45	26	5	6	1	2	85

When these two tables are collapsed, the following two matrices are formed which show the relationship between the variables of political competitiveness and total constituency variation in the vote obtained by the two major parties to be tested.

Table 29

Collapsed Total Constituency Variation Scores for Liberal Percent of Total Vote by Number of Times Constituency Changed Hands, Ontario, 1953-1965.

		Total Constituency Variation		
		0.0-19.9	20.0+	N
Number of Times Constituency Changed Hands	0-1	26	28	54
	2-4	19	12	31
		45	40	85

Yule's Q = -.26
Epsilon = -.12

Table 30

Collapsed Total Constituency Variation Scores for Progressive
Conservative Percent of Total Vote by Number of Times
Constituency Changed Hands, Ontario, 1953-1965

		Total Constituency Variation		
		0.0-19.9	20.0+	N
Number of				
Times				
Constituency	0-1	26	28	54
Changed Hands				
	2-4	19	12	31
	N	45	40	85

Yule's Q = -.26
Epsilon = -.12

　　　　For both political parties the relationship between

political competitiveness and total constituency variation is

weak; or, in other words, the less competitive constituencies

in Ontario are slightly more likely to have high constituency

variation scores than are the more competitive ridings. These

results, although a little stronger, are essentially the same

as were reported previously for the relationships between pol-

itical competitiveness and turnout and Liberal share of the two-

party vote constituency variation scores in Ontario.

　　　・We now turn to an examination of the relationship between,

the constituencies in terms of community size and the total

variation in constituency effect. Tables 31 and 32 show this

relationship in the province of Quebec for the Liberal and

Progressive Conservative proportions of the total vote.

Table 31

Total Constituency Variation Scores for Liberal Percent of Total Vote by Community Size, Quebec, 1953-1965.

Total Constituency Variation

		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.0	100+	N
	Rural	6	10	8	6	2	6	38
	25,000-49,999	3	2	1	0	1	1	8
	50,000-99,999	2	1	1	0	0	0	4
Community Size	100,000-299,999	0	0	2	0	0	2	4
	300,000-499,999	0	0	0	0	0	0	0
	500,000+	4	2	6	1	2	6	21
	N	15	15	18	7	5	15	75

Table 32

Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Community Size, Quebec, 1953-1965.

Total Constituency Variation

		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
	Rural	3	11	2	5	2	15	38
	25,000-49,999	1	2	1	1	0	3	8
	50,000-99,999	1	1	0	0	0	2	4
Community Size	100,000-299,999	1	1	0	0	0	2	4
	300,000-499,999	0	0	0	0	0	0	0
	500,000+	8	1	7	1	2	2	21
	N	14	16	10	7	4	24	21

Both tables are characterized by the new well-known

dispersion of cases: some features worthy of comment are that

those constituencies with very high total constituency variation

scores for the Progressive Conservative vote tend to be concentrated

in the less urbanized ridings of the province, with 15 out of 24

(62.5 percent) seats being essentially rural in nature; and a

considerable proportion of such constituencies have very high

total constituency variation scores (15 out of 38 constituencies,

or 39.4 percent); conversely those seats with low total constituency

variation scores (0.0-19.9) for the Conservative vote tend to be

found in the very large urban area (8 out of 14, or 57.1 percent),

and large urban areas, tend to have total constituency variation

scores at the lower range of the continuum, with 38.1 percent of

such ridings have scores lower than 19.9 (8 out of 21 constituencies).

The Liberal constituency variation scores are much more widely

dispersed throughout the various cells, to the extent that it is

very difficult to ascertain any systematic concentration of cases.

Tables 33 and 34 show the two-by-two matrices for the

Liberal and Progressive Conservative vote respectively.

Table 33

Collapsed ·Total Constituency Variation Scores for Liberal Percent of Total Vote by Community Size, Quebec, 1953-1965.

		Total Constituency Variation			
		0.0-39.9	40.0+	N	N
Community Size	Rural to 99,999	24	26	50	
	100,000 +	6	19	25	
	N	30	45	75	

Yule's Q =+.49
Epsilon =+.22

Table 34

Collapsed Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Community Size, Quebec, 1953-1965.

		Total Constituency Variation		
		0.0-39.9	40.0+	N
Community Size	Rural to 99,999	19	31	50
	100,000 +	11	14	25
	N	30	45	75

Yule's Q = -. 12
Epsilon = -. 05

In the Liberal case, there is a moderately positive relationship between community size and total constituency variation scores; that is, the more urbanized ridings, compared to the more rural seats, are more likely to have high total constituency variation scores; similar results, but of lesser strength, were reported for turnout and Liberal share of the two-party vote. A contrary pattern is evident in the Progressive Conservative case as evidenced by the weak negative scores; rural seats tend to have high total constituency variation scores while urban ridings tend to have low total constituency variation scores.

Tables 35 and 36 below show the dispersion of cases by total constituency variation scores and community size for the Liberal and Progressive Conservative parties.

Table 35
Total Constituency Variation Scores for Liberal Percent of Total
Vote by Community Size, Ontario, 1953-1965

		Total Constituency Variation					
		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+ N
	Rural	20	15	1	1	1	0 38
	25,000-49,999	3	3	1	0	0	0 7
Community Size	50,000-99,999	6	3	1	2	0	0 12
	100,000-299,999	6	0	0	0	0	1 7
	300,000-499,999	1	2	0	0	0	0 3
	500,000+	9	4	2	3	0	0 18
	N	45	27	5	6	1	1 85

Table 36

Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Community Size, Ontario, 1953-1965.

		Total Constituency Variation						
		0.0-19.9	20.0-39.9	40.0-59.9	60.0-79.9	80.0-99.9	100+	N
	Rural	21	12	3	2	0	0	38
	25,000-49,999	4	2	0	1	0	0	7
	50,000-99,999	7	3	2	0	0	0	12
Community Size	100,000-299,999	5	1	1	0	0	0	7
	300,000-499,999	3	0	0	0	0	0	3
	500,000+	5	7	3	3	0	0	18
		45	25	9	6	0	0	85

Unlike the relationship between these two variables in the Province of Quebec for the Liberals and Progressive Conservatives, the Ontario pattern is one of great similarity in the dispersion of the constituencies throughout the tables; most of the constituencies in the various community size categories are concentrated in the 0.0-19.9 and 20.0-39.9 columns of the total constituency variation scores, with the greatest amount of dispersion occurring in the 500,000+ category (Metropolitan Toronto), where one-third of the eighteen ridings have scores greater than 40.0. The two-by-two matrices for these two tables are shown below.

Table 37

Collapsed Total Constituency Variation Scores for Liberal Percent of Total Vote by Community Size, Ontario, 1953-1965.

		Total Constituency Variation		
		0.0-19.9	20.0+	N
Community Size	Rural to 99,999	29	28	57
	100,000 +	16	12	28
	N	45	40	85

Yule's Q = -.13
Epsilon = -.06

Table 38

Collapsed Total Constituency Variation Scores for Progressive Conservative Percent of Total Vote by Community Size, Ontario, 1953-1965.

		Total Constituency Variation		
		0.0-19.9	20.0+	N
Community Size	Rural to 99,999	32	25	57
	100,000 +	13	15	28
	N	45	40	85

Yule's Q = +.19
Epsilon = +.09

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In the Liberal case there is weak negative relationship between the variables of community size and total constituency variation; the more rural ridings are likely, compared to the more urban seats, to have high total constituency variation scores. In the Progressive Conservative case, however, the contrary relationship is evident, with the more urban ridings more likely than the rural seats to have high total constituency variation scores, but the relationship is not very strong as is indicated by the relatively low Yule's Q and Epsilon values.

For both provinces, then, both variables - political competitiveness and community size, related to the total constituency variation scores for the Liberal and Conservative parties, no strong relationships were found; the closest exception is the relationship between community size and Liberal share of the total vote in Quebec where a moderately strong relationship was found.

Table 39 gives the Yule's Q and Epsilon values for those provinces - Nova Scotia, New Brunswick, Manitoba and British Columbia - where there were a sufficient number of ridings with a range of scores on the index of political competitiveness to allow for the testing of any relationship. No such test is possible in the case of community size and total constituency variation since, outside of the one or two large urban areas in each province, there is little variation in the size of communities in the ridings.

Table 39

Yule's Q and Epsilon Values for Collapsed Constituency Variation Scores
for Liberal and Progressive Conservative Percent of Total Vote by
Number of Times Constituency Changed Hands (Political Competitiveness);
New Brunswick, Nova Scotia, Manitoba, and British Columbia, 1953-1965.

Political Competitiveness by Total Constituency
Variation Scores.

	Liberal		Dichotomized Constituency Variation Scores	
	Yule's Q	Epsilon		
New Brunswick	+.11	+.05	0.0-9.9	10.0+
Nova Scotia	-.67	-.38	0.0-9.9	10.0+
Manitoba	+.67	+.35	0.0-9.9	10.0+
British Columbia	-.39	-.21	0.0-14.9	15.0+

	Progressive Conservative		Dichotomized Constituency Variation Scores	
	Yule's Q	Epsilon		
New Brunswick	-.33	-.12	0.0-9.9	10.0+
Nova Scotia	0.0	0.0	0.0-9.9	10.0+
Manitoba	+.50	+.25	0.0-9.9	10.0+
British Columbia	-.50	-.24	0.0-14.9	15.0+

The overriding characteristic of Table 39 is that there is

no constant pattern of association between political competitiveness

and total constituency variation scores. In some of the provinces

there is a negative relationship, in some cases, quite strong, and

in others, a positive relationship, again, in some cases, moderately

strong. While in two provinces - Manitoba and British Columbia -

the direction of the relationship is the same for both the Liberals

and the Progressive Conservatives, New Brunswick has both a positive

and negative relationship, and Nova Scotia in one case has quite a strong

relationship between the two variables for the Liberal party and no

relationship for the Progressive Conservatives.

Table 40 below shows the Pearson correlation coefficients

for the relationships between the total constituency variation scores

for turnout, Liberal share of total party vote, and Progressive

Conservative share of total vote, for all constituencies by

provinces.

Table 40

Relationships between Total Constituency Variation Scores for Turnout, Liberal Percent of Total Vote, Progressive Conservative Percent of Total Vote, for all Constituencies, by Province, and Strength of Relationship, 1953-1965

	Strong		Moderate		Weak	
	Province	r	Province	r	Province	r
Liberal Vote by Turnout	P.E.I.	+.99	Nova Scotia	+.43	Quebec	+.21
	Newfoundland	-.68	British Columbia	+.37	Ontario	+.03
			Sa...	+.34	New Brunswick	-.01
			Alber...	-.35	Manitoba	-.06
Conservative Vote by Turnout	P.E.I.	+.98	Saskatchewan	+.61	Quebec	+.33
	Nova Scotia	+.65	New Brunswick	+.35	Ontario	+.33
			Newfoundland	-.58	B.C.	+.01
					Manitoba	-.02
					Alberta	-.18
Liberal Vote by Conservative Vote	P.E.I.	+.98			Ontario	+.28
	Alberta	+.86			New Brunswick	+.26
	Newfoundland	+.78			Quebec	+.25
	Nova Scotia	+.71			B.C.	+.23
	Saskatchewan	+.68			Manitoba	+.18

This table is an important test for the argument that the constituencies constitute important and significant political environments within the Canadian political system. The assumption underlying the formation of the table is that there will be a series of high positive correlations for those provinces in which the constituencies are influential determinants of behaviour.

When the table is inspected only one province - Prince Edward Island - is found to have high positive correlations for all three cases, with the highest value obtained in each instance (although there is a problem, as discussed earlier, of multi-collinearity because of the procedure used for the division of the double-member riding of Queens). Nova Scotia - the other province with a double-member constituency - had high positive values in two instances - Conservative vote by turnout and Liberal vote by Conservative vote.

If the search for provinces with high positive scores is made less rigorous, then two provinces - Nova Scotia and Saskatchewan - are found to have positive correlations in the moderate to strong range. It should also be noted that two provinces - Ontario and Quebec - consistently recorded low positive correlations. Lastly, three provinces - Newfoundland, Alberta, and Manitoba - each had two instances where the correlation was negative.

While Prince Edward Island clearly can be seen to have ridings which act as political environments, the other provinces,

with the possible exceptions of Nova Scotia and Saskatchewan,

do not support the contention that their constituencies act as

important political environments. While the strong correlations'

reported for five provinces in the case of Liberal vote by

Conservative vote is impressive, it should be emphasized that

if were constituency-level factors were strong enough to result

in deviations from higher-order movements, to the extent that

the constituency could be regarded as being an influential

environment upon political behaviour, then that should be

apparent as well in the case of the turnout and party vote

correlations. But, as has been pointed out already, that clearly

is not the case. And it bears reiteration, by way of summary,

that five provinces - Ontario, Quebec, Newfoundland, Alberta

and Manitoba - had either consistently low positive values or

had at least two instances of negative correlations. New

Brunswick has an inconclusive pattern inasmuch as it had two

positive correlations - one of moderate strength and one of

weak strength - and one negative correlation.

The analysis, then, suggests that only three prov-

inces - Prince Edward Island, Nova Scotia, and Saskatchewan -

have constituencies which appear to act as important sources

of deviation from higher-order patterns. These provinces have

a total of 33 ridings out of the total of 263 in all of Canada

during the analysis period (12.5 percent).

Table 41 and 42 give the three new regions with low total
constituency variation proportions for the Liberal and Progressive
Conservative proportions of the total vote and similar variation
proportions for the Montreal region for each of the elections and
overall elections.

Table 41

New Regions with Low Total Constituency Variation Proportions for
Liberal Percent of Total Vote, and Montreal Region, by Election Year,
and Overall.

	Toronto	Vancouver	North-Western Quebec	Montreal
1953	.26	.34	.38	.90
1957	.08	.15	.98	.80
1958	.21	.24	.04	.97
1962	.24	.12	.16	.80
1963	.09	.14	.20	.86
1965	.25	.26	.65	.79
	.19	.21	.40	.85

Table 42

New Regions with Low Total Constituency Variation Proportions for
Progressive Conservative Percent of Total Vote, and Montreal Region,
by Election Year, and Overall.

	Toronto	Vancouver	North-Western Quebec	Montreal
1953	.20	.59	.20	.91
1957	.08	.33	.87	.94
1958	.37	.15	.82	.66
1962	.23	.58	.64	.55
1963	.12	.77	.35	.57
1965	.17	.24	.31	.95
	.19	.44	.53	.76

For both the movements in the Liberal and Progressive

Conservative proportions of the total vote, the Toronto region seems

to provide a strong influence; in every election the constituency

proportion is less than 50 percent (indeed only in the election of

1958 does the constituency proportion of the total variation within

the region extend much beyond the mark of 25 percent). The Vancouver

region also seems to act as an important force upon the movements of

the vote of the two parties, although the impact is much clearer and

consistent in the case of the Liberals (in three elections - 1953, 1958

and 1963 the constituency variation proportion is high in the

Progressive Conservative vote movement). The region of North-Western

Quebec, the region with the third lowest overall constituency variation

proportion, is characterized by considerable range in the constituency

proportions. The Montreal region, provides a strong contrast to the

pattern evinced by the two largest urban areas in English-speaking

Canada; the high constituency variation proportions (the proportion

of 85 percent obtained in the Liberal case was the highest for any

region in the analysis) are regular and consistent, indicating that

while the Island of Montreal remained generally Liberal throughout the

analysis period in terms of seats, there were a number of divergent

movements not caught by the seats won and lost analyses.

Chapter Six

Footnotes

1. Since both the CCF-NDP and Social Credit parties, especially
   in the 1950's, failed to nominate candidates in many ridings,
   particularly in the six eastern-most provinces, it is not
   feasible to employ Stokes' variance components model.

2. Contrary Regional and Provincial Movements Compared to the
   National Movement in Liberal Proportion of the Total Vote,
   1953-1965.

Regional/National
1958-1962   1963-1965

National   33.8-36.8 = +3.0   National   40.8-39.6 = -1.2
Quebec   45.2-38.2 = -7.0   Quebec   44.1-44.3 = +0.2

Provincial/National
1958-1962   1963-1965

National   33.8-36.8 = +3.0   National   40.8-39.6 = -1.2
Quebec   45.2-38.2 = -7.0   Quebec   44.1-44.3 = +0.2
                                   Sask.   23.7-23.8 = +0.1
                                   Alberta   18.7-19.2 = +0.5

Contrary Regional and Provincial Movements Compared to the
National Movement in Progressive Conservative Proportion of
the Total Vote, 1953-1965.

Regional/National
1962-1963   1963-1965

National   37.6-33.6 = -4.0   National   33.6-33.3 = -0.3
Prairies   45.3-48.9 = +3.6   Quebec   20.0-22.5 = +2.5
                                   Atlantic   41.3-43.6 = +2.3

Provincial/National
1962-1963   1963-1965

National   37.6-33.6 = -4.0   National   33.6-33.3 = -0.3
PEI   50.7-51.2 = +0.5   N.S.   47.3-49.7 = +2.4
Manitoba   42.6-44.2 = +1.6   N.B.   39.8-41.3 = +1.5
Sask.   49.6-54.0 = +4.4   Nfld.   27.7-30.8 = +3.1
Alberta   43.3-47.6 = +4.3   PEI   51.2-53.2 = +2.0
                                   Alberta   47.6-48.1 = +0.5
                                   Quebec   20.0-22.5 = +2.5

Chapter Seven

Conclusion

It was argued in the first chapter that Canada has

been traditionally interpreted as a national system with a

number of territorially-based differentiations best represented

in regional terms. In recent years, however, a number of studies

have appeared which have cast the image of Canadian politics

less in terms of regions and more of provinces. Black and Cairns,

for example, speak of "province-building" and construct their

interpretation of the Canadian political system in light of the

development of highly-differentiated provincial political systems.[1]

John Wilson, in a similar vein, albeit in an admittedly over-

simplified manner, writes that

> there is no national party system at all
> but rather a loose association of 10 dis-
> tinct provincial systems which, because of
> wholly understandable variations in their
> patterns of behaviour, are bound to aggre-
> gate at any federal election to the
> peculiar hybrid which Canada appears to be.[2]

These arguments (in particular that of Wilson)

suggest that the national values for voter turnout and party

vote are misleading in that they do not correspond very well

to what is happening below the level of the nation; they are

averages that are characterized by a high degree of variation.

Political systems may differ in the extent to which

national values for party vote and voter turnout correspond to

or diverge from sub-national movements. The arguments about the provincially-based sources of differentiation in political behav- imply that Canada is not a "nationalized" political system. Such a system would be one in which the party vote and voter turnout movements for sub-national political levels, such as regions or provinces or constituencies, would be very similar, if not identical, to the national movements. Geography, or different levels of spatial aggregation below the level of the nation,would be of no consequence. Conversely, a "de-nationalized" system would have little correspondence between the national and sub-national movements. In the former case, the political system would be interpreted as being dominated by issues, events, personalities, and political organizations which have a national focus and orientation, while in the latter case it would be seen as being dominated by issues, events, personalities, and political organizations which have sub-national perspectives and orientations.

The overriding object of this study, then, was to examine the national and sub-national movements in voter turnout and party vote for the six Canadian general elections from 1953 to 1965 to provide an estimate of the extent to which the system could be said to be "nationalized" or "de-nationalized."

However, as was argued in chapter three, measurements of sub-national variations in political behaviour taken at single points in time or at two points in time do not speak adequately

to the question. No answer to the question of the relative rank-
ing of the impact of national and sub-national political levels
upon the party vote and voter turnout movements can be given.
And the relationship between the higher-order and lower-order
levels of the system cannot be simultaneously measured.

These deficiencies in the traditional techniques of
analyzing sub-national movements in political behaviour led to
the adoption of Stokes' analysis of variance model.[3] This model,
in addition to its capacity to partition out the impact of
national and sub-national levels upon political behaviour, has
been used in the analysis of a number of systems.

The provision of a comparative framework for the
analysis of the Canadian case is important, as those scholars who
have stressed the significance of the regional variable in
analyses of Canadian politics have not been sensitive, for the
most part, to the implicitly comparative nature of the claim.[4]
One of the central components of any definition of regionalism,
or any other concept of sub-national political differentiation,
is the presence of differences which have a spatial dimension
underlying their existence and continuance in a given society.
To claim that a particular society is regionalized is to argue
that sub-national territorial units to some degree provide the
basis of differentiation within that society, and that other
possible sources of differentiation are of weaker consequence.

The judgment of the extent of regionalism, even if explicitly
confined to the bounds of a single system, involves implicitly
a decision of measurement; that is, some ordering of the weights
to be attached to regional and non-regional forces has to be made.
In order for this ranking of relative weights for a set of pol-
itical forces to have any theoretical consequence, it must be
made in the light of the experiences of other political systems.
And the judgment of the significance of the variable of regional-
ism, again commonly made within the single system, inevitably
must be comparative; it calls attention to the relative absence
of regionalism in another system or set of systems. The failure
to recognize the implicitly comparative nature of regional anal-
ysis has meant that few studies of the regional phenomena in
Canada have incorporated data bases, or analytical techniques, or
theoretical perspectives, which have been used in the study of
the development of a number of systems.[5]

To a certain extent this deficiency in the study of
regionalism in Canada has been remedied inasmuch as data have been
presented for the pattern of movements in the two-party vote in
Australia, the United Kingdom, and the United States, as well as
in Canada, and for the United States and Canada in the case of
turnout movements. These systems, while different in a number of
important ways, are sufficiently similar that Alford, among
others, categorizes them as "Anglo-American" and considers them

amenable to valid comparative analysis.[6] It must be emphasized, however, that these comparisons must be treated gingerly and tentatively since it is erroneous to assume, because the time-periods of comparison are more or less the same, that the systems are more or less at the same level of development or have more or less the same rate of change. [7]

The general impression created by the presentation of the results of the application of Stokes' variance components model to Canada for the six general elections from 1953 to 1965 is that sub-national political forces - as represented by the variance component scores or effects for regions, provinces, and constituencies - are important influences upon electoral behaviour.

This is particularly the case when the turnout movements in Canada and the United States are compared. Canada appears to have a much more "de-nationalized" political system than does the United States, given that the two national variance component scores are 59 and 86 percent respectively.[8]

Stokes interpreted the American finding as showing "that the great contests for the presidency have extraordinarily importance in getting people to the polls."[9] Stokes also recognized that the turnout variance component score, which was for the American House of Representatives from 1952 to 1960, reflects a decade noted for the very successful presidential candidacies of Dwight Eisenhower.[10]

Following this mode of interpretation the Canadian
electorate, despite the enormous transformation of the party
system brought about in the elections of 1957 and 1958 by John
Diefenbaker and the Conservative party, and the great increase
in turnout from 1953 to 1958 (from 67 percent to 79 percent), is
characterized not by a national tide but by a number of spatially-
based variations in its reaction to national political events.
Even when the six-election analysis set is broken down into two
sets of three elections each the national variance component for
turnout in the 1950's elections is only 66 percent; one-third,
that is to say, of the variation in turnout is attributable to
the impact of the lower-order levels of the system.

The two-party vote analysis presents an even stronger
picture of "de-nationalization" in that the national variance
component is only 37 percent, with each of the two lower-order
levels (either in the regional-constituency or provincial-
constituency formats) claiming a little over 30 percent of the
total variation. While the national level can be said to make
a substantial contribution to the variation in turnout the nation
seems to be much weaker in the case of the party vote variation;
the nation, in other words, attracts voters to the polls but once
they are there its influence is seriously diminished.

The fact that the sub-national political levels are
important sources of spatial differentiation in the behaviour of

the Canadian electorate would seem to offer strong supporting evidence for the claim that Canadian politics is highly regionalized in nature.

This claim, however, is put into question by the fact that the regional level, in both the cases of turnout and two-party vote, is the third most important level in terms of contributing to the variation in the respective movements.

It is at this point that the comparative nature of this study becomes important for it is evident that Canada, when compared in terms of the variance components of the two-party vote, is similar to the other systems rather than being different. For example, while the national level in Canada is not as important as the national level in the United Kingdom in influencing the flow of the two-party vote (the range between the two scores is 10 points), it is quite similar to the impact of the nation in Australia and the United States (the range for these three systems is just 6 points). Indeed, Canada ranks just behind Australia and ahead of the United States. The greatest difference between the systems is found in the relative weights obtained for the two lower-order levels of the systems. In the United States, Australia, and the United Kingdom the lowest level is either the most important or second-most important contributor to the total variation in the two-party vote. In Canada, however, the constituency is less important than the equivalent levels for the other systems, and is

the second-most influential level in the case of the regional-

constituency format and tied with the provincial level in the

case of the provincial-constituency format. The support for the

claim of the importance of electoral regionalism in Canada, then,

is found in the much stronger impact on behaviour that can be

attributed to the middle-level - either provinces or regions -

of the system than is the case for the other systems.

Another difference between Canada and the other systems

is found in the total amount of variation reported for turnout and

party vote. The American total variation in turnout for the five

congressional elections from 1952 to 1960 was 85.3 while the total

variation in turnout in Canada from 1953 to 1965 was 35.9, which

indicates that the propensity to vote in Canada is more stable and

less sensitive to short-term stimuli than is the case in the United

States.

The comparison, however, between Canada and the other

systems in terms of the total variation in the two-party vote re-

veals a different picture. The total variation scores for Australia,

the United States, the United Kingdom, and Canada respectively are

23.8, 28.6, 11.0, and 180.8. Quite clearly the first three systems

have a much more stable pattern of voting for the various political

parties than does Canada. While the act of voting in Canada seems to

be institutionalized (at least relative to voting in the United States),

the commitment to the parties themselves is much less institutionalized.

Since this study has utilized only aggregate data, so
that no conclusions about the psychological bases of political
behaviour can be drawn, the difference between Canada and the
other systems in the total variation in the two-party vote does
suggest that in Canada party identification, which in the
United States and other systems has been shown to have a
stabilizing effect on voting behaviour, is less firmly rooted.[11]
This difference between systems in the commitment to political
parties, it must be emphasized, can only be suggestive as the
party identification of individuals can remain stable even though
the actual vote has changed. Since this study has been concerned
with shifts in the proportions of the total vote or the two-party
vote received by the parties, as recorded for the various levels
of the system, what appears to be a pattern of weakly rooted party
identification may, in fact, be a pattern of stable party identifi-
cation and unstable voting over a relatively short period of time.

The variance components analysis for the total party
votes for the Liberal and Progressive Conservative parties presents
a somewhat mixed picture. First, the national level over the entire
analysis period accounts for approximately 30 percent of the total
variation in the Liberal vote and 40 percent of the total variation
in the Progressive Conservative vote; but the nation in the Liberal
case is the second most important level and in the Conservative case
is the most important level. The other difference between the parties

is that the middle level is least influential in the Liberal case while it is, albeit by only a slight margin, the second most important level in the case of the Progressive Conservative party.

Second, on the one hand, the decline in the national level variance component for the two-party vote and total party vote movements for the Liberal party was 6 percentage points, while, on the other hand, there was an increase in the weight attached to the national level for the Progressive Conservative total party vote movements from that recorded for the two-party vote analysis. The Liberal party vote movements, then, are somewhat more susceptible to sub-national political influences when the vote flows for all of the political parties are considered.

The Progressive Conservative party over the analysis period appears to be somewhat more of a nationalizing force than is the Liberal party, but its vote movements are influenced to a greater extent by the regional and provincial levels, so that, paradoxically, compared to the Liberal party, it makes a greater contribution to the nationalized and regionalized character of electoral politics in Canada.

The overall picture drawn by the variance components analysis for the set of six elections is of a political system influenced to a great extent by sub-national political forces. However, as was argued in the preceding chapters, this image is partly misleading, as the analyses of the three elections in the

1950's and the three elections of the 1960's indicated that

Canada can be seen as having two distinct political systems; the

first being the political system of the 1950's, when the flow of

political forces seemed to emanate more from the level of the

nation than from the lower-order levels, so that Canada can be

said to have had a "nationalized" political system; and the

second being the political system of the 1960's, when the country

seemed to be dominated by political forces emanating from the

sub-national political levels, to the extent that the system was

"de-nationalized."

The dramatic shift in the relative weights to be attach-

ed to the three levels of the political system in such a relative-

ly short period of time raises some question about the nature of

electoral regionalism in Canada. The transitory nature of the

dominance of electoral movements by the lower-order levels of the

political system suggests that electoral regionalism may have been

exaggerated as a characteristic of the Canadian political system.

At a minimum, electoral regionalism is not so deep-seated as not to

be resistant to the impact of national political forces. At a

maximum, the presence of powerful sub-national political forces in

the 1960's may mark a departure from a normal pattern of the party

vote and voter turnout movements being dominated by political forces

that are national in nature. The answer to the question of what is

the relationship over the course of Canadian history between the

national and lower-order levels of the Canadian political system
is precluded by the relatively short period of time covered in
this study. It should be noted in this regard that Stokes argues
that in both the United States and the United Kingdom there has
been an increase in electoral nationalization since the turn of
the century.[12] Stokes speculates that the process of electoral
nationalization can be explained in terms of the development of
national system of mass communications and the increasing import-
ance of the national government in social and economic affairs,
coupled with the extension of the franchise and the growth of
national election campaigns.[13] It is difficult to equate the
nature of mass communications of Canada with those of the
United States and the United Kingdom, given the lack of national
newspapers and the fact that the electronic media, especially the
C.B.C., is split into French and English networks, but Canada can
be regarded as being roughly comparable with the United Kingdom and
the United States in terms of the extension of the franchise and
the development of national election campaigns, while the saliency
of the national government, while weaker than in the other systems,
has increased since the time of the first world war. These similarities
would lead to the prediction, provided that the mass media is not
the crucial element in the causal chain, that Canada electoral be-
haviour would show evidence of increasing nationalization.

However, this certainly was not the case during the period

of analysis. Blake, whose results for the same analysis period of 1953 to 1965 paralleled this study, argued, after an examination of the regional character of the support bases of the parties since 1908, that there has been little evidence of any decline in the impact of regionalism.[14] This would indicate that there has not been an increase in electoral nationalization in Canada since the turn of the century.

The other substantive question in this work concerned whether regions or provinces provided the greatest source of spatial differentiation within the Canadian political system. This question was not answered as fully as is desirable because of the overlap between regions and provinces, so that the analysis was only in terms of the Atlantic and Prairie provinces.

In the case of turnout the amount of the total variation that was attributed to the middle level of the system increased from 7 percent for regions to 15 percent for provinces, indicating that the provinces provide a greater source of differentiation than do the regions. However, both levels were much weaker than the national and constituency levels. Indeed, when the turnout movements for ridings in the Atlantic and Prairie regions were examined little evidence of a regional factor was found, and only in two provinces — Alberta and Newfoundland — was the proportion of the total turnout variation attributable to province-wide factors greater than half.

In the case of the two-party vote analysis the national-regional-constituency and national-provincial-constituency formats resulted in little difference in the variance component scores for the intermediate levels of the political system. The values recorded for provinces and regions generally were higher in the case of the two-party vote than were found for turnout. Both these features indicate that regional and provincial political forces are important influences upon electoral behaviour. In the Atlantic and Prairie regions, particularly the latter, there was evidence of a strong regional factor underlying the two-party vote movements. In three provinces- Alberta, Saskatchewan, and Prince Edward Island - the evidence was very strong that provincially-based political factors influenced the pattern of the two-party vote.

The variance components analysis of the total party vote pattern, however, revealed a different pattern than was found for the two-party vote movements. Over the entire analysis period the intermediate level of the system was least influential in the case of the Liberal party but was the second most important influence in the case of the Progressive Conservative party. In the Atlantic region the Conservative movements were more likely to be regionally influenced than were the Liberal movements, although in both cases most of the variation within the region came from below the region itself. More of a regional factor was found in the Prairie region,

but only in the case of the Progressive Conservative party was the amount of the variation attributable to the level of the regional greater than half. Only in one province - British Columbia - was evidence found that suggested that the Liberal vote was underlain with a provincial factor. In four provinces - Nova Scotia, Alberta, Prince Edward Island, and Saskatchewan - the Progressive Conservative vote movements were influenced by province-wide political factors.

An attempt was made to overcome the problems encountered in the analysis of the differences between the contributions of regions and provinces to the overall variation in turnout and party vote by decomposing the three provinces - British Columbia, Ontario, and Quebec - which also were regions into sub-provincial regions to ascertain if aggregations of contiguous constituencies acted in a similar manner. A consistent pattern was found for all three analyses; Toronto constituencies had movements for turnout and party vote which were heavily influenced by Toronto-wide political forces, while Vancouver had a similar pattern but not of the same strength as were the movements in Toronto. The other sub-provincial regions generally showed a pattern of low regional factors and high constituency factors.

Two concerns must remain at the level of speculation in this study. One, as raised by Stokes, concerns the nature of electoral forces as represented by the various levels of the political

system.[15]

The nature of variance components analysis is such that sub-national deviations in the party vote and voter turnout movements - which are taken as reflecting the impact of political forces arising from the various levels of the system - can be best described rather than explained. While it is relatively easy to provide a conceptual framework for these deviations by postulating the differential impact of issues, events, politicians, and political organizations peculiar to the different levels of aggregation within the political system, it is very difficult to specify and empirically establish a relationship between one set of deviations and their presumed causes. What, then, has been done in this study has been to provide a description of the processes of change in electoral behaviour in Canada for a specific period of time.

The second question pertains to the intriguing pattern of high variance component scores for the level of the constituencies in Canada. It is somewhat surprising that in the United Kingdom - a political system which is supposed to be influenced only to a minimal degree by local and idiosyncratic political factors - there are also high variance component scores for the party vote movements in the constituencies.[16]

The striking contrast is not so much in the magnitudes of the British and Canadian two-party variance component scores -

110.0 and 180.8 respectively - because the purpose of the Stokes model is to partition out the impact of various spatial aggregations or levels upon the processes of change over time in electoral behaviour. The model, then, provides for a standardized estimate of the impact of similar levels of aggregation in different systems, especially those characterized by great differences in the processes of change in electoral behaviour. In other words, changes in the party vote in the United Kingdom were much smaller in the 1950's elections than was the case in Canada, but the constituencies, after the national level, were the second most important influence upon the changes in party vote. The important contrast, then, is that in Canada the constituencies, relative to the United Kingdom (and, indeed, compared to Australia and the United States), are not as significant in influencing the flow of the two-party vote.

An attempt was made in this study to ascertain if constituencies with high constituency variation scores were united by any common factor, but the analysis of the variables of political competitiveness (as measured by the number of times a constituency was won by a different party) and community size within the constituency generally failed to produce any strong relationships, especially in the provinces of Ontario and Quebec, the two provinces with either a large enough number of ridings or sufficient variation in political competitiveness, community size, or total constituency variation so that analysis of relationships could be confidently

carried out.

It is readily admitted that the pattern of constituency variation scores may be a function of certain socio-economic factors associated with particular constituencies which are un-evenly distributed throughtout the country, to the extent that what seems to be a number of incongruent movements, which in terms of the variance components model reflect local and idiosyncratic political factors, are, in fact, the similar responses of similarly constituted constituencies that are spatially separated. Or, in fact, these high constituency variation scores may reflect the influence of local political environments, where the pattern of issues, events, politicians, and political organizations inter-act to lead electorates to act in significantly different ways from the patterns of higher-order levels within the system.[17]

The application, then, of Stokes' analysis of variance to the six Canadian general elections from 1953 to 1965 has shown that while Canada can be seen as a "de-nationalized" system, the sub-national spatial bases of the party vote and voter turnout movements are generally similar, in terms of the relative weights of the variance components, to the United Kingdom, the United States, and Australia.

Quite clearly, what is needed is a specification of the causes of the sub-national spatially-based variations from the national pattern in electoral behaviour. As was indicated

above, different socio-economic groups within Canadian society may
have differential reactions to national issues, events, politicians,
and political organizations. To the extent that this is the case,
what appear to be spatially-based deviations from the national
pattern may reflect the simple fact that different constituencies
contain different sorts of people. It is necessary, then, to show
that this is not the case before it can be confidently stated that
the Canadian electorates are significantly influenced by sub-national
political, forces that have geographical or spatial bases.

Chapter Seven

Footnotes

1. Edwin R. Black and Alan C. Cairns, "A Different Perspective on Canadian Federalism," Canadian Public Administration, IX, No. 1 (March, 1966),37-9.

2. John Wilson, "The Canadian Political Cultures: Towards a Redefinition of the Nature of the Canadian Political System," Canadian Journal of Political Science, VII, No. 3 (September, 1974), 449.

3. Donald E. Stokes, "A Variance Components Model of Political Effects," in John M. Claunch, ed., Mathematical Applications in Political Science, I, (Dallas, 1969), 61-85.

4. For a partial exception, see Richard Rose and Derek Urwin, "Social Cohesion, Political Parties and Strains in Regimes," Comparative Political Studies, I, No. 2 (April,1969),7-67.

5. See, for example, R.R. Alford, Party and Society: The Anglo-American Democracies (Chicago, 1963),250-62.

6. Ibid.

7. William B. Moul, "On Getting Nothing for Something: A Note on Causal Models of Political Development," Comparative Political Studies, VII, No. 2 (July,1974),140-48.

8. Stokes unfortunately does not explain the method in which the turnout rate was calculated except to say that the model was applied to "congressional turnout in the 1950's." Stokes, op. cit., 75.

9. Ibid.,76.

10. Ibid.

11. Angus Campbell, et al, The American Voter (New York,1960); see Peter Regenstreif, The Diefenbaker Interlude: Parties and Voting in Canada (Toronto,1965),16.

12. Donald E. Stokes, "Parties and the Nationalization of Political Forces," in W.N. Chambers and W.D. Burnham, eds., The American Party Systems: Stages of Political Development (New York,1967), 187-92. Stokes bases this conclusion partly on the results of his application of the variance components model to the United Kingdom for the six general elections from 1950 to 1966 and partly on the analysis of swing for the preceding period back to 1892.

13. Stokes, "Parties and the Nationalization of Political Forces,"
    196-98.

14. Donald E. Blake, "The Measurement of Regionalism in Canadian
    Voting Patterns," Canadian Journal of Political Science , V,
    No. 1 (March,1972),76.

15. Stokes, "A Variance/Components Model of Political Effects,"
    78-80. In light of the recent interest in the notion of
    regional and provincial political cultures in Canada, it is
    interesting to note that Stokes raises the possibility that
    contributions to the overall variation from the level of the
    states reflects distinct political cultures in the states;
    ibid., 80.

16. Stokes, "Parties and the Nationalization of Political Forces,"
    188.

17. Robert D. Putnam, "Political Attitudes and the Local Community,"
    American Political Science Review , L , No. 2 (June,1966),
    640-54.

Appendix I

The quantities below decompose the variance of the percent turnout or the Liberal proportion of the two-party vote in the jth constituency of the ith province over a number of election years into national, provincial, and constituency variance components. Throughout these formulae, the index i varies over provinces with a maximum values I, the index j varies over constituencies within provinces with a maximum value of J_i for the ith province, and the index k varies over years with a maximum value K. The notation otherwise corresponds to that followed for expressions (4) and (12) in chapter three.

$$\mu = \frac{\Sigma_i \, \Sigma_j \, \Sigma_k \, y_{ijk}}{K \, \Sigma_i \, J_i} \qquad (1)$$

$$a_k = \frac{\Sigma_i \, \Sigma_j \, y_{ijk}}{\Sigma_i \, J_i} - \mu \qquad (2)$$

$$Var(a) = \frac{\Sigma_k \, a_k^2}{K-1} \qquad (3)$$

$$b_{ik} = \frac{\Sigma_j \, y_{ijk}}{J_i} - \frac{\Sigma_j \, \Sigma_k \, y_{ijk}}{K J_i} - a_k \qquad (4)$$

$$Var(b_i) = \frac{\Sigma_k \, b_{ik}^2}{K-1} \qquad (5)$$

$$c_{ijk} = y_{ijk} - \frac{\Sigma_j \, y_{ijk}}{J_i} - \left\{ \frac{\Sigma_k \, y_{ijk}}{K} - \frac{\Sigma_j \, \Sigma_k \, y_{ijk}}{K J_i} \right\} \qquad (6)$$

$$Var(c_{ij}) = \frac{\Sigma_k \, c_{ijk}^2}{K-1} \qquad (7)$$

$$Cov(a, b_i) = \frac{\Sigma_k \, a_k \, b_{ik}}{K-1} \qquad (8)$$

$$Cov(a, c_{ij}) = \frac{\Sigma_k \, a_k \, c_{ijk}}{K-1} \qquad (9)$$

$$Cov(b_i, c_{ij}) = \frac{\Sigma_k \, b_{ik} \, c_{ijk}}{K-1} \qquad (10)$$

The variance components (5) and (7) obtained for each constituency have been averaged across provinces and the nation according to these formulas:

$$Var(b) = \frac{I}{I-1} \cdot \frac{\sum_i J_i \, Var(b_i)}{\sum_i J_i} \qquad (11)$$

$$Var(c) = \frac{\sum_i \sum_j Var(c_{ij})}{\sum_i (J_i - 1)} \qquad (12)$$

The variance components (3) and (11) above must be adjusted in order to allow for the fact that constituency forces, when summed across a province, will be responsible for some of the variation of the provincial mean, and the fact that constituency and province forces, when summed across the nation, will be responsible for some of the variation of the national mean. The formulae needed to adjust the national and province components are as follows:

$$Var^*(a) = \frac{\sum_k a_k^2}{K-1} - \frac{\sum_i J_i \sum_k b_{ik}^2}{(\sum_i J_i)^2 (K-1)} - \frac{I}{I-1} \cdot \frac{\sum_i \frac{\sum_j \sum_k c_{ijk}^2}{J_i(K-1)}}{\sum_i J_i} \quad (13)$$

$$Var^*(b) = \frac{I}{I-1} \cdot \frac{\sum_i J_i \frac{\sum_k b_{ik}^2}{K-1}}{\sum_i J_i} - \frac{I}{I-1} \cdot \frac{\sum_i \frac{\sum_j \sum_k c_{ijk}^2}{J_i(K-1)}}{\sum_i J_i} \quad (14)$$

The variance component values reported in this study are those given by (12), (13), and (14) above.
Adapted from:
Donald E. Stokes, "A Variance Components Model of Political Effects," in Mathematical Applications in Political Science, 1, ed., John M. Claunch (Dallas: Southern Methodist University Press, 1969), 84-5.

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