
by

Kashi Tanaka

B.A. (Honours) University of British Columbia, 2003

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

MASTER OF ARTS

in

The Faculty of Graduate Studies (Political Science)

UNIVERSITY OF BRITISH COLUMBIA

December 2005

© Kashi Tanaka 2005
Abstract

One of the purposes of political parties is to reduce a heterogeneous polity into a few political elements. This thesis determines if there is a relationship between political parties and social cleavages in Canada. I have used provincial election results and census data from 1956 to 1991. Electoral results are converted into two measures of party system size, the effective number of parties (the number of significant parties in a legislature) and the competitive number of parties (the number of relevant parties in an election). Social heterogeneity is measured by converting census data into a series of indexes that measure the ethnic, religious, and linguistic diversity. I also examine the affect of rural/urban and centre periphery cleavages in provincial politics.

I have found that there is a significant relationship between social heterogeneity and party system size in Canada. Of the cleavage structure examined, ethnicity is positively correlated with party system size and the size of a province’s rural population is negatively correlated with party system size. Curiously, religion and language have mixed affects; religion is positively correlated with the number of parties that get elected but negatively correlated with the number of parties that win seats. Similarly, the size of a province’s French speaking population has a positive relationship with the number of parties that win seats but a negative relationship with the vote distribution among parties.

There are two important conclusions in this thesis. First, there is substantial evidence that social heterogeneity influences party systems size in Canadian provinces. This result challenges institutional explanations which suggest that party systems in polities that use
plurality electoral systems which elect single members will not be affected by social diversity. My second conclusion is the identification of a largely untouched area of research on provincial party systems. European theorists have used social structural approaches for fifty years to explain how societies and political parties co-evolve. This thesis proves that this approach has an important role to play on this side of the Atlantic.
# Table of Contents

Abstract ................................................................. ii
Table of Contents ...................................................... iv
Lists of Tables ........................................................... v
Lists of Figures ........................................................... vi
Acknowledgements ....................................................... vii
Dedication ..................................................................... viii

Chapter I – The shape of provincial party systems .................. 1
  Measuring parties ............................................................. 4
  The unit of analysis – Canadian Provinces (1951-1996) ............ 6
  Determinants of ENP and CNP ........................................... 11
  Institutional effects – Electoral systems .............................. 11
  Institutional effects – District magnitude ........................ 15

Chapter II - The shoulders of social structural giants .......... 19
  Social structural models .................................................. 20
  Critiques of social explanations ....................................... 26
  The value cleavage ......................................................... 28
  Explanations of party system development in Canada ........ 31
  Summary .......................................................................... 36

Chapter III – The building blocks of party systems ............. 39
  Building an index ............................................................ 40
  Ethnic diversity .............................................................. 43
  Religion ......................................................................... 49
  Language ......................................................................... 53
  The proximity cleavage in Canada .................................... 56
  Rural/Urban ................................................................. 60
  Methodology ................................................................. 63

Chapter IV – Social heterogeneity and party systems .......... 66
  Social heterogeneity and ENP ......................................... 67
  Social heterogeneity and CNP ......................................... 71
  Comparing ENP and CNP models .................................... 75
  Testing the models ........................................................ 79
  Summary ......................................................................... 84

Works Cited ...................................................................... 87
Lists of Tables

Table 1.1  ENP and CNP for Provinces 1951-1996 *(CNP in italics)*  7
Table 1.2  District magnitude for Provinces with a history of employing multi-member ridings (1951-1996)  17
Table 3.1  Average size of ethnic population for single respondents by province as a percentage (1951-1996)  47
Table 4.1  Estimates of the Effective Number of Parties (ENP) in Canadian Provinces (1951-1996)  68
Table 4.2  Estimates of the Competitive Number of Parties (CNP) in Canadian Provinces (1951-1996)  73
Table 4.3  Estimated ENP for selected provincial cases – with comparisons between early period and late period in study  80
Table 4.4  Estimated CNP for selected provincial cases – with comparisons between early period and late period in study  82
Lists of Figures

| Figure 1.1 | ENP and CNP for Provinces (1951-1996) | 9 |
| Figure 2.1 | Lipset and Rokkan's model of social cleavage structures | 22 |
| Figure 3.1 | Percentage of Catholic population by region | 50 |
| Figure 3.2 | Percentage of Protestant population by region | 51 |
| Figure 3.3 | Estimated number of religious groups by region | 53 |
| Figure 3.4 | Adjusted linguistic index for Quebec and New Brunswick | 55 |
| Figure 3.5 | Approximated magnitude of centre-periphery cleavage in provinces | 58 |
| Figure 3.6 | Rural population as a percentage | 61 |
Acknowledgements

I have had four wonderful years at UBC and a large part of that is due to the excellent teaching and mentorship I received from the faculty members I have worked with. The department continually attracts tremendously bright people from around the world to learn and to be challenged. The quality of the students in the Honours and Graduate programs has always impressed and humbled me. I am grateful for the friendship and support my peers gave me.

In addition, there are several people I owe particular thanks.

I would like to thank my thesis supervisor, Dr. Fred Cutler, whose insight and soccer abilities were equally inspirational.

I owe thanks to two of my past teachers. Mrs Beverly Reid, who convinced me I was smart and stimulated a life of curiosity and Mr Raj Tour whose passion and integrity will continue to inspire me.

I must thank Cam Gross, Don Colangelo, Eli Walker, Jeff Bell, Kristen Stevenson, Lindsey Galvin, Paul Allanson, Tim Bottomer, and Scott Graham whose camaraderie, sober and not so sober judgement, and above all else, love and friendship for the past two years I will spend a lifetime repaying.

Finally, I would like to thank my family which never wavered in their love and support. This thesis is dedicated to them.
To my sister, Nikko

and

my parents, Lynn and Yosh
Chapter I – The shape of provincial party systems

Generating a list of divisive topics in any polity is rarely difficult. In Canada the hardest part would be to know where to begin, or perhaps more accurately where to end. At any point in time there are thousands of potential points of conflict that have the potential to drive people apart. Some of the most basic divisions in Canada are social cleavages such as race, religion, and language. Effective governance requires reducing heterogeneous polity’s to a few political elements of which the most salient are political parties. The central question of this thesis is to determine if there is a relationship between political parties and social cleavages.

The reduction of political views into a handful of political parties is well documented by spatial theories.¹ Spatial models elegantly demonstrate the mechanism with which the complex calculation of individual preferences is translated into partisanship, but this does not eliminate the impact of social diversity. This thesis will demonstrate that “the relationship between electoral rules and party systems is not mechanical and automatic: A particular electoral regime does not necessarily produce a particular party system; it merely exerts pressure in the direction of this system.”² Research on party systems indicates that the number of political parties that successfully participate in a democracy is a product of both institutional and cultural elements: in particular electoral system design, district magnitude, and societal cleavages.³

¹ The roots of spatial theories of party systems are with Downs. Variations and critiques of his work are found in Hinich and Enelow (1984), and Rabinowitz and MacDonald (1989).
² Duverger (1964), pg. 40.
The connection between social cleavages and political parties is a relatively unexplored area of Canadian politics. The absence of literature would suggest there is very little connection at all. Are societal cleavages reflected in party systems? Or are parties aggregates of a multitude of constituencies concerns? Until now a common convention in Canadian politics has been that, at a federal level, the major political parties act as omnibuses aggregating political concerns.\(^4\) This is a persuasive argument. However, this thesis will argue that the omnibus theory misses out on part of the explanation because it is arguable that parties are also a product of social cleavages. None of the major parties in Canada claim direct connections religious or ethnic groups. However, parties like these have emerged in several democracies; the governing Christian Democrats in Germany and BJP in India are examples. Moreover, while the major Canadian parties do not advertise connections to specific populations, students of Canadian politics undoubtedly recognize that these connections exist. The relationship between Catholics and the federal Liberal party is an example which will be looked later on. This thesis will explore these connections and other to determine the extent to which societal cleavages influence party systems in provinces.

The defining characteristics of party systems are the participants, the nature of interaction between these participants and the voting population, and how both of these change over time. Two measures of party and voter participation are employed in this paper, the *effective number of parties* (ENP) and the *competitive number of parties* (CNP). ENP measures the number of significant parties in a legislature, whereas CNP measures the number of relevant parties in an election.

Current literature argues that the degree of variation caused by social heterogeneity is limited when party systems are constrained by electoral ridings with small district magnitudes and the mechanical effects of plurality electoral systems. In the summary of their work, Ordeshook and Shvetsova argue that, "if district magnitude equals one, then the party system is relatively ‘impervious’ to ethnic and linguistic heterogeneity." Combined with the restrictive effects of the plurality electoral system, their findings suggest that the effects of social heterogeneity on ENP and CNP may be overwhelmed by the constricting effects of institutional variables. This paper looks at two interrelated questions. First, do ENP and CNP vary in systems with low district magnitudes and plurality electoral formats? And second, if there is evidence of variation, which variables explain this variation?

Canadian provinces provide a unique opportunity for studies of party systems because it is possible, for the most part, to control for the effects of electoral systems and district magnitude. At present every Canadian province uses the plurality formula and single-member districts to elect its representatives. At various times, provinces have experimented with different electoral arrangements such as multi-member districts and majoritarian electoral formulas. However, there are few instances of these elections in the latter half of the last century. At the same time the provinces are not demographically uniform. The ethnic, linguistic and religious make-up of provinces varies considerably. The central hypothesis is that social cleavages influence party systems. Therefore, the institutional similarity and social diversity of provinces make them an ideal crucible to test to this hypothesis.

5 Ordeshook and Shvetsova (1994), pg. 122.
Measuring Parties

Explaining the connection between social heterogeneity and party systems first requires determining how party systems can be measured. One way to is to establish who is participating and the power the each party has in a legislature. To this end counting the number of parties that operate in a political system would be the simplest place to start.

Two basic methods for counting parties would be to sum all the parties that run in elections or to sum all the parties that win seats. In both cases the power of these measures to explain party system size is questionable. An example of an electoral result from Québec provides a reasonable justification for this hesitation. In the 1989 provincial election sixteen parties contested the election and three won seats in the legislature. These figures provide some idea of the range of competition but they are not indicative of the actual election or the resultant legislature. Nearly 99% of the votes were cast for the three parties that won seats and, of those parties; one received almost 75% of the seats.

The standard alternative is to use some form of index or approximation derived from Douglas Rae’s measure of fractionalization. His measure, presented mathematically is:

\[ F_e = 1 - \left( \sum_{i=1}^{n} T_i^2 \right) \]

Where: \( T_i \) is group \( i \)'s decimal share of the total population.
The index has several advantages, "first, it is sensitive to both the number and the relative equality of the party shares. Second, it will allow us to consider systems with any number of parties, and to compare the resulting states of fractionalization ... and third, it may prove to be a convenient device for ... [examining] the general concept of fractionalization in other concepts." The first two advantages apply directly to the question at hand while the last advantage will be effectively demonstrated in Chapter 3. In this later chapter fractionalization indexes are used as an elegantly simple way of empirically examining changes in patterns of social cleavage. This paper uses a variation of Rae's index proposed by Taagepera and Shugart who manipulate the formula to produce a number which is more intuitively appealing. Their formula for determining the ENP is:

\[ ENP = \frac{1}{\sum_{i=1}^{n} p_i^2} \]

Where: \( p \) is the percentage of the seats a party receives

In this paper, this formula is also used to determine the CNP, where \( p \) becomes the percentage of votes that a party receives province-wide.

---

6 Rae (1971), pg. 56.  
7 Taagepera and Shugart (1989), and Rae (1971), pgs. 54-58. For example in a hypothetical political system with 100 seats if two parties split the seats 50-50, the ENP is 2. Similarly, if three parties split the seats 33-33-34, the ENP is nearly 3. Even if seat allocation is not symmetrical, the formula still produces useful results. In an election where the seat allocation is 60-30-10, the ENP is 2.18, indicating that the combined effectiveness of the second and third party is, as would be expected, less than two.  
8 For this project, only parties that obtained at least one-percent of the popular vote were included in calculations.
Consideration of the CNP has generally been neglected in research because it includes non-elected parties that have an arguably limited degree of influence in party systems. In addition, the majority of studies of party systems are comparative works that include proportional electoral systems in which ENP is, by and large, equivalent to CNP.\(^9\) Arend Lijphart argues that looking at the number of parties that receive votes “is the better indicator of the long-term nature of the party system” because party popularity best represents the concerns of a polity.\(^{10}\) This thesis considers both measurements because provincial party systems are shaped by the plurality electoral system which disproportionately allocates seats to votes. Using two measures of a party system—one that includes all parties and another that indicates which parties are succeeding in finding seats in legislatures—provides a more complete account of Canadian party politics.

**The Unit of Analysis – Canadian Provinces (1951-1996)**

The data employed to answer the questions of this thesis are provincial election results from 1951 to 1996. The elections are paired with census enumerations which, in Canada, occur on the first and sixth year of every decade. In periods where an election does not occur in a census year the next chronological election is used. In situations where two or more elections fall within a census period all elections after the first election are dropped from the study. Because of this treatment it is important to note that any effects attributable to time are measured in periods between censuses and not

---

\(^9\) Proportional systems where ENP and CNP diverge significantly are those with higher electoral thresholds (>3%).

\(^{10}\) Lijphart (1993), pg. 483.
elections. With this data it is possible to consider how the evolution of provincial societies affects party systems.

Table 1.1 – ENP and CNP for Provinces 1951-1996 (CNP in italics)

<table>
<thead>
<tr>
<th>Census year</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>ON</th>
<th>QC</th>
<th>NB</th>
<th>NS</th>
<th>NF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>2.151</td>
<td>1.603</td>
<td>2.204</td>
<td>2.047</td>
<td>2.216</td>
<td>1.970</td>
<td>1.485</td>
<td>2.445</td>
<td>1.882</td>
</tr>
<tr>
<td></td>
<td>2.935</td>
<td>2.618</td>
<td>2.840</td>
<td>2.581</td>
<td>2.636</td>
<td>2.545</td>
<td>2.348</td>
<td>3.011</td>
<td>2.412</td>
</tr>
<tr>
<td>1991</td>
<td>1.914</td>
<td>1.900</td>
<td>1.393</td>
<td>2.167</td>
<td>2.135</td>
<td>1.920</td>
<td>1.536</td>
<td>1.600</td>
<td>1.825</td>
</tr>
<tr>
<td></td>
<td>2.985</td>
<td>2.725</td>
<td>2.627</td>
<td>2.846</td>
<td>2.910</td>
<td>2.485</td>
<td>3.113</td>
<td>2.710</td>
<td>2.373</td>
</tr>
<tr>
<td>1986</td>
<td>1.768</td>
<td>1.724</td>
<td>1.979</td>
<td>2.060</td>
<td>1.753</td>
<td>1.676</td>
<td>1.000</td>
<td>2.198</td>
<td>1.929</td>
</tr>
<tr>
<td></td>
<td>2.326</td>
<td>2.762</td>
<td>2.410</td>
<td>2.856</td>
<td>2.849</td>
<td>2.408</td>
<td>2.228</td>
<td>2.698</td>
<td>2.208</td>
</tr>
<tr>
<td>1981</td>
<td>1.967</td>
<td>1.108</td>
<td>1.319</td>
<td>1.928</td>
<td>2.405</td>
<td>1.823</td>
<td>1.822</td>
<td>1.756</td>
<td>1.352</td>
</tr>
<tr>
<td></td>
<td>2.205</td>
<td>2.228</td>
<td>2.281</td>
<td>2.382</td>
<td>2.830</td>
<td>2.206</td>
<td>2.506</td>
<td>2.849</td>
<td>2.015</td>
</tr>
<tr>
<td>1976</td>
<td>1.985</td>
<td>1.136</td>
<td>1.672</td>
<td>2.007</td>
<td>2.786</td>
<td>2.072</td>
<td>1.998</td>
<td>2.136</td>
<td>1.865</td>
</tr>
<tr>
<td></td>
<td>2.250</td>
<td>2.537</td>
<td>2.535</td>
<td>2.459</td>
<td>2.934</td>
<td>3.135</td>
<td>2.534</td>
<td>2.642</td>
<td>2.356</td>
</tr>
<tr>
<td>1971</td>
<td>1.923</td>
<td>1.858</td>
<td>1.600</td>
<td>2.277</td>
<td>2.000</td>
<td>1.159</td>
<td>1.991</td>
<td>1.899</td>
<td>2.095</td>
</tr>
<tr>
<td></td>
<td>3.349</td>
<td>2.552</td>
<td>2.050</td>
<td>2.859</td>
<td>2.826</td>
<td>2.469</td>
<td>2.254</td>
<td>2.504</td>
<td>2.202</td>
</tr>
<tr>
<td>1966</td>
<td>2.190</td>
<td>1.376</td>
<td>1.933</td>
<td>2.540</td>
<td>2.303</td>
<td>2.068</td>
<td>1.979</td>
<td>1.293</td>
<td>1.153</td>
</tr>
<tr>
<td></td>
<td>2.723</td>
<td>3.245</td>
<td>2.408</td>
<td>3.092</td>
<td>2.887</td>
<td>2.533</td>
<td>1.993</td>
<td>2.175</td>
<td>2.131</td>
</tr>
<tr>
<td>1961</td>
<td>2.064</td>
<td>1.101</td>
<td>2.039</td>
<td>2.145</td>
<td>1.780</td>
<td>1.830</td>
<td>1.899</td>
<td>1.203</td>
<td>1.463</td>
</tr>
<tr>
<td></td>
<td>3.349</td>
<td>2.704</td>
<td>2.808</td>
<td>2.807</td>
<td>2.642</td>
<td>1.994</td>
<td>2.039</td>
<td>2.104</td>
<td>2.086</td>
</tr>
<tr>
<td>1956</td>
<td>1.663</td>
<td>1.134</td>
<td>1.871</td>
<td>2.803</td>
<td>1.730</td>
<td>1.549</td>
<td>1.696</td>
<td>2.052</td>
<td>1.246</td>
</tr>
<tr>
<td></td>
<td>2.946</td>
<td>2.546</td>
<td>2.967</td>
<td>3.010</td>
<td>2.650</td>
<td>2.111</td>
<td>2.073</td>
<td>2.121</td>
<td>1.814</td>
</tr>
<tr>
<td>1951</td>
<td>2.309</td>
<td>1.490</td>
<td>2.290</td>
<td>1.284</td>
<td>1.642</td>
<td>1.742</td>
<td>2.022</td>
<td>1.324</td>
<td>1.766</td>
</tr>
<tr>
<td></td>
<td>3.313</td>
<td>2.244</td>
<td>3.506</td>
<td>2.710</td>
<td>2.116</td>
<td>2.082</td>
<td>2.326</td>
<td>2.082</td>
<td>1.766</td>
</tr>
</tbody>
</table>

7
There are clear trends in the ENP and CNP in provinces. The average ENP across
time and provinces is 1.83 with a standard deviation of 0.36. CNP across time and
provinces is 2.56 with a standard deviation of 0.36. Regression analysis of both sets of
data on time indicates that the average ENP and CNP increased between 1951 and 1996;
ENP has increased by 0.20 and CNP by 0.15. The ENP figures in Table 1.1 provide an
overview of the size of Canadian provincial party systems between 1951 and 1996.\(^{11}\)

Party systems range from systems dominated by single parties to systems with
consistent multi-party competition. Evidence of single-party domination in Alberta is
clear with an average ENP of less than 1.5. The province has been governed by parties
with overwhelming electoral majorities since 1930. A part of this dominance is
explained by the somewhat higher average CNP for the province, indicating a
fractionalization of support for the opposition parties.\(^{12}\)

Single-party dominance of a lesser magnitude is also found in Newfoundland and
New Brunswick. In Newfoundland the party system has typically been dominated by a
single party, beginning with the Liberals in 1949, shifting to the Conservative party in
1972, and back to the Liberals in 1989. In New Brunswick a legitimate two party system
that spans much of the sixties and seventies is flanked by a period of power by the
Conservative prior to this period and even stronger period of dominance by the Liberals
after. A clear example of this dominance was manifested in 1987 when Frank

\(^{11}\) The province of Prince Edward Island has been excluded from this thesis due to variances in size and
electoral systems. The population of PEI only recently exceeded 100,000 which have meant that provincial
politics bears more resemblance to large municipalities than most other provinces. Indeed, a long-standing
anecdote characterizing PEI politics goes that when the local Member wants to know what his constituents
think he simply opens his back door. The province also employed a unique electoral system from the
beginning of this study until 1996 where the province was divided into 13 districts with each riding electing
a Member and a Councilman.

\(^{12}\) In every election considered in this study at least two parties competing against the Social Credit pre-
1967 or the Progressive Parties after 1967 won at least 10% of the popular vote, in two elections three
parties other than the eventual winner managed to winner this amount.
McKenna’s party swept every seat in the province. For both of these provinces the narrower range of ENP is mirrored by a narrow range of CNP. As has been the case since Confederation, party systems in the Maritime region have predominantly been a two-horse race between the Liberals and the Conservatives.

A multi-party landscape has been the norm in Manitoba and Ontario. Both had high ENP and CNP averages between 1951 and 1996 which reflects the competition among the Conservatives, Liberals, and New Democrats in both provinces. In these provinces there are only a handful of cases where all three parties did not win at least 15% of the popular vote and at least some seats. In additions, all three parties have enjoyed power at least once during the past fifty years.

Figure 1.1 – ENP and CNP for Provinces (1951-1996)

For ENP the designation of high, medium, and low were determined as: above 2.0, between 1.99-1.75, and below 1.74. For CNP the designation of high, medium, and low were determined as: above 2.75; between 2.74-2.50, and below 2.49.
The remaining four provinces fall into the middle range in ENP but are spread across the CNP category. Figure 1.1 demonstrates the variation in these provinces. In Saskatchewan and Nova Scotia the difference between ENP and CNP is fairly consistent with ENP typically 20-25% smaller than the CNP. There are different reasons for this in each province, the figures for Saskatchewan are the result of a volatile political arena. The party system has shifted several times with four different parties achieving power over the past fifty years.\textsuperscript{13} Generally it could be characterized as a party system with two strong parties and a weak party. Nova Scotia’s results are a product of static electoral results. The party system has been dominated by the Conservatives and the Liberals while the NDP has tenaciously been able to hold on to a small but significant wedge of the electorate. ENP for the province hovers just below 2 while the CNP sits above 2.5.

British Columbia and Québec find themselves on opposite ends of the CNP spectrum even though they have similar average ENP. Both provinces have seen parties emerge and fade and both have a variety of parties assume power. The main difference is the distribution of votes and how these are translated to seats in each province. In British Columbia elections have been a battle between two main parties with one or two other minor competitors. In all but three elections the two large parties have failed to win 80% of the combined popular vote. In Québec the battle between two main parties is also present; however, these two parties typically win over 90% of the popular vote. The key difference between the two provinces is that with a far smaller piece of the electoral pie smaller parties in Québec have found as much success winning seats as smaller parties in British Columbia.

\textsuperscript{13} This figure includes both the Cooperative Commonwealth Federation and the New Democratic Party which are arguably too similar in political ideology and support to differentiate.
Determinants of ENP and CNP

There is evidence of variation over time and space in ENP and CNP. It is clear that there are variations across provinces. Where does the variation come from? This section looks at how institutional factors shape party systems. The list of independent variables in the literature regarding the causes for the proliferation or contraction of the number of parties that operate in a polity is fairly narrow. Douglas Rae suggests that, we can generally limit our focus to those factors that are “social, economic, legal, and political.”14 Past research on the size and competitiveness of party systems point to three types of variables that are influential: type of electoral system, district magnitude, and societal cleavages, the last of which can be either territorial or social.15

Institutional Effects – Electoral Systems

Elections serve as a mediating institution between individual voters and political parties. No two states use exactly the same electoral formula; each system takes into account local characteristics and idiosyncrasies. All electoral systems have at least some distorting effect on the translation of votes to seats. Highly proportional systems such as those employed the Netherlands and Israel seek to minimize this distortion to the point where the level is negligible, while majoritarian or plurality systems such of those widely used in Anglo-American democracies tend to produce significantly disproportional

14 Rae, pg 141.
15 Taagepera and Shugart (1989 and 1993), Lijphart (1993), Ordeshook and Shvetsova (1994), and Cox and Neto (1997). It has been pointed out by Lijphart (1990) that ballot structure can play a significant role in the proportionality of an electoral outcome; his analysis is largely limited to proportional electoral formulas which have minimal application to this study.
results. In these states the electoral systems tend to reward the largest vote getter in an
election with the majority of seats and punish parties that receive fewer votes and that are
not regionally concentrated.

This “mechanical” effect has an obvious influence on party systems. In his
seminal work, Political Parties, Duverger argues that, “the simple-majority single-ballot
system favours the two-party system.”\textsuperscript{16} Duverger goes on to suggest that this is nearly
“a true sociological law.” His hypothesis has been subject to criticism; however, a
general aspect of his assertion remains true. Rae’s text was among the first to provide
empirical evidence that there is a negative correlation between plurality electoral systems
and the ENP. However, some of Rae’s work calls into question the universality of
Duverger’s law. Rae points out that it is not hard to find exceptions to the plurality/two-
party relationship as demonstrated by the multi-party electoral competitions in India and
Canada. These exceptions do not undo Duverger’s work; undoubtedly it would be unjust
to throw the baby out with the bathwater. It is clear that majoritarian and plurality
electoral systems, in contrast to proportional systems, involve strong forces that result in
the reduction of the number of political parties. Multiple studies provide evidence that
there is a negative correlation between plurality electoral systems and the number of
parties that get elected and vice versa for proportional systems. Further support for this
hypothesis is provided by Lijphart and Cox whose work tempers the absoluteness of
Duverger’s assertion but nevertheless reinforces the direction of the causal relationship.
More parties gain legislative representation in proportional electoral systems than they do
in plurality electoral systems.\textsuperscript{17}

\textsuperscript{16} Duverger (1964), pg. 217.
\textsuperscript{17} Rae (1971), pgs. 133-140; Lijphart (1993), pgs. 484-485; and Cox (1999), pg. 15.
The explanation provided by Duverger of why *ceteris paribus*, party systems experience constraint in majoritarian systems and not proportional systems is a result of two factors, one he terms "mechanical" and the other "psychological." The mechanical factor consists of the mathematical effects of the application of an electoral system that rewards the largest party in a constituency at the expense of all others. The psychological factor consists of the reactions, adaptations, and strategic reasoning of both voters and parties to the aforementioned mechanical suppression. It is important to distinguish that the effects identified by Duverger differ between the national and constituency level. The constraining factors generally have the most significant effect at a local level but considerations of party systems refer to results at a national level. Duverger himself was conscious of this, stating that "the true effect of the simple-majority system is limited to local bipartism."^18

For the purpose of this thesis there are few examples of deviation from the plurality, first-past-the-post electoral formula among provinces.^19 In two instances covered in this study a completely different electoral system was employed: In Alberta from 1921 to 1959, the province employed a mixed electoral formula that used a multi-member proportional system in urban areas and a preferential system in rural areas. In British Columbia the elections in 1952 and the following year were conducted using an alternative vote system across the province. To address this inconsistency the 1951 election for Alberta has been excluded. For the British Columbian case the results of the first two elections after 1951 have been skipped, so the next election that uses the single-member plurality formula is the starting point in BC.

---

^18 Duverger (1964), pg. 223; and Chhibber and Kollman (2004).

^19 The notable exception here is PEI which was excluded for reasons outlined previously.
The last deviation is found in Manitoba which used a mixed electoral system until 1958. In elections up until this point the province elected members from rural ridings using the single-member plurality formula and used an alternative vote system in the urban regions of Winnipeg and St Boniface. In the two elections used in this data set there were three ridings in Winnipeg each electing four members and a single riding in St Boniface electing two members. Given that in the two elections considered the overall number of seats that are not decided using the single-member plurality formula does not exceed 25% the results from the two elections have been included.

An area of some concern is the dynamics of party system realignment and political socialization after electoral system change. In Manitoba as previously mentioned the number of seats affected by this change is not large. In British Columbia the use of the alternative vote system was relatively short lived, so voters would have been quite familiar with the plurality formula when the system was reintroduced even if they were not as familiar with the parties.\textsuperscript{20} Alberta poses a slightly more complicated problem because of the long period in which the entire province used the alternative-vote/single-transferable-vote system. Previous studies suggest that effect of the outcomes of the alternative vote system is not too dissimilar from plurality elections.\textsuperscript{21} The effect of realignment of the voting population is not directly considered in this paper and as such this is a potential point of error for this study.

\textsuperscript{20} The Alternative Vote system was originally brought in as a way to consolidate support around the two right-leaning parties in the province, the Conservatives and the Liberals. The system was meant to shut-out the New Democrats. Things did not go according to plan as the Social Credit Party emerged and won a minority government. A quick re-election brought about a majority for the new party simultaneously ushering in a 30 year period of government dominance by the Social Credits and banishing the Liberals and Conservative to the political hinterland.

\textsuperscript{21} Koop and Tanaka (2003).
Institutional Effects – District Magnitude

The second institutional factor that has an influential impact on party systems is district magnitude (DM), that is, the number of seats allocated to an individual electoral district. States use a variety of districting policies that range from the exclusive use of single-member districts to systems where the entire country operates as a single district. Anglo-American states sit at one end of this spectrum, where for the most part each legislator represents a single district. At the other end of the spectrum, as previously mentioned, are countries such as Israel and the Netherlands, in which the entire country is considered a single district. In these cases DM is equal to the total number of members of the legislature. Countries fall in between these two extremes and it is possible for there to variation in DM within a country as is seen in Irish national and Australian senate elections under single-transferable vote formulae, and in the list component of German elections for the Bundestag.

While there is debate within the literature with regard to the scale of influence that district magnitude has on party systems, the correlation between the two variables is positive. The larger the DM the more proportional the outcome of the election is likely to be. That is, the more seats per district, the closer the approximation between a political party's percentage of the vote and the number of seats that party receives in the legislature. There are two reasons for this effect: First, the vote quota that candidates must obtain is lower and, therefore, parties with smaller popular vote shares have a greater chance of electoral success. However, success in these cases is dependent upon

---

22 Exceptions to this rule have occurred in Canada since the time of Confederations at both a national and sub-national level. At present though there are no multi-member ridings employed in Canadian elections.

the use of a proportional electoral system within the district. Some polities have employed two- and three-member districts that were decided on the basis of plurality. In these ridings, a plurality of votes would win all the seats in the riding, thereby negating any proportionalizing influence that increased DM would supposedly have had. The second reason is an extension of the first, much like the way in which Duverger explained that the psychological effects of an electoral system are dependent on the mechanical effects. Because electoral systems with larger DMs tend to be more proportional, this gives ideological and social groups with smaller, diffused popular support more incentive to organize politically.

It is interesting to note the connections that can be drawn between institutional influences of party systems and social forces. More proportional systems or systems that are designed to allow smaller parties a greater chance of electoral success have a permissiveness that opens up possibilities for niche parties. Parties that represent minority groups, singular interests, or geographically dispersed populations have found success in the substantially more proportional electoral systems of Western Europe than in Anglo-American polities. These types of parties have not been shut out in systems that employ less proportional systems but where they have found success this has been through geographic concentration as seen with the Scottish National Party and Plaid Cymru in British elections.

For the most part DM in provinces examined in this thesis is constant. Table 1.2 reports the average DM for the four provinces whose electoral systems have included ridings with more than one elected representative. British Columbia was the most adventurous of the four provinces employing a variety of multi-member districts from
1871 to 1986. During this period, two- and three-member districts were used in several urban ridings. The high-water mark for use of multi-member districts was 1986 where 17 seats returned two members. Manitoba’s use of multi-member districts corresponds with the use of proportional electoral formulas in Winnipeg and St. Boniface. Nova Scotia and Newfoundland’s use of multi-member districts since 1951 has been limited to a handful of urban two-member ridings.

Table 1.2 – District magnitude for Provinces with a history of employing multi-member ridings (1951-1996)

<table>
<thead>
<tr>
<th>Census Year</th>
<th>British Columbia</th>
<th>Manitoba</th>
<th>Nova Scotia</th>
<th>Newfoundland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1991</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1986</td>
<td>1.327 (17,0)a</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1981</td>
<td>1.140 (7,0)a</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1976</td>
<td>1.140 (7,0)a</td>
<td>1</td>
<td>1.040 (2)c</td>
<td>1</td>
</tr>
<tr>
<td>1971</td>
<td>1.146 (7,0)a</td>
<td>1</td>
<td>1.069 (3)c</td>
<td>1.024 (1)c</td>
</tr>
<tr>
<td>1966</td>
<td>1.146 (7,0)a</td>
<td>1</td>
<td>1.069 (3)c</td>
<td>1.024 (1)c</td>
</tr>
<tr>
<td>1961</td>
<td>1.238 (6,2)a</td>
<td>1</td>
<td>1.075 (3)c</td>
<td>1.029 (1)c</td>
</tr>
<tr>
<td>1956</td>
<td>1.238 (6,2)a</td>
<td>1.213 (3,1)b</td>
<td>1.075 (3)c</td>
<td>1.029 (1)c</td>
</tr>
<tr>
<td>1951</td>
<td>1.171 (3,2)a</td>
<td>1.213 (3,1)b</td>
<td>1.156 (5)c</td>
<td>1.120 (3)c</td>
</tr>
</tbody>
</table>

a. Numbers in parentheses indicate number of two- and three-member ridings.
b. Numbers in parentheses indicate number of four- and two-member ridings
c. Number in parentheses indicates number of two-member ridings

Nova Scotia elections used two-member districts in two to five ridings until 1976. Similarly, elections in Newfoundland also used two-member districts until 1972.
Manitoba and British Columbia have experimented more liberally with multi-member districts. Manitoba has mixed variations in electoral formulas with multi-member districts. The average DM for the first two elections with the multimember urban ridings is 1.21. In British Columbia the average DM has fluctuated between 1 and 1.32.

The difficulty of comparing elections with variations in DM is not new. Is it possible to compare elections with different average DM's? Lijphart suggests that electoral systems with an overall DM average of 1.1 or less can, *ceteris paribus*, be considered to have DM's of one. This rule of thumb permits considering all but one of the elections in Nova Scotia and Newfoundland as being conducted with an overall DM of one. This neatly eliminates nine of the 21 elections involving multi-member electoral districts reducing the affected elections from twenty percent of the total sample to only 12. Of these none of the multi-member districts used in the elections in question are at a higher-tier. That is to say the number of constituents that each member represents is relatively constant regardless of their being elected from a single- or multi-member district. To address concerns a DM variable will be included in the regression analysis described in Chapter 3.

---

24 Lijphart (1993), pg. 486.
Chapter II - The shoulders of social structural giants

Social structural theories of party systems have had a short but tumultuous life. It has been less than half a century since Lipset and Rokkan described European party systems as being shaped by underlying social structures. Over the latter half of the twentieth-century political theorists have taken turns refuting and defending the social structural hypotheses. These debates and entirely new theories of party system development have shaken up the Lipset and Rokkan hypothesis but they have not irrevocably changed the original foundations.

The purpose of this chapter is to examine social structural explanations of party system development and to argue for the applicability of social structural models to Canada. The chapter is divided into five sections: the first examines the social structural approach outlined by Lipset and Rokkan and discusses their “frozen cleavages” hypothesis; the second reviews the social psychological literature that has followed. The second discusses several critiques which argue that many Western democracies are undergoing, or have gone through, a period of party system realignment or dealignment. The third looks at Inglehart’s critique which suggests that traditional social cleavage structures are being replaced in importance by value cleavages. The fourth section takes stock of the realignment/dealignment critiques and suggests a framework for approaching party systems in Canada. The last section reviews the current literature on social approaches to explaining Canadian party systems.
Social structural models

In *Contemporary Democracies* Powell emphasizes the role of social structures in party politics. He asserts that, “virtually all of the multiparty systems have clear linkages to social groups.” 25 The connection between specific populations and political parties was initially identified and categorized by Lipset and Rokkan. The introductory essay to *Party Systems and Voter Alignment* answers two inter-related sets of questions within the field of comparative political sociology. One set focuses on the genesis of political cleavages that engender different political system alignments. What are the influences of social forces on party systems in post-industrial and post-revolutionary democracies? When are regional, linguistic, or ethnic cleavages most likely to prove polarizing? Which of these are most salient or persistent? The second set of questions looks at the process of transformation of social cleavages into political divisions. Which cleavages develop into stable societal conflicts that are politically represented? Which of the existing conflicts have been most salient? How resilient are cleavages over time? As cleavages evolve or emerge how are they incorporated into pre-existing party systems?

Lipset and Rokkan tackle these questions in two steps. In the first step they develop a framework that encompasses all the salient social cleavage structures that could exist in any particular society. This model has two dimensions, one which addresses functional matters and another that addresses the geographic proximity of political actors. The functional dimension encompasses individual concerns; on one side are material concerns such as obtaining food and shelter, on the other side are non-material concerns such as political emancipation or eternal salvation. On this dimension interest-specific

25 Powell (1982), pg. 77.
concerns and ideology are polar opposites. The proximity dimension covers a range of conflicts from local quarrels to debates in national arenas. On this dimension regional conflicts sit in opposition to deliberations between established national organizations. By locating existing societal cleavages along these two dimensions, Lipset and Rokkan explain variation in party systems across countries.

The model identifies four cleavage structures that characterize most European states. They are the conflicts between: subject and dominant culture, church and state, primary and secondary economy, and workers and employers. Lipset and Rokkan argue that two of these cleavages are tied to the French Revolution and two are connected to the Industrial Revolution. In both revolutions one cleavage gains salience during the event itself and another cleavage rises after the revolutionary dust has settled. The conflict between subject and dominant cultures began the French Revolution as the masses battled the existing government power. The removal of the papal yoke from government led to the institutionalizing of nation-states in the place of feudal political structures. In this new political environment the clash between secular and ecclesiastical powers began to take hold and continues to dominate European politics to this day. In England the clash between the landed gentry and the newly arising entrepreneurial industrialists initiated the Industrial Revolution. As the industrialists began to take over economic and political control of the state the conflict against the landed gentry gave way to a conflict with workers. The clash between factory workers and the owners of the means of production exacerbated tensions between strataums of social classes. Figure 2.1 demonstrates the two-dimensional model and locates the four major cleavages Lipset and Rokkan identify in European democracies.
In the second step Lipset and Rokkan develop a model that describes the transformation of cleavage structures into party systems. This is a complex model which Lipset and Rokkan describe in four phases. The first explains how changes in social structures impact party systems. The analysis moves onto considerations of voter and party interactions within social structures. The third phase describes how the four established cleavage structures cause variations in party systems. Finally, they produce a multi-level model for explaining how alliance-opposition structures are created. Each of these elements will be briefly examined.

Changes in cleavage structures at a demographic level may have no impact on the politics of a society; they may cause the decline of a current political cleavage, or they
may create a new dimension for opposition. In both of the cases involving change, it is possible that this could cause the expansion or contraction of a party system. Intuitively, it is not difficult to understand how a society that undergoes a transformation which decreases the salience of a political cleavage would see a decrease in parties. This assumes that the removal of a cleavage would remove the \textit{raison d'etre} for parties that rallied around that division. However, an argument could also be made that removing a cleavage shifts focus, and that new cleavages may come into play which could increase the number of parties. Similarly, the development of a new cleavage may trump all other considerations and could, in effect, remove minor parties from the electoral competition thereby acting as restricting force on a party system.

Using a rational-choice analysis of the decision making processes that voters go through, Lipset and Rokkan argue,

\begin{quote}
Cleavages do not translate themselves into party opposition as a matter of course: there are considerations of organizational and electoral strategy; there is the weighing of pay-offs of alliances against losses through split-offs; and there is the successive narrowing of the ‘mobilization market’ through the time sequences or organizational efforts.\textsuperscript{26}
\end{quote}

There are limits to the political power that a social cleavage can have. The cleavage needs to have both salience and a critical mass of support on one side or the other to develop political momentum. Cleavages that lack importance or backing are not feasible vehicles for coordinating electoral support. A population that gravitates to a new banner in the political landscape does so through a process of rational choices. The voters need to perceive that the benefits they will derive from the new political party will outweigh the benefits they would realize if they maintained the status quo. In periods where

\textsuperscript{26} Lipset and Rokkan (1967).
restructuring of the electorate is imminent parties work to narrow the support market by making broad appeals to the electorate.\textsuperscript{27}

Lipset and Rokkan argue that the conditions for the expression of protest and the representation of interests play a significant role in part system formation. Specifically, the freedom to mobilize political ideas is a powerful determinant into the likelihood of cleavages influencing party systems. Political mobility includes decision making traditions within a polity; the channels for expressing and mobilizing protests; the payoffs, opportunities, and costs of alliances; the ease for new movements to gain representation; and the types of alliances that are likely to bring about the majority rule. In liberal systems party structures emerge as stable systems of party politics with a clear and distinctive pattern of citizen alignments behind each party.

Party systems evolve in patterns that reflect the four traditional cleavages previously described. The interactions between these cleavages in each state play a significant role in shaping the developmental course of political structures. The differences between states in the strength and magnitude of cleavages play a critical role in how parties develop. This is a powerful descriptive model for Europe because it adequately explains why an overtly religious party would emerge to a position of strength in Germany while a fiercely nationalistic party came to occupy a similarly dominant position in France. Interestingly, Lipset and Rokkan argue that the class-based worker-employer cleavage does not actually contribute to variations in party structures between European states. Instead, the cleavage between worker and employers in European states has led to commonalities between these countries in terms of party system structure.

\textsuperscript{27} Classic examples of restructured electorates are democracies that have changed who are eligible to vote. The enfranchisement in many states during the latter half of the 19\textsuperscript{th} Century and the suffrage movements in the early 20\textsuperscript{th} Century are examples.
Lipset and Rokkan explain that cleavage structures are translated into party systems through a multi-level model where government alliances and rival oppositions are produced. The models are built on three dichotomies. The use of the three dichotomies is designed to,

...reduce the variety of empirical party systems to a set of ordered consequences of decisions and developments at three crucial juncture of history of each nation: ... first, during the Reformation—the struggle for control of the ecclesiastical organizations within the national territory; second in the wake of the "Democratic Revolution" after 1789—the conflict over the control of the vast machineries of mass education to be built up by the mobilizing nation-states; finally, during the early phases of the Industrial Revolution—the opposition between landed interests and the claims of the rising commercial and industrial leadership in cities and towns.28 (emphasis by the authors)

As indicated by the name and description within each level there are two alternatives at each juncture. The combination of these factors leads to eight different possible patterns of party alignments. The shape of party systems and party alignments is dictated by how the incumbent regime decides with whom they should ally with at decision making junctures. These choices place constrains on types of alliances that the opposition can form. This process roughly describes how party systems develop.

Overall, Lipset and Rokkan's framework does a good job of describing the linkages between cleavage structures and party systems. The linking of party systems to social heterogeneity has led to an oft-debated conclusion. The model suggests that party system transformation only arises during periods of change in the electorate. This suggests that absent revolutionary impulses, party systems should remain stable. The term introduced by Lipset and Rokkan that has now become synonymous with their theory is "frozen."

---

28 Lipset and Rokkan (1967), pg. 38.
Critiques of social explanations

A central thread to the social structural paradigm is party system stability. Lipset and Rokkan argue the last large-scale shuffling of the political card deck occurred with suffrage. The cleavage structures of the 1920s begat a party system that had remained largely unchanged over the fifty years leading up to the time of Lipset and Rokkan’s research. They argue that, “the party systems of the 1960s reflect, with few but significant exceptions, the cleavage structures of the 1920s.” Aggregate evidence of the freezing hypothesis was provided by Rose and Urwin in their cross-national analysis of seventeen party systems between the mid-1940s and 1960s. Their work examined the social cohesion of 76 different parties on the basis of their support base. They focused on five types of social groups: religious, ethnic, social class, regional groupings, and groups that were created by urban-rural divisions. This research indicated that party systems were largely stable and the social groups that contributed most to this stability were those of religion and class.

The freezing hypothesis has not been without its critics which have necessitated a fairly extensive overhauling of the social structural argument. Two significant papers refute Rose and Urwin’s aggregate analysis. Ersson and Lane suggest that after a period of relative stability through the 1960s and early 1970s European party systems went through a period of destabilization that continued through to the 1980s. Shamir’s account of this period is quite similar although he additionally suggests that party systems were never frozen. Shamir’s key piece of evidence is the significant shifts in policy

29 Ibid. pg. 50.
30 Rose and Irwin (1969).
considerations. In both cases, the conclusions they arrive at are that party systems are not stable and are no longer bound by the cleavage structures which originally shaped the European political theater in the 1920s.

More criticism of the freezing hypothesis is found in *Electoral Change in Advanced Industrial Societies* edited by Dalton, Flanagan, and Beck and *Electoral Change in Western Democracies*, edited by Crewe and Denver, two cross-national collections of essays. Both books were the product of academic conferences that sought to explain why, if the party systems were supposed to be frozen, was there so much volatility in electoral results through the 1970s and early 1980s? In the view of Dalton, Flanagan, and Beck,

Electoral alignments are weakening, and party systems are experiencing increased fragmentation and electoral volatility. Moreover, the evidence suggests that the changes in all of these nations reflect more than short-term oscillations in party fortunes. This decomposition of electoral alignments often can be traced to shifts in the long-term bases of partisan support—party identification and social cleavages. Virtually everywhere among the industrial democracies, the old order is changing.\(^\text{32}\)

The contributors to both texts proceed from the hypothesis that the relationships identified by Lipset and Rokkan in the late 1960s are undergoing a period of realignment or dealignment. Social cleavages that motivated political actions a generation before had begun to weaken in the post-War period. In their place, new non-traditional cleavages gained prominence.

The value cleavage

Inglehart suggests that in the latter half of the Twentieth Century Europe has seen the development of post-industrial, post-materialist cleavages that sits apart from traditional social structural cleavage structures. His research argues that the explanatory power that traditional socio-economic cleavages have over political behavior has diminished. Arguments on dealignment and fragmentation of party systems existed prior to Inglehart's work but there was very little in the way of systematic explanations of why this was occurring. Inglehart's post-materialist perspective argues that increasing wealth, the absence of major wars, and increasingly accessible education has turned an unprecedented number of people towards post-materialist values. This value change has had a profound impact on European democracies. Increased government intervention in social and economic matters, highly developed post-secondary education systems, and the exponential growth of information technology has led to three developments. First, a new cohort of political actors has emerged that is highly skilled and has access to an unprecedented range of media, information, and capital resources. Second, new issues, such as the environment, global responsibility, and social justice have emerged to positions of considerable national importance. Finally, non-conventional modes of political participation have developed, allowing an increasingly diverse range of political actors to participate at national and sub-national levels.

---

33 See for example Franklin and Jackson (1983).
In *Citizen Politics in Western Democracies*, Dalton describes these phenomena as "new politics." In new politics citizens give increasing priority to global responsibility, social justice, and the environment. These newly politicized citizens challenge an older guard who emphasize political ideals like economic growth (or at least stability) and physical security. Because value orientations are both persistent and formed early in an individual’s life this conflict between new politics and old politics is generally considered a conflict between new generations of political actors and the older generation.

This is a pivotal claim in Inglehart’s theory of value change. He argues that the value orientations that were founded on the traditional cleavage structure identified by Lipset and Rokkan have lost much of their significance in the second half of the twentieth century. The older voting cohorts in contemporary polities experienced first hand the economic crises of the 1930s and the physical threat of the Second World War. These experiences instilled a belief that economic well being and physical security are both scarce goods. Post war generations have grown up in far different and arguably far less arduous circumstances. Because of this bifurcation of experiences Inglehart predicts that there will be a quiet revolution in which materialist generations will be gradually replaced by generations with postmaterialist value structures. This generational shift will lead to a realignment of party systems where maturing voters will base a significant part their party allegiances on values as opposed to traditional issues.

Adding to the value cleavage hypothesis, Flanagan has stated that Inglehart's conceptualization of values is actually a combination of two dimensions. First, there is the materialist/postmaterialist dimension that is central to Inglehart’s work; and second,
there is a libertarian/authoritarian dimension. The libertarian value orientation is tied to the concept of self-actualization. The central facets to the libertarian value structure are individuality, liberty, and self-improvement. On the other end of the dimension the authoritarian value orientation is based on concerns for security. These concerns are manifested in value structures that are based on deference to authority, respect for law and order, patriotism (to the point of jingoism at times), conformity to cultural norms, and support for traditional religious and moral values. The libertarian/authoritarian value dimension is also seen in Kitschelt’s work, where it plays a central role in explaining changes in party systems in Western democracies. Kitschelt argues that explanations of party systems that focus on traditional class cleavage structures underestimate the magnitude of change. This is because these explanations do not take into consideration the abilities of party elites to forge new electoral coalitions on issues quite separate from the cleavages identified by Lipset and Rokkan. In Kitschelt’s study of why socialist parties have slipped in popularity through the 1970s and 1980s, The Transformation of European Social Democracy, he states that:

The future of social democracy to a large extent lies in the hands of party leaders and activists. External social, economic and institutional settings within which parties operate are less important for determining a party’s fortunes than its own choice of objectives and strategies in the arena of party competition.

Even though Kitschelt’s work plays down the importance of social cleavages in contemporary party politics his work moves the social structural approach a considerable way forward. His theory introduces a compelling rational choice argument: where political elites make strategic choice about the cleavages upon which to focus.

---

37 Flanagan and Jackson (1983), pg. 1301.
38 Ibid. pg. 1305.
40 Kitschelt (1994), pg. 4.
It seems undeniable that traditional social cleavages are eroding and facing heavier competition from ideological cleavages. These critiques have required rethinking how social conditions influence party systems; however, they have not toppled the social structural model. Instead, in some respects the theory seems to have come full circle, albeit as the theory returns to its origins it is a significantly modified version of its former self. Recent work from Europe, most notably by Kriesi has focused on developing a third way in the social structural approach that navigates between the frozen party systems hypothesis on the one hand, and the realigning/dealigning hypothesis on the other. Kriesi suggests that “the decline of traditional cleavages does not necessarily signify the end of structuration of politics by social divisions.” Instead he argues that class, religion, ethnicity, and regionalism still play an important role in structuring party systems. However, these cleavages now compete with value cleavages that at time are reinforcing, and at other times cross-cutting. The following section will attempt to build evidence of these cleavages in Canada.

**Explanations of party system development in Canada**

There are virtually no social structural explanations of Canadian party systems. Crewe and Denver argue that this is because the precursors of modern mass parties in North America existed prior to the settling of the demographic landscape. They argue that this has led to an aggregation of interests in a few parties. Party systems are therefore not shaped by social cleavages but rather by enduring partisan loyalty. In *The
American Voter, Campbell et al suggest that voters acquire enduring allegiances or identifications with an established party. The act of party identification is an affective or emotional psychological attachment to a partisan reference group. This model has been used by several students of Canadian party systems. Before examining these works a brief introduction of social psychological models is necessary.

Social psychological explanations of party system development suggest that voters develop long-standing loyalties with established parties. Party identification is an internalized personal attachment an individual feels towards the partisan group of their own choice. Miller and Shanks suggests that “party identification is a concept . . . positing that one’s sense of self may include a feeling of personal identity with . . . a political party.” This allegiance not only has a major role in determining vote choice, but also alters the perceptions of voters. From Campbell et al, Converse and Pierce, Green and Palmquist, and Blais et al, it is understood that party identification has two critical facets. The first is identification, which Campbell et al describe as, ...

... an attachment to a party that helps the citizen locate him/herself and others on the political landscape. As thus conceived, partisans are partisan because they think they are partisan. They are not necessarily partisan because they vote like a partisan, or think like a partisan, or register like a partisan, or because someone else thinks they are a partisan. In the strict sense, they are not even partisan because they like one party more than another. Partisanship as party identification is entirely a matter of self-definition.

The second facet is time. Party identification is considered to be a part of an enduring belief structure, it is self-reinforcing over time, and it will persist after the inspiring event that originally inspired the loyalty has passed. A common mechanism for acquiring

---

42 Campbell et al (1960), pg. 120.
44 Campbell et al (1986), pg. 100.
partisan loyalties is through generational inheritance. Partisan belief structures are just one of several identifies that can be inherited. Palmquist explains:

Like identification with a socioeconomic class, party identification reflects an awareness that one belongs to a social group. As with ethnic identification, the individual must decide whether to appropriate the group label as part of his or her self-description. And like religious identification, one's sense of group membership and attachment may develop for reasons that have to do with a person's social location (for example, the family in which one was raised, the person one chooses to marry).45

These stable and generally enduring affective attachments to a party have an obvious and powerful influence on voting decisions which in turn have an influence on party systems. Voting populations professing moderate to strong partisan loyalties are relatively stable over time. The predictability of partisan transference identified in earlier studies of voter behaviour led to a compelling conclusion that voting populations in most Western democracies were quite stable.46 Although the path to this conclusion is quite different from the social structural model the end result is quite similar to the frozen hypothesis forwarded by Lipset and Rokkan. Another similarity between the two is addressed in the following section.

The connection between social heterogeneity and party identification has a modest literature. One area where there has been some active debate is the connection between religion and parties.47 Most studies indicate that at a federal level there is a correlation between church affiliation and party is a strong factor (Johnston, Irvine, and Lijphart). Given the nature of Canadian politics, this is somewhat surprising. The relative strength of religion as an important dimension of party choice is perplexing because the more salient dimension of political conflict in Canada has traditionally been

45 Palmquist (2002), pg. 204.
46 See for example Campbell et al 1960; Butler and Stokes 1969, and Budge, Crewe, and Farlie 1974
the linguistic-ethnic cleavage. As Meisel states religion is “of virtually no political importance in contemporary politics; in Canada, whereas, of course, the conflict between francophone and anglophone Canada is of the greater political significance.”

Nevertheless, one of the strongest correlations in federal elections is that between Catholic voters and supporters of the Liberal party.

Language is a complex factor in Canadian politics as it is inextricably tied to other variables. Lijphart has drawn connections between language and religion. He explains that,

Religion and language are mutually reinforcing determinants of party choice in Belgium, Canada, and Switzerland. In terms of their relative strength ... the Canadian percentages are difficult to interpret because there are hardly any French speaking Protestants in the country. Nevertheless, religion emerges as the more important variable because there is relatively less difference between francophone and anglophone Catholics than between Catholic and Protestant anglophones.

The linguistic variable is additionally limited by geographic specificity. Outside of Québec and New Brunswick the level of linguistic diversity is so low that it could be considered a non-factor in political concerns.

There have been very few studies into the impact of ethnicity on party systems as such it might be tempting to dismiss its relevance. However, much like language, ethnic concerns are often tied to a myriad of other variables. At a provincial level many ethnic movements have been tied with movements of gender equality. Combining these interests increases the profile of the overall movement but obscures the influence of ethnicity.

49 Blais (2005).
50 Lijphart (1993), pg. 449.
The impact of social class is oft-debated. Swartz argues that “class-based voting exists; it is consistent class-based parties that are missing.”\textsuperscript{52} With the exception of the NDP, which has a traditional connection to big labour, the effect of social class is typically filtered through other variables. Class typically needs to be activated by the presence or absence of other variables. One example of this is the connection between Catholicism and class. Using union membership as a proxy for class Johnston argues that that in Canada social class can be a powerful indicator of political partisanship. He explains “part of the geographic story is that Catholics much more than union families are distributed unevenly over the landscape. This allows them to control the electoral agenda, so to speak, where their numbers are relatively large.”\textsuperscript{53}

The underlying sentiments of the centre-periphery cleavage identified by Lipset and Rokkan are present in the regional argument made by Ricketts and Waltzer.

The expression of regional interests by provincial government may occur either through a party bearing a traditional label or a third party. Indeed, provincial governments offer the wherewithal—powers, prestige, patronage, experience—for the political survival of third as well as traditional parties. And in a number of provinces, Canadians’ perceptions of what best serves their interests have included the idea that a third-party provincial government is the more effective regional instrument. Besides, if such a party enters national contest, it may succeed in attaining a balance-of-power position in the House of Commons and thus give more effective representation to regional interests.\textsuperscript{54}

Ricketts and Waltzer effectively argue that the nature of the federal relationship between provinces and the central government provide an adequate incentive from party to rally around this cleavage. The existence of the Bloc Québécois, Social Credit, and Reform parties provide solid evidence. The federal question is an interesting one for Canada. Unlike the United States there is a disconnection between federal and provincial parties.

\textsuperscript{52} Swartz (1974), pg. 589.
\textsuperscript{53} Johnston (1985), pg. 128.
\textsuperscript{54} Ricketts and Waltzer (1970), pg. 713.
Blake *et al* suggests that this is evidence of weak party systems; he suggests that “one key indicator of the weakness of partisanship in Canada is identification with different parties at the federal and provincial levels, reflecting two political words that largely do not intersect.” The reasons for this disconnection is complex and beyond the scope of this thesis. What is important to acknowledge is that the connection between federal and provincial politics is not particularly strong and therefore the influence that the federal party system has on provincial parties is not great. It is a causal variable, but for the purposes of this thesis it is assumed to be negligible.

**Summary**

Social structural perspectives explain how social situation influences voting decisions. It captures how embedded political cleavages—religion, ethnicity, regionalism, and class—form the foundation of electoral preferences. This is not a simple relationship to explain because while the act of voting is simple, the decision making process is not. The approach of the majority of Canadian party system literature begs the question of suitability of social structuralism. As previously stated the majority of literature on Canadian party systems has employed social psychological approaches. Crewe and Denver offer an explanation which suggests why this might not be surprising.

The ‘social structural’ paradigm was particularly apt for much of continental Europe, where organized communities often pre-dated the mass franchise and where proportional representation encouraged the separate party representation of distinct religious and economic groups. The second paradigm, anchored in the concept of party identification, was developed in the United States. Here organised mass parties pre-dated the class and

---

*Blake (1985).*
religious communities of modern America and were encouraged by the simple-plurality, presidential electoral system to aggregate interests and groups into a broad coalition rather than represent them exclusively (1985:2).

However, it would be wrong to classify all party systems in North America as identical in their origins. The unique pathway that led to confederation and the formation of Canada in addition to the significant volume of social structural literature suggests that societal cleavages should not be disregarded when considering party systems. There is a great deal that is unknown about Canadian party systems and employing a fresh approach deserves consideration.

Provinces are socially diverse polities and it stands to reason that party systems may be influenced by demographic shifts. This thesis accepts that there are limits to social structural models. A comprehensive model of party system development would have to include consideration of a myriad of institutional and social variables. However, a study of that magnitude is beyond the scope of this paper. Instead this paper intends to examine a heretofore unexplored section of this puzzle in detail. Kriesi has argued that social structural models can and should be viewed flexibly. Social cleavages work in concert and in opposition to value cleavages, partisan loyalties, and institutional factors.

The hypothesis of this paper is that social heterogeneity and party system size are connected. If they are, what is the nature of these relationships? How does social diversity affect party systems? The hypothesis forwarded here is that growing social diversity increases the chances of parties emerging and being electable. In provinces where there has been an increase in the number of ethnic, religious and linguistic groups there should be a corresponding increase in the number of parties receiving votes and being represented in legislatures. How are party systems affected by social cleavages
where the magnitude of the division is based on the size of one population relative to another such as rural versus urban populations? In these cases the hypothesis tested in this thesis is that there is a negative relationship between binary cleavages and party system size. The larger the gap between the two populations the less likely the cleavage will foster political competition. Staying with the example of the urban-rural cleavage in a province with identically sized urban and rural populations and no other political cleavages we would expect a balanced two party system to emerge centred on this division. In this isolated system we would expect the party system to contract if the urban-rural population became unbalanced. Additionally, in a polity with multiple cleavage structures we would expect the effects of the cleavage to become negligible as the balance between urban and rural populations decreases.

With both of these hypotheses there are obvious difficulties with trying to prove them. Changes in cleavage structures can be glacial. This makes it difficult to draw connections between party systems and changes in the population. Being able to use a continuous run of five decades of elections and census data improves the likelihood of identifying these linkages. Another difficulty is determining how to measure the magnitude of social cleavages. This problem is addressed in the next chapter. The chapter identifies cleavage structures that may have influence on provincial party systems and employs a variety of methods for attempting to quantify social diversity in a way that allows comparisons between provinces.
Chapter III – The building blocks of party systems

Provinces are a good place to test social structural approaches to party system development. As discussed in the previous chapter, a modest literature has emerged in Canada that draws links between social diversity and political parties. However, few efforts have been made to quantitatively explain the significance or magnitude of these relationships. This chapter will begin by looking at five cleavage structures. Building on the social structural framework this chapter will focus on specific areas of social division in Canadian provinces and will present a variety of methods for considering each cleavage.

The five vectors that are examined here are ethnicity, religion, language, the centre-periphery cleavage, and urban/rural dispersion. These first four divisions are encapsulated in national cleavage structures, while the latter measure addresses the economic-class cleavage. Admittedly, this is not the optimal method for addressing the class cleavage. As Johnston et al explain, “as a practical matter, the operative definition of the class cleavage is the union movement versus the rest.” 56 Unfortunately, accurate union membership figures are not obtainable for the majority of the period under consideration. Therefore, an urban-rural variable has been developed that attempts to capture some of the political tensions that exist between class stratum's in Canada.

56 Johnston (1992), pg. 37.
Building an Index

The general formula for constructing the heterogeneity indexes, unless otherwise stated, is a modified version of Rae’s fractionalization index. The model is derived by summing the squared percentages of a group’s population relative to the population as a whole.

\[
\text{Heterogeneity Index} = \sum_{i=1}^{n} P_i^2
\]

Where \( P \) is the percentage a group’s size relative to the total population.

So the higher the number, the less heterogeneous is the society. Unlike Taagepera and Shugart, instead of inverting this result we have left the result in the form of an index. This facilitates easier comparison across social groups and provides a more elegant model.

In general, the primary criteria for inclusion of individual social groups were size and consistency. Any population that at a national level comprised at least 1% of the population for at least five of the ten census periods was included. In addition, for certain variables additional populations were included when they exceeded 5% of a province’s population in at least five census periods. Given the design of the index, over-estimating the variables by including too many sub-groups is not an issue as the impact that small populations have on the index is minimal.

Some words of caution should be offered before addressing the variables. Any measure of social heterogeneity poses potential problems. First, this study has divided
consideration of social cleavages into three individual variables to avoid over-
generalization. As Ordeshook and Shvetsova point out, “[t]he problem with any 
fractionalization index ... is that it obscures the motives and actions of voters and 
political elite so that it becomes difficult or impossible to discern the effect of 
institutional structure on these separate motives.” Choosing to convert each variable 
into an index will not eliminate over-generalization but it will limit the degree to which it 
occurs.

It is important to note, however, that while increased richness of our data may 
help avoid over-simplifying the causal relationships at work, there are issues with using 
three measures of social heterogeneity. With multiple measures, multicollinearity may be 
inevitable. With multiple variables it is more difficult to identify the magnitude of each 
cleavage. An index cannot measure variations in the level of salience. In particular, 
Ordeshook and Shvetsova argue that “the particular problem is that ethnic, religious, and 
linguistic heterogeneity can operate differently when groups are geographically separate 
than when all groups are mixed.” Two territorially based variables and multiple 
measures of social heterogeneity have been included to take into account of the inherent 
pathologies of index measurements.

Indexes also carry an inherent assumption that all groups have similar 
organizational abilities and characteristics. Put another way, indexes assume that ceteris 
paribus, two groups of a similar size will possess similar levels of political efficacy. As 
Cox and Neto correctly point out, not all social groups have the resources to develop to 
the point where the creation of politically motivated elements is realized. This aside,

57 Ordeshook and Shvetsova (1994), pg 103.
indexes do allow social scientists to condense large amounts of data into manageable parcels and so long as the findings presented recognize the limitation of macro data they remain a valuable tool.

A final comment on the difficulty of using indexes is an assumption that the relationships examined in this thesis are linear. To take this into account, logarithmic values for each variable were tested, none produced robust results.

Another area of concern is the accuracy of data. Census data in Canada is gathered with the best intentions for producing accurate and unbiased information. Nevertheless, there are inevitable biases that occur because of the difficulty in producing neutral questionnaires. Four issues are relevant to the investigation at hand: First, census questionnaires bias results by explicitly including or excluding variable alternatives. An example that will be examined later on would be the inclusion of the option “Canadian” as an ethnicity for the first time in 1996. Second, the primary focus for censuses is providing an accurate snapshot of the population at a given time; a secondary motivation is providing detailed information that can be compared over time. Evidence of this hierarchy of ideals is seen in the periodic changes that occur with Statistics Canada’s counting and reporting methods. An unavoidable source of error in this study has come from subtle changes in reporting figures between census periods. The third area where we find bias is in generalizations. Considerations of sub-groups are a particular area of difficulty. For example, all people of Asian decent prior to 1961 were classified as Asiatic. Even after this point the differentiation between Asians who were not Japanese or Chinese did not occur until 1971. Finally, the census conducted in the first year of each decade is comprehensive, while the census conducted on the sixth year of each
decade is an estimation based on a random sampling of anywhere from five to twenty percent of the population. The latter census is also not as thorough in the categories that it covers. For the purposes of this study it was at times necessary to extrapolate some figures. Where necessary an exponential estimation was employed. This form of estimation takes into consideration that populations do not expand or contract at set rates. Instead growth is a function of the size of the current population. Overall, these issues do not jeopardize the validity of the analysis but they do open the door to error.

Ethnic diversity

Ethnicity is a relatively straightforward place to begin looking at social heterogeneity in Canada. Canada’s national identity is a product of multiple cultural identities. There is also a strong argument that the most salient social cleavages in Canada are predicated on the divisions between the historical occupants of North America and the two great powers that colonized it. As such, consideration of ethnic diversity is essential for understanding social heterogeneity in provinces.

Eleven population groups met at least one of the two criteria previously set out: English, Scottish, Irish, French, German, Italian, Dutch, Ukrainian, Scandinavian, Asiatic, and Aboriginal/First Nations. The latter three are composites of multiple ethnicities. The Scandinavian counts included Swedish, Finish, Norwegian, and Danish.

59 See for example Ricketts and Waltzer (1971), Rutan (1971), and McRoberts (1977).
60 There are two reasons for using aggregate figures for these three population groups. First, census reports prior to 1976 reported Asian and Scandinavian populations as a single group. Second, most of the ethnic groups that fall in these three categories would be too small to be included under the current parameters of this experiment. That said it is the authors opinion that each of these groups are significant and that the
peoples. The Asiatic variable includes people of Chinese, Japanese, Korean, Taiwanese, and Vietnamese decent. The Aboriginal/First Nations population includes both First Nations and Inuit peoples; it does not include the Métis. A twelfth population group, Canadian, was also included although it falls outside of the inclusion criteria. It is debatable whether Canadian should be considered an ethnic group, yet the size of this population as recorded by the Census necessitated some consideration.61

61 Prior to 1981 the number of individuals claiming Canadian as their ethnicity was less than one-percent in all provinces. Since then there has been a meteoric rise in the percentage of the population that self-identifies itself as being of Canadian ethnicity. Across the board the number of people claiming to be Canadian jumped to almost ten percent between 1981 and 1996. The most dramatic of these increases was in Québec where the ethnic Canadian population accounted for less than 0.1% of the population in 1981. By 1996 this figure had jumped to 37.2%. Even more startling in the Québec case is that in 1991 the self-identified Canadian population stood at less than 1%.
The increase across all provinces in the number of individuals who identify themselves as being ethnically Canadians can be partially attributed to a legitimization of the concept of Canadian as an ethnic group. The concept of “Canadian” as an ethnic identity did not gain purchase until late in the twentieth-century. For this the census questionnaires actually provides a good indicator of when the idea that “Canadian” could be an ethnicity earned a minimum level of acceptance. The inclusion of “Canadian” in the listings of ethnic groups in census forms began in 1996. This inclusion both legitimized respondents who identified as Canadian and introduced the concept to a population that previously may not have hitherto for considered it. This helps explain the steady, and somewhat steep, increase in the size of this population. However, this does not explain the variation between provinces.
In the case of Québec some of the explanation for this phenomenon undoubtedly lies with the impact of the 1995 Sovereignty referendum in Québec. The referendum and the sentiments of supporters of both sides were a primary, if not the, casual variable. However, it is important to note that a similar rise in Canadian identity did not occur after the 1980 sovereignty referendum. Two additional intervening variables explain why this was the case. First, it is arguable that from the outset the chance of success for the separatist vote in the first referendum was not as high as in the second. The degree of bifurcation between sovereigntists and nationalists was, therefore, less pronounced and less likely to inspire the strong nationalistic sentiments that manifested after the 1995 referendum.
Second, prior to the voting date in the first referendum several powerful interveners, including the Prime Minister of Canada, were successful in persuading the Québec population that changes would be made to recognize the distinctiveness and importance of Québécois culture. During the second referendum, Québec voters were given few assurances that Québécois cultural concerns would be adequately dealt with. This contributed to both sides becoming firmly entrenched in pro-Québec and pro-Canada camps which in the latter case is arguable evolved into a national identity that superseded traditional allegiances.
The effect of the referendum on the emergence of a Canadian identity was not limited to Québec. In the region that stood the most to lose if Québec separated, the Maritimes, there were also significant increases in the number of individuals who considered themselves “Canadian” ethnically. By 1996 over 20% of the population in Nova Scotia, New Brunswick, and Newfoundland considered themselves “Canadian.” Compared to the provinces west of the Québec/Ontario border levels hovered around 10-12%.
Ultimately the inclusion of “Canadian” as an ethnicity is important because it provides a powerful indicator of decreasing saliency of ethnic considerations. In all provinces ethnic diversity remaining relatively stable over the first 30 years of this study. After that period there is a variation between provinces with diversity
Another area where changes to the census questionnaire reflect major social changes and also impact the quality of the data is the change in how the ethnicity variable is recorded for single versus multiple responses. Prior to 1986 the census questionnaire required ticking a box beside the appropriate ethnic group or writing in a response if it was not already indicated. To claim a second ethnicity the respondent would have to write this in below their initial response. This in addition to the substantially lower number of people with multi-racial heritages resulted in relatively low recorded numbers of multi-ethnic Canadians. After 1986, individuals could tick as many boxes as were appropriate for describing their ethnic background. Added to eroding cultural boundaries regarding interracial marriages, there has been a significant increase in the number of people who claim multi-ethnic heritages. The problem with multiple responses has been addressed by omitting these individuals. The justification for this stems from an assumption that these multiple loyalties will not inspire the same political movements as people who have a single ethnic heritage.

There are two ways of omitting this population and both are tested in this study. First, none of the individuals which had multiple-ethnic origins were included in the ethnic population counts. The second way of omitting individuals with multiple ethnic origins is to remove their influence on the index entirely. This is done through an adjusted ethnicity index which uses as the divisor the total number of individuals in the province minus all individuals who claim multiple ethnicities. This does mean there is a

*increasing in Québec and Newfoundland, decreasing across the Prairies and the Maritimes and remaining constant in Ontario and British Columbia. This trend is misleading though as overall diversity of Québec and New Brunswick is significantly lower than the other eight provinces. The dramatic increase of the “Canadian” ethnic population served to bump up measures of ethnic diversity. In Ontario and British Columbia ethnic diversity has always been quite high and the emergence of the “Canadian” ethnicity had a minimal effect of aggregate figures. In the Prairies and Maritimes, the “Canadian” ethnic group served to significantly decrease the ethnic diversity of those provinces.*
structural difference between data collected in the early and latter parts of this study because people were not prompted to declare multiple ethnic origins. However, the number of individuals who this would have applied to in the early years of this study is likely to be small.

Table 3.1 reports the ethnic composition of Canadian provinces between 1951 and 1996. This first figure indicates the average size of the ethnic population during the period under consideration. The second figure reports that net change in the ethnic population percentage from 1951 to 1996. It is important to note that this second figure should not be interpreted as an indicator of consistent long-term trends, though in most cases this is an appropriate assumption.

Changes in ethnic make up across provinces are marked by a degree of consistency. Individuals' claming European ancestry declined in all provinces at relatively steady rates. The biggest decline is among those groups originally from the British Isles which is understandable considering the large amount of non-European and non-British Isles immigration over the past fifty years. The significance in the ethnic shift in Québec cannot be overstated. In the five year span between the 1991 and 1996 censuses the population identifying itself as ethnically French dropped from over five-million to just over two-million, while the “Canadian” population rocketed to over 2.5 million.  

Outside of the “Canadian” ethnic group, large increases were seen in the Chinese and Japanese populations particularly in British Columbia and Ontario. Falling outside of the parameters set by this study, modest increases in population size were

---

62 Clearly this phenomenon warrants further investigation, however, this is beyond the scope of this paper. For the purposes of this experiment this dramatic shift raises an important point about the mutability of cultural compositions and the transience of ethnic identity.
Table 3.1 – Average size of ethnic populations for single respondents by province as a percentage (1951-1996)

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>BC</th>
<th>AB</th>
<th>SK</th>
<th>MB</th>
<th>ON</th>
<th>QC</th>
<th>NB</th>
<th>NS</th>
<th>NF</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>28.3</td>
<td>21.2</td>
<td>18.1</td>
<td>18.1</td>
<td>28.2</td>
<td>5.5</td>
<td>27.4</td>
<td>34.5</td>
<td>70.6</td>
</tr>
<tr>
<td></td>
<td>-27.0</td>
<td>-16.9</td>
<td>-14.5</td>
<td>-16.1</td>
<td>-27.6</td>
<td>-6.1</td>
<td>-19.0</td>
<td>-25.3</td>
<td>-38.7</td>
</tr>
<tr>
<td>Scottish</td>
<td>10.5</td>
<td>8.6</td>
<td>7.5</td>
<td>8.7</td>
<td>9.0</td>
<td>1.4</td>
<td>9.2</td>
<td>18.0</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>-14.5</td>
<td>-11.0</td>
<td>-9.4</td>
<td>-11.8</td>
<td>-11.6</td>
<td>-1.8</td>
<td>-10.4</td>
<td>-17.6</td>
<td>-0.3</td>
</tr>
<tr>
<td>Irish</td>
<td>6.4</td>
<td>6.6</td>
<td>6.4</td>
<td>5.9</td>
<td>8.9</td>
<td>1.8</td>
<td>9.4</td>
<td>8.3</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>-9.2</td>
<td>-8.8</td>
<td>-9.0</td>
<td>-8.8</td>
<td>-13.7</td>
<td>-1.9</td>
<td>-10.6</td>
<td>-9.4</td>
<td>-6.4</td>
</tr>
<tr>
<td>French</td>
<td>3.3</td>
<td>4.9</td>
<td>5.0</td>
<td>7.2</td>
<td>8.1</td>
<td>73.9</td>
<td>34.4</td>
<td>9.0</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>-2.3</td>
<td>-4.2</td>
<td>-4.4</td>
<td>-5.5</td>
<td>-7.6</td>
<td>-53.1</td>
<td>-22.2</td>
<td>-7.6</td>
<td>-1.4</td>
</tr>
<tr>
<td>German</td>
<td>6.3</td>
<td>11.0</td>
<td>15.7</td>
<td>9.5</td>
<td>4.7</td>
<td>0.6</td>
<td>0.9</td>
<td>4.2</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>-1.2</td>
<td>-6.1</td>
<td>-7.1</td>
<td>0.0</td>
<td>-2.6</td>
<td>0.0</td>
<td>0.0</td>
<td>-2.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Italian</td>
<td>1.8</td>
<td>1.1</td>
<td>0.2</td>
<td>0.8</td>
<td>4.6</td>
<td>2.2</td>
<td>0.2</td>
<td>0.4</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>-0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>0.3</td>
<td>2.6</td>
<td>1.5</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Dutch</td>
<td>2.8</td>
<td>3.0</td>
<td>2.1</td>
<td>3.7</td>
<td>2.3</td>
<td>0.1</td>
<td>0.8</td>
<td>2.0</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>-1.2</td>
<td>-2.1</td>
<td>-2.9</td>
<td>-4.1</td>
<td>-0.6</td>
<td>0.0</td>
<td>-0.8</td>
<td>-2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Scandinavian</td>
<td>4.6</td>
<td>5.4</td>
<td>5.9</td>
<td>3.8</td>
<td>1.5</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>-4.2</td>
<td>-6.3</td>
<td>-5.7</td>
<td>-3.3</td>
<td>-0.4</td>
<td>-0.1</td>
<td>-0.5</td>
<td>-0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Ukrainian</td>
<td>2.1</td>
<td>6.8</td>
<td>7.8</td>
<td>9.9</td>
<td>1.7</td>
<td>0.3</td>
<td>0.1</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>-0.8</td>
<td>-6.1</td>
<td>-4.9</td>
<td>-7.5</td>
<td>-1.2</td>
<td>-0.2</td>
<td>0.0</td>
<td>-0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Asiatic</td>
<td>4.6</td>
<td>2.3</td>
<td>0.8</td>
<td>1.5</td>
<td>2.1</td>
<td>0.7</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>8.1</td>
<td>4.1</td>
<td>0.9</td>
<td>3.2</td>
<td>5.0</td>
<td>1.3</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Aboriginal</td>
<td>2.3</td>
<td>2.5</td>
<td>4.0</td>
<td>4.7</td>
<td>0.8</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>-0.4</td>
<td>0.1</td>
<td>4.6</td>
<td>4.5</td>
<td>-0.2</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Canadian</td>
<td>3.1</td>
<td>4.4</td>
<td>3.6</td>
<td>2.9</td>
<td>4.4</td>
<td>9.4</td>
<td>6.3</td>
<td>5.1</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td>9.6</td>
<td>12.7</td>
<td>10.1</td>
<td>8.5</td>
<td>12.0</td>
<td>37.2</td>
<td>23.7</td>
<td>19.0</td>
<td>20.8</td>
</tr>
</tbody>
</table>

Change in percentage of population for each ethnic group from the beginning to the end of the study is in italics. Percentage of populations in 1951 belonging to a specific group – Percentage of population in 1996 belonging to that same group.

Census data between 1966 and 1976 aggregated all individuals who identified themselves as British, Welsh, or Scottish as being from the British Isles. Estimation of each of these populations was calculated by using country of birth as a proxy for ethnic identity. The number of individuals who stated they were born in Britain, Wales and Scotland were aggregated and then the percentage of each group was determined. These figures were multiplied by the total number of individuals whose ethnic identity was attributed to the British Isles. This method produced reasonable estimations for each population but they are also a possible source of error.
recorded in the black and indo-Canadian population. However, neither of these populations was greater than the 1% minimum threshold until very recently.

A final area of concern for putting together a measure of ethnic heterogeneity was balancing an accurate portrayal of demographic trends in Canada with a measurement that makes intuitive sense. There has been an obvious increase in ethnic diversity in Canada over the past five years, however, basic indexes using the ethnic groupings previous discussed suggested that there were fewer ethnic groups at the end of the century then there were at the beginning. Much of this anomalous result is due to the emergence of the dominant Canadian ethnicity and the decision to ignore individuals with multiple ethnic identities. The measure that was used in the models overcame some of the initial short-comings through two modifications. First, individuals of British Isles ethnicities were aggregated into a single population. While ethnic identities between these groups may still have some lingering cultural significance, in particular during World Cups, there are few political cleavages that are observable based on these divisions. Second, the Canadian ethnic group was redistributed between the measured ethnic groups on the basis of the magnitude of the decline of each group from the previous census figures. This was done to maintain continuity with the data and to take into account that not all groups actually experienced drops in population counts while the Canadian ethnic population soared.\(^6\)

\(^6\) An interesting observation made from the ethnic data is that while most ethnic groups saw decreases in populations that were proportional to the increase of the Canadian ethnic population, a few groups were stable. For example, during the final period from 1991-1996 the Canadian population increased by about 20% across the country; for most ethnic groups this was matched by a 20% decline. Some groups were not affected by this. For example, across Canada the Italian population remained quite stable, and the Asiatic populations continued to grow.
Religion

Religion has an arguable relevance to Canadian politics. The muddiness of the relationship between organized religions and party politics has led some to refer to religion in general as “the unwelcome dinner guest” in the canon of Canadian party politics.65 For those that have wrestled with the topic some general statements can be made about party politics in Canadian provinces. At a federal level there are discernable linkages between the Liberal Party and the Catholic Church and a similar historical relationship between the Conservative Party and Protestant faiths. The translation of these connections to the provinces varies, with the strongest connections in the Maritimes.

One province where the Liberal Party and Catholicism are not synonymous is in the francophone province of Québec. The election of Jean Lesage and the Liberal Party in 1960 herald a period of extensive change in Québec that saw the power of the Catholic Church reduced dramatically. During the “Quiet Revolution” social change was widespread and sudden. During this period of modernization no institution suffered more than the Roman Catholic Church. Significantly, language replaced faith as the focus of Québec’s distinctiveness. Québec society became profoundly secularized and Church’s connection to politics was irrevocably altered.66

The complex relationship between religion and politics may make it the unwelcome guest; nevertheless, this paper will try to make the connection somewhat clearer. For the purposes of this analysis the variable is constructed in manner somewhat

different than the ethnicity variable. Initial attempts at constructing a religious heterogeneity variable included Catholicism, the five largest denominations within the Protestant domain and, where applicable, individuals with no religious affiliation and Eastern non-Christian religions. This index indicated there was significant variation between provinces. The most heterogeneous provinces are located west of the Ontario/Québec border; Québec is unsurprisingly the least diverse and the Maritime Provinces fall somewhere in between. This index also suggested that religious heterogeneity was stable over time with only a slight increase in religious diversity over the period of this study. The average standard deviation of the religious index for all provinces was 0.013.

Figure 3.1 Percentage of Catholic population by Region

---

Figures for Catholic populations are not consistent throughout the examination because census Canada includes Ukrainian Catholics in total counts for the first three censuses used in this study. To overcome this, the sum total for all Catholics is used throughout the study. Individuals who claimed no religious were included after 1966 onward and individuals claiming eastern non-Christian religious after 1976.
These results are problematic because there seems to be little evidence that religious membership has been stable over the period of this study. Figures 3.1 and 3.2 indicate the percentage of Catholic and Protestant populations by region. The four regions considered are the West (British Columbia, Alberta, Saskatchewan, and Manitoba), Ontario, Québec, and the Maritimes (New Brunswick, Nova Scotia, and Newfoundland).

Looking at figure 3.1, the high concentration of Catholics in Québec is obvious. The significance of this is debatable, as previously mentioned; in the political arena the politics of language seems more salient than the politics of religion. Additionally, given the hegemony of the Catholic population it is arguable that religion is a non-factor in provincial politics. Outside of Québec, the general trend for Catholic population is stable and slow growth over the period covered.

Figure 3.2 Percentage of Protestant Population by Region
In Figure 3.2 as in the previous graph, Québec is an outlier with a Protestant population that never exceeds ten percent of the province’s population. Significant decline is the story across all other regions with the largest drops seen in the West and Ontario. Moreover, in all regions outside of the Maritimes the Protestant population decreased by over fifty percent.

These two tables demonstrate a curious aspect of the Canadian population and prove that the original index was failing to capture a significant trend. On one hand, the decline of the Protestant share of the population is not surprising given the influx of non-Western immigrants and the general decline in the popularity of organized religion. On the other hand, what is sauce for the goose is clearly not sauce for the gander, as the Catholic population appears to have been impervious to demographic change and does in fact seem to have grown over the past fifty years. Explaining this aspect of Canadian politics is beyond the scope of this study, however; it does suggest that there may be significant variation in the political unity and strength between religious groups.

There have also been sizable increases in the number of individuals claiming no religious affiliation and affiliation with Eastern non-Christian faiths. This rapid increase might suggest that a new cleavage that has emerged might simply be described as secular-religious. In order to provide a more textured account of religious heterogeneity a simpler index was developed which included Catholics, all Protestants aggregated together, non-religious individuals, and individuals belonging to non-Christian faiths. The Aggregated Religious Index (ARI) successfully captures the significant trends in religious membership over the latter half of the Twentieth Century. Figure 3.3 demonstrates the intuitive appeal of this index. The difference in religious heterogeneity
between regions remains clear while at the same time reflecting the decreasing religious membership in traditional areas and the emergence of new religious groups.

![Figure 3.3 - Estimated number of Religious Groups by Region](image)

**Language**

In a country with as many cross-cutting cleavages as Canada, language is arguably the most salient political division. The two-founding-nations cleavage is addressed partially by considerations of ethnicity and religion; however, it is in language that the bifurcation is most clearly represented. The distinctiveness of language as a source of cleavage is promoted by the fact that at a national level there are no third significant linguistic groups. The *two founding nations* argument has in many respects
evolved into a two official languages argument. However, this debate is not present in all provinces. In 1996 there were two provinces in which three distinct linguistic groups were larger than the French population. In British Columbia the number of individuals who have German, Cantonese, and Punjabi as a mother tongue was larger than the Francophone population. In Saskatchewan the Cree, German, and Ukrainian populations were larger. And in both Alberta and Manitoba the German speaking population was larger than the French speaking population. Having said that, only in Manitoba, where six-percent of the population has German as their mother tongue, does any non-Official language group exceed five-percent of a province's total population.

The absence of a significant non-Official language in any province allows this index to measure almost exclusively the effect that the French speaking populations have on provincial politics. The division between anglophones and francophones is only notable in Québec and New Brunswick. For the sake of simplicity the index was created by determining the aggregate number of people who spoke a single official language. Two treatments were applied to these figures. The first method was to create an index using the previously established formula. This index indicated the degree of linguistic heterogeneity between provinces. Figure 3.3 demonstrates the level of linguistic heterogeneity of Québec and New Brunswick. With the index 0 represents a completely heterogeneous population, where everyone essentially speaks their own language, and 1 indicates the province is entirely unilingual. As figure 3.3 indicates, New Brunswick is slightly more heterogeneous than Québec. With very little variation between the seven provinces outside of Québec and New Brunswick this variable is

68 In all other provinces the index averaged over 0.950 indicating the provinces were in effect unilingual.
limited to describing the unique effects that language has in the latter two provinces and as well as the differences between the two provinces.

The second way of treating this data is to create a linguistic ratio between English and French speaking individuals. With this ratio 0 would indicate that population was entirely French speaking and 1 would indicate that the population was entirely English speaking. Employing this method has little effect on the dominantly English speaking Provinces, in all cases across time the ratio was higher than 0.975. The significant change lies in the results for Québec and New Brunswick. For New Brunswick the ratio ranged from 0.760 in 1951 to 0.851 in 1996, indicating an increase in the English-
speaking population. In Québec, the ratio ranged from 0.154 to 0.083, indicating the opposite trend.

Although the two measures are derived from the same data they tell two different stories. When regressed on the election results the index indicates how much effect having a heterogeneous society has on party politics. The ratio indicates the effect that the relative size of the French speaking population has on party systems. The ratio is in some respects a dummy variable for Québec although the distinctive Francophone population in New Brunswick cannot be discounted. This is not necessarily an issue but it does assume that language is an appropriate proxy for cultural differences between Québec and the ROC. It also assumes that the figures determined for New Brunswick correctly reflect the impact that language/culture has on provincial politics.

Both measures of linguistic heterogeneity will be employed in the analysis. A final area of concern for both formats would be they assume that, ceteris paribus, individuals who speak both languages are not as likely to be politically motivated as people who speak only one official language.

**The Proximity cleavage in Canada**

The next variable considered in this chapter addresses the centre-periphery cleavage that exists between central Canada and the outlying provinces. Regional alienation has received a significant amount of attention by academics and media alike. It has been used as a rallying cry at times by political parties. And it has brought Canada to the brink of separation on more than one occasion. For these reasons it deserves
consideration. However, it will be interesting to see if alienation has a consistent effect on party systems. Does the magnitude of alienation have a significant impact on party system size?

In Canada the centre-periphery cleavage has less to do with geography and more to do with the ties that bind provinces to the federal government. Some studies have explored this relationship but they tend to focus on the effects of these connections on federal elections. Québec provides ample evidence of this characterization: the province is situated in central Canada. However, it is, by most measures, the province most alienated from the federal government. Similarly, Nova Scotia and New Brunswick have relatively harmonious relations with Ottawa even though they are on the eastern end of the country.

The relationship between alienation and party systems is different from the previously considered variables. To begin with, alienation is not a measure of social heterogeneity but rather a measure of a social division. That is to say, alienation does not measure social diversity but instead measures the strength of the division between the local region and Ottawa. With religion, ethnicity and language it is expected that greater salience will lead to more parties. However, with alienation the opposite effect would be expected. The stronger the degree of alienation between the federal government and the province the more likely provincial parties are to rally around that cleavage. Spatial logic would dictate that under these conditions a party system would be reduced to two viable parties, one on either side of the cleavage.

69 See Cairns (1968) pg. 55-80; Blake (1972), pg. 55-81; Johnston and Ballantyne (1977) pg. 857-66; and Blake (1978), pg. 279-305.
Although the idea of a centre-periphery cleavage based on alienation seems intuitively comfortable there is a significant issue with determining how to quantify this variable. At the risk of oversimplifying, this variable has been approximated using a 0 to 1 scale, where 0 indicates no alienation from the federal government and 1 indicates a high level of alienation from Central Canada. An underlying assumption with this variable is that similar levels of alienation will have a similar effect on party system development. This brings about an important question of whether these effects are similar or would it be better to use a dummy variable for each province to account for the unexplained unique effects of each province? Regression analysis in Chapter 5 will employ both methods. Figure 3.4 shows the approximated positions of the nine provinces on an alienation spectrum.

The placement of each province attempts to encapsulate the characteristics of the relationship between provincial and federal levels of government for the duration of this study. Federal transfer payments, jurisdictional debates, constitutional matters, and federal representation are all factors are considered in this ranking: Dependence on
Ottawa for funding is a double-edged sword; on the one hand it encourages provinces to be cordial to ensure fiscal support but, on the other hand, it can also be a source of tension if there is debate over revenue shares. Jurisdictional conflicts have involved debates over control of natural resources and the provision of social services. The constitutional battles of the Eighties and Nineties had a profound impact in several provinces on the relationship with the federal government. And finally, cabinet representation has a pivotal role in federal-provincial relations, as regions tend to feel ignored if they perceive a lack of voice in Ottawa.

The province with the lowest level of alienation is Ontario. The proximity to Ottawa and common interests has meant the provincial government has rarely felt distanced from its federal counterpart. Nova Scotia and New Brunswick both experience relatively low levels of alienation for two general reasons. Both provinces are heavily dependent on federal transfer payments and both provinces have had success at having local Members of Parliament placed in prominent Cabinet postings. Also on the less alienated end of the spectrum is Manitoba where the debate over the constitution has been the lightening rod for provincial-federal tension. Outside of constitutional matters conflict between Manitoba and Ottawa has been low.\(^70\)

Moving toward the middle of the scale, Saskatchewan is a province which has often felt shut out of federal politics and has been at odds with Ottawa's stance on tariffs and trade regarding natural resource and agricultural commodities. British Columbia's attitude towards Ottawa has been marked more by indifference than tension. Geographic isolation and a healthy provincial economy have left few areas of major conflict yet several lesser issues dealing with First Nations treaties, fisheries, forestry, and the burden

\(^70\) A notable exception to this would be the awarding of the CF-18 maintenance contract to Québec.
of being a “have” province have maintained a moderate level of alienation. Tension
over control of offshore fishing, the Hibernia oil project, and the Churchill Falls hydro
project have all soured relations between Newfoundland and Ottawa. The fiscal nature of
these debates has been exacerbated by Newfoundland’s heavy dependence on federal
funding. Similar to the economic complaints of Saskatchewan and Newfoundland,
Alberta’s frustration with Ottawa is magnified by fundamental differences on social
policy regarding healthcare, same-sex marriages, and bilingualism as well as being a net
donor of equalization.

At the most alienated end of the spectrum is Québec. Not much needs to be said
about the reasons for this, it should be noted that the reason Québec is not ranked higher
is that the Québécois population is not a monolithic entity. While it is clear there is a
sense of alienation between Québec and Ottawa it is important to remember that two
separation referendums were defeated in the province and that historically, until recently,
the Province tended to vote en bloc for the party that formed the government in Ottawa.

Rural/Urban

The decline of rural Canada is a part of a global shift from agrarian to industrial
economies. The five decades covered in this study have seen a steady shift in population
from rural areas to urban centres. The division has had a significant impact on Canadian
politics; Johnston et al surmise that “for the Canadian case, the central cleavage is
between export-oriented agriculture and the rest.” The recent BC Citizens’ Assembly for

71 Blake (1996).
Electoral Reform final report concluded that the dominance of the urban centres of Vancouver and Victoria was a crucial concern to rural voters. Figure 3.4 demonstrates the steady shift in urban and rural populations. The largest shifts are seen in the Prairies where the rural population was larger than the urban population in 1951 but significantly lower by 1996. British Columbia, Ontario, and Québec and the Maritimes all saw modest shifts of at least 10% over the five decades covered. In the Maritimes, however, the starting point was much higher than the other three regions. Across Atlantic Canada the shift shows a reversal of the dominant population.

Figure 3.6 - Rural Population as a Percentage
In this study, the urban/rural cleavage will be looked at using three methods which provide a different lens to view the urban/rural divide. The first approach is determining the ratio between urban and rural populations in each province. This provides an elegantly simple measure of the magnitude of difference between the two populations. The provinces with the higher urban/rural ratios are Alberta, British Columbia, Ontario, and Québec. For the latter three, urban populations were at least twice that of rural populations in 1951; by 1996 these ratios had grown to over four to one in Ontario and British Columbia and three-and-a-half to one in Québec. Alberta’s rural population was actually larger than the urban population in 1951, but by 1996 the urban population had increased proportionally to nearly four times that of the rural population. In the remaining provinces, with the exception of Manitoba, the rural population was larger in 1951 than the urban population. This remained true in New Brunswick all the way until the end of this study. In Newfoundland, Nova Scotia, and Saskatchewan the urban population grew about one-and-a-half times larger than the rural population by 1996. In between the mostly urbanized and mostly rural provinces, Manitoba has become somewhat more urban with the urban population growing from 57% to 71%.

The second approach for examining the rural-urban cleavage is suggested by Powell where the influence of the agricultural sector over the polity as a whole is coded as 1, 2, or 3; if the agricultural population comprises 0-19%, 20-49%, or 50-80% of the total populations. For this study these divisions are not as effective as none of the provinces in this time period have a rural farming population that exceeds 50% of the total population. However, by adjusting the population ranges to 0-10%, 11-30%, and
31-100% the evolution of provinces that are predominantly farm-orientated is quite clear. The results of this measurement system do a generally good job of tracking this shift from agricultural to industrial dominance within provinces. The two exceptions are Newfoundland and British Columbia where the farming population never exceeds 10% of the total population during any period of this study. The third approach, employed by Ordeshook and Shvetsova and Eagles, uses a modified fractionalization index.\textsuperscript{72} Two variations of this index were developed for this study. The simpler index is created by adding the inverse percentage of the urban and rural populations. The more complex index further divides the urban and rural populations, the urban group is divided into individuals who live in communities below 30,000 and above;\textsuperscript{73} while the rural group is divided into individuals who live in farm and non-farm residences. As with the linguistic index described in the previous section, indexes are limited in their explanatory power, for example with the index formula a 40:60 split in urban to rural populations will look the same as a 60:40 split. With these limitations in mind these indexes do offer some valuable insight as to whether the magnitude of the difference between urban and rural populations is a causal factor in party system development.

\textit{Methodology}

Given that this set of data has both cross-sectional and time-series dimensions, it is unlikely that the ENP of provinces is independently distributed. The reactions of

\textsuperscript{72} Ordeshook and Shvetsova (1994) and Eagles (1995).

\textsuperscript{73} There is some unavoidable error with this classification as census figures prior to 1986 reported the aggregate number of people living in communities below 29,999, in 1986 and for each census thereafter this figure was reduced to 24,999.
political actors—political parties, politicians, or voters—to changes in their environment resulting from changes in social heterogeneity are never instantaneous nor are they independent from reactions in previous periods. The changes are likely to be distributed over time; and positions of equilibrium in ENP or CNP, if they are ever attained, are likely to be approached gradually. The slowness to respond may be due to two factors. In the first place, there will be time delays in the transmission and the reception of the information upon which the political actors base their actions. In the second place, costs will be entailed in the process of adapting to the new circumstances, and these costs are likely to be positively related to the speed and to the extent of the adjustments. For these reasons, it is appropriate to make some provision for correlations across time and provinces.

Given the relatively lengthy period (1951-1996) under analysis, the customary approach to this kind of time-series cross-sectional data used in political science—OLS with panel corrected standard errors, including fixed effects—should be satisfactory.⁷⁴ A possible area where bias might arise would be that five decades of elections covered in this project are encapsulated in ten observations for each province which correspond to the years in which census data was collected.

The estimation model assumes that the various measures of social heterogeneity examined in this chapter have independent effects modeled by a simple linear relationship with ENP and CNP.

\[
ENP = \beta_0 + (\text{ethnicity}) \beta_1 + (\text{religion}) \beta_2 + (\text{language}) \beta_3 + (\text{rural/urban}) \beta_4 + (\text{agriculture}) \beta_5 + (\text{alienation}) \beta_6 + (\text{DM}) \beta_7 + c
\]

Within this linear model the two measures of linguistic heterogeneity and all three of the measures of the urban/rural divide are employed. For both variables, the different measures make intuitive sense and they both produced robust results. Each variation provides a different lens for examining party systems.

In all of the models the agriculture index is employed. The index and ratio measures are each used separately. A basic assumption with this variable is that its effect should be binary. That is to say, if a population is equally split into an urban and rural population we would expect this to foster a political cleavage that was also equally split. The rural side of this cleavage would champion agrarian and family centric concerns and the urban side would champion union and post-material issues. The rural-urban index (RUI) is successful in describing the balance between urban and rural populations but it is unable to determine the direction of the relationship between the urban/rural cleavage and party system size. The rural-urban ratio (RUR) does provide directionality but it less sensitive to the balance between urban and rural populations. As with the religious variables the strength and weakness of each measure warrants separate investigation of each.
Chapter IV – Social Heterogeneity and Party Systems

The previous chapters have described how party systems have evolved over the latter half of the Twentieth Century, examined social structural models, and explained how this approach could be applied to Canadian provincial politics. The first half of the previous chapter outlined the social cleavage structures of the Canadian population. This chapter tests the validity of social structural approaches in a Canadian setting. The chapter is divided into two parts, the first reports the results and the second part summarizes the findings and indicates where future research is needed.

The first two tables in this chapter indicate that even when party systems are constrained by institutional factors, social heterogeneity has a significant influence on the size of party systems. As anticipated, where the estimated coefficients for social heterogeneity are significant, they are also positive. This supports part of the social structural hypotheses: populations divided by multiple social cleavages will have more parties participating at an electoral and legislative level than polities with fewer social divisions. Briefly looking at each variable, the effects of ethnic and religious heterogeneity are significant in a few of the equations. They generally have more power in the CNP models. The significance of the linguistic variables is dependent on the format of the linguistic heterogeneity measurement. The same applies for the urban/rural variable which is only significant in the ratio format. For the alienation variable the regressions indicate that alienation is negatively correlated with party systems. The following sections will examine the ENP and CNP models separately and will unpack the variables in further detail.
Social Heterogeneity and ENP

ENP is the dependent variable in the regressions in Table 4.1. The four models described in the previous chapter are all tested with varying degrees of significance. All models indicate that there is a relationship between social heterogeneity and the number of parties that are elected. Three of the four models are statistically significant at the 0.05 level and several of the independent variables are significant at the 0.10 level or better. The reasonable degree of consistency in the direction of the coefficients encourages further confidence in the results.

Negative coefficients for variables that use index measurements indicate that there is a positive relationship between social heterogeneity and party system size. This hypothesis holds true for several of the regression coefficients. This does not apply for the ethnicity and religion coefficients which, although all negative, are with one exception, negligible in size. The steady increase in ethnic heterogeneity, in particular west of the Ontario-Québec border, has not had a significant impact on the number of parties elected. The same can largely be said for religion. Using the index as a comparative tool, religious diversity in provinces west of Ontario has increased three-fold while a proportionally much smaller increase has occurred in Québec and the Maritimes. The regression results indicate that this has had a negligible effect on the number of parties.
Table 4.1  Estimates of the Effective Number of Parties (ENP) in Canadian Provinces (1951-1996)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>-.1230</td>
<td>-.0775</td>
<td>-.0381</td>
<td>.0026</td>
</tr>
<tr>
<td>Language Index</td>
<td>.0737</td>
<td></td>
<td>.1245</td>
<td></td>
</tr>
<tr>
<td>( .5525 )</td>
<td></td>
<td>( .4904 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linguistic Ratio</td>
<td></td>
<td>-1.1417***</td>
<td></td>
<td>-.7414*</td>
</tr>
<tr>
<td>( .3446 )</td>
<td>( .5525 )</td>
<td></td>
<td>( .3889 )</td>
<td></td>
</tr>
<tr>
<td>Basic Religious Index</td>
<td>-.0198</td>
<td>-1.4323**</td>
<td>.0737</td>
<td>-.9678</td>
</tr>
<tr>
<td>( .4650 )</td>
<td>( .5830 )</td>
<td>( .3852 )</td>
<td>( .6137 )</td>
<td></td>
</tr>
<tr>
<td>Rural-Urban Index</td>
<td>-.5508</td>
<td>.0483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( .5862 )</td>
<td>( .5855 )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural-Urban Ratio</td>
<td></td>
<td></td>
<td>.1732***</td>
<td>.0989</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>( .0564 )</td>
<td>( .0685 )</td>
</tr>
<tr>
<td>Agricultural</td>
<td>-.0217</td>
<td>-.0432</td>
<td>-.0375</td>
<td>-.0378</td>
</tr>
<tr>
<td>( .0652 )</td>
<td>( .0642 )</td>
<td>( .0606 )</td>
<td>( .0615 )</td>
<td></td>
</tr>
<tr>
<td>Alienation</td>
<td>-.2297</td>
<td>-1.0333***</td>
<td>-.3944*</td>
<td>-8.286***</td>
</tr>
<tr>
<td>( .2709 )</td>
<td>( .3194 )</td>
<td>( .2410 )</td>
<td>( .3081 )</td>
<td></td>
</tr>
<tr>
<td>District Magnitude75</td>
<td>.2005</td>
<td>.8668</td>
<td>.2299</td>
<td>.6857</td>
</tr>
<tr>
<td>( .5284 )</td>
<td>( .5703 )</td>
<td>( .4483 )</td>
<td>( .5554 )</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.0583**</td>
<td>3.0029***</td>
<td>1.5101**</td>
<td>2.450***</td>
</tr>
<tr>
<td>( .8419 )</td>
<td>( .7117 )</td>
<td>( .6198 )</td>
<td>( .6798 )</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.7613</td>
<td>0.7692</td>
<td>0.8412</td>
<td>0.7924</td>
</tr>
<tr>
<td>Wald chi²</td>
<td>4.93</td>
<td>16.63</td>
<td>14.49</td>
<td>18.21</td>
</tr>
<tr>
<td>Prob &gt; chi²</td>
<td>0.6689</td>
<td>0.0199</td>
<td>0.0431</td>
<td>0.0111</td>
</tr>
</tbody>
</table>

OLS with panel corrected standard errors, standard errors in parentheses, ***p<.01, **p<.05, *p<.10

Neither coefficient for the linguistic index is significant but each indicates that there is a negative relationship between linguistic heterogeneity and party system size. In this case, more diversity leads to fewer parties. As previously established, the linguistic variable is essentially identical for all provinces except New Brunswick and Québec. Of

75 District magnitude was included to limit error attributed to institutional bias. No control was necessary for the electoral system as this can be held constant for the entire period of study.
the two New Brunswick has a more balanced and thus more diverse linguistic population. New Brunswick and Québec's linguistic uniqueness means that the models predict how much linguistic diversity affects party systems in those provinces. The first model indicates there will be on average 0.023 fewer parties in New Brunswick and 0.015 fewer parties in Québec than in the rest of Canada. The third model predicts that there will be 0.038 fewer parties in New Brunswick and 0.026 fewer in Québec. Clearly the effect that this variable has on party system size is limited.

The coefficients for the linguistic ratio are both negative and significant at least at the p=0.10 level. The coefficients indicate that there is a negative relationship between the proportions of English speakers, relative to the French speaking population. These results indicate that the existence of a significant French speaking population appears to increase ENP. A simple explanation for this could be that French-English linguistic cleavages tend to be a dominant political issue. Even in provinces without large French speaking populations' language has been a divisive issue. The addition of a significant cleavage provides an additional spectrum which opens the arena for more parties.

Similar to the findings for the linguistic index the unique linguistic nature of Québec and New Brunswick allows predictions to be made based on the ratio of French to English speakers in those provinces. The second model predicts there will be on average 0.994 more parties in Québec and 0.223 parties in New Brunswick. The fourth model predicts there will be 0.646 more parties in Québec and 0.146 more parties in New Brunswick.

The coefficients for the rural-urban index (RUI) are also either negative or negligible in size, however, the story this tells is slightly different from that of the ethnicity and religious index variables. The negative coefficient indicates that provinces
with balanced urban and rural populations have more parties than provinces with unbalanced populations. This suggests that provinces with unbalanced sized urban and rural populations develop stronger political cleavage structures around the urban/rural bifurcation than provinces with more equal urban and rural populations. This conclusion verifies the hypothesis that the urban-rural cleavage is negatively correlated with party system size. Provinces with equally sized urban and rural populations have more parties than provinces with unequal distributions.

These results are reinforced by the rural-urban ratio (RUR) and agricultural variables. These variables also indicate the direction of the relationship between urban and rural populations and party systems. The coefficients for the RUR variables in the third and fourth models are positive and for the latter model significant at the $p=0.01$ level. These results suggest there is a positive relationship between the size of party systems and the proportion of a population that resides in urban centres larger than 30,000 people. As a province becomes more urbanized the number of elected parties increases. Given the steady shift in population counts from rural to urban centres, these coefficients indicate that population movements have a powerful effect on ENP. The coefficients for the agricultural index are consistently negative but not significant. They support the conclusion that there is a positive relationship between urbanization and ENP. Provinces with larger agricultural populations will have fewer parties. As the most agrarian province, the four models predict that over the course of this study Saskatchewan will have between 0.043 and 0.085 fewer parties than the least agrarian provinces of British Columbia, Newfoundland and Ontario.
Union membership figures are not available over the course of this study so urban growth serves as a proxy for measuring societal class structures. By using urban/rural dispersion there is an implicit assumption that urban growth is positively correlated with union membership as well as post-materialist and environmental movements. As a proxy for the class cleavage, the coefficients of the urban/rural variables tell an interesting story. The variables suggest that for ENP, the balance between urban and rural population is a less powerful indicator of party system size than urban growth. Party systems are less affected by the cleavage between urban and rural populations and more so by the concentration of populations in urban centres.

The coefficients for the Alienation scale are consistently negative and significant at the 0.10 level for all but the first model. These coefficients indicate that there is a negative relationship between levels of alienation and ENP. Higher levels of alienation reduce the number of parties that are elected to legislatures. Comparing Ontario and Québec, the least and most alienated provinces in this study the first model predicts that Québec will have 0.159 fewer parties than Ontario, 0.723 fewer in model 2, 0.276 fewer in model 3, and 0.580 fewer in model 4.

Social Heterogeneity and CNP

In Table 4.2 CNP is the dependent variable. The results are encouraging as all of the models are significant at the 0.001 level and several of the independent variables are significant at the 0.10 level. There some consistency in the direction and magnitude of the coefficients. Because voter preferences are more pronounced in measurements of
CNP it was expected that the greater variation in CNP over the period of this survey would produce more robust results and these models do not disappoint.

The coefficients for index measurements are less consistent than the ENP models. Depending on the variable, social heterogeneity can have both positive and negative relationships with the number of parties that garner vote support. Coefficients for the ethnicity and religious indexes are significant at least at the 0.10 level in three of the four models. As with the ENP, models the positive relationship between ethnicity and CNP is not surprising. However, the negative relationship between religious heterogeneity and the number of parties is somewhat unexpected. The coefficients for the religious variable are significant at the 0.05 level for all but the second model.

Why is religion not positively correlated with CNP? Part of the answer is that the number of religious cleavages does not impact vote support for parties but rather the magnitude of those cleavages. In North America, the key political-religious cleavage is centred on social policies that are either founded in some way on Christian Scriptures or are nonsectarian. It would be expected that the CNP in a province with fewer major religions and more clearly defined religious boundaries would be lower than a province with multiple significant religious groups with less definable religious divisions. The existence of fewer religious cleavages is coupled with an assumption that cleavages between these religious groups are stronger and will act as a constraining force on the number of parties that receive votes.
Table 4.2  Estimates of the Competitive Number of Parties (CNP) in Canadian Provinces (1951-1996)

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethnicity</strong></td>
<td>-.6537*</td>
<td>-.6433*</td>
<td>-.6898*</td>
<td>-.5886</td>
</tr>
<tr>
<td></td>
<td>(.3401)</td>
<td>(.3347)</td>
<td>(.3764)</td>
<td>(.3818)</td>
</tr>
<tr>
<td><strong>Language Index</strong></td>
<td>1.3577***</td>
<td>-</td>
<td>1.0660***</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(.5013)</td>
<td>(.4030)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Linguistic Ratio</strong></td>
<td>-</td>
<td>.4497</td>
<td></td>
<td>.8912***</td>
</tr>
<tr>
<td></td>
<td>(.3287)</td>
<td>(.3122)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Religious Index</strong></td>
<td>1.0366**</td>
<td>.8666</td>
<td>1.0085**</td>
<td>1.7880***</td>
</tr>
<tr>
<td></td>
<td>(.4171)</td>
<td>(.6465)</td>
<td>(.4876)</td>
<td>(.5871)</td>
</tr>
<tr>
<td><strong>Rural-Urban Index</strong></td>
<td>-.6896</td>
<td>-.9148</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(.6078)</td>
<td>(.6225)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rural-Urban Ratio</strong></td>
<td>-</td>
<td>-</td>
<td>.1387**</td>
<td>.2562***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.0576)</td>
<td>(.0528)</td>
<td></td>
</tr>
<tr>
<td><strong>Agricultural</strong></td>
<td>.0154</td>
<td>.0011</td>
<td>-.0085</td>
<td>.0108</td>
</tr>
<tr>
<td></td>
<td>(.0539)</td>
<td>(.0580)</td>
<td>(.0522)</td>
<td>(.0519)</td>
</tr>
<tr>
<td><strong>Alienation</strong></td>
<td>-.4269*</td>
<td>.1474</td>
<td>-.4406**</td>
<td>-.0027</td>
</tr>
<tr>
<td></td>
<td>(.2627)</td>
<td>(.2787)</td>
<td>(.1955)</td>
<td>(.2341)</td>
</tr>
<tr>
<td><strong>District Magnitude</strong></td>
<td>.5906</td>
<td>.9573</td>
<td>.8165</td>
<td>.7105</td>
</tr>
<tr>
<td></td>
<td>(.5422)</td>
<td>(.5682)</td>
<td>(.5155)</td>
<td>(.5060)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>1.1392</td>
<td>1.5635*</td>
<td>.6867</td>
<td>.3134</td>
</tr>
<tr>
<td></td>
<td>(.7215)</td>
<td>(.7715)</td>
<td>(.5956)</td>
<td>(.6194)</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>0.8954</td>
<td>0.8669</td>
<td>0.9297</td>
<td>0.9436</td>
</tr>
<tr>
<td><strong>Wald chi²</strong></td>
<td>34.32</td>
<td>20.88</td>
<td>39.81</td>
<td>45.73</td>
</tr>
<tr>
<td><strong>Prob &gt; chi²</strong></td>
<td>0.0000</td>
<td>0.0040</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

OLS with panel corrected standard errors, standard errors in parentheses, ***p<.01, **p<.05, *p<.10

Both of the coefficients for the linguistic index are positive and significant at the 0.01 level indicating that there is a negative relationship between linguistic heterogeneity and party system size; more diversity leads to fewer parties. As with the analysis of the ENP models the lack of variation in the linguistic index outside of New Brunswick and Québec’s allows prediction of how much linguistic diversity affects CNP. The first model predicts there will be on average 0.419 fewer parties in New Brunswick and 0.282 fewer
parties in Québec than in the rest of Canada. The third model predicts that there will be 0.329 fewer parties in New Brunswick and 0.222 fewer in Québec.

The coefficients for the linguistic ratio are both positive though only one is significant at the p=0.01 level. The regression results indicate that there is a positive relationship between the proportions of English speakers, relative to the French speaking population, and CNP. Unlike the ENP models these results indicate that a significant French speaking population has a limiting effect on party systems. A possible explanation for this could be that at a voting level the party systems becomes constrained through the splitting of vote support into two camps; camps that are either explicitly or implicitly pro-French party or pro-English. In these provinces the mechanical and psychological effects of the electoral system have a powerful effect on the size of the party system. The third model predicts there will be on average 0.391 fewer parties in Québec and 0.088 parties in New Brunswick. The fourth model predicts there will be 0.776 fewer parties in Québec and 0.174 fewer parties in New Brunswick.

The coefficients for the RUI are negative in the first and second model. As with the ENP models this is an unexpected result. These results indicate that provinces with balanced urban and rural populations will have more parties receiving vote support than provinces with unbalanced populations. Further evidence of the nature of this relationship is provided by the RUR variables. The coefficients for the ratio in the third and fourth models are both positive and for the third model significant at the p=0.01 level. The results indicate that there is a positive relationship between the size of party systems and the proportion of a population that resides in urban centres larger than 30,000 people. As a province becomes increasingly urbanized a greater number of
parties receive votes in elections. The coefficients for the agricultural index are not significant or consistent in the four models. Unlike the ENP models the agricultural variable is not useful for either confirming or denying the findings of the other urban/rural variables.

The coefficients for the alienation scale are also inconsistent. Three of the models are negative and the first and third models are significant at the 0.10 level. The inconsistency for the second and third models can be attributed to the use of the linguistic ratio in these regressions. Both the linguistic ratio and the alienation variable have Québec as an outlier which results in a high degree of correlation between the two variables thereby limiting the explanatory power each variable has individually. For the first and third models negative coefficients indicate that there is a negative relationship between levels of alienation and ENP. Higher levels of alienation reduce the number of parties that are elected to legislatures. Comparing Ontario and Québec, the least and most alienated provinces in this study the first model predicts that Québec will have 0.299 fewer parties, with 0.308 fewer in model 3.

Comparing ENP and CNP models

This analysis, unsurprisingly, found a stronger link from heterogeneity to CNP than to ENP. It is assumed that most voters understand the restrictive elements of the electoral system, at least in as much as they recognize that only a limited number of candidates have a chance of winning. Under this assumption it was expected that the distribution of votes offers a ‘truer’ representation of the voters’ desires than the
distribution of seats. Estimations of CNP should be more robust because they more closely reflect the political affiliations of the population. These results also indicate that not all voters are fully aware of the restrictive effects, or it verifies that there are voters who chose to support the party of their choice regardless of its chances.

The two sets of regressions indicate that there is a previously unexplored connection between social heterogeneity and party system size. Of the two sets of models the CNP models are the more robust with all regressions significant at the 0.05 level or better. The ENP models are still useful given the small amount of variation in the dependent variable. This section will compare the results of the two regression results and will also attempt to explain some of the inconsistency issues in the regression results.

The ethnicity coefficients are weakly significant in the CNP models but are not significant in ENP models. This is a reoccurring theme in this analysis, several of the heterogeneity variables are correlated with CNP but not with ENP. With these variables it appears that some cleavages are salient enough to alter voting behaviour among a section of the populace. These divisions convince some voters to move their support from traditional parties to minor and emerging parties. However, the shift of votes does not seem to be significantly high enough to push these smaller parties over the restrictive electoral-system thresholds.

There is consistency in both ENP and CNP models for both of the linguistic variables but there is a surprising variance between the two sets of regressions. The linguistic index variable is positive in both sets of models but it is only significant in the CNP models. Similar to the ethnic variable, linguistic diversity is positively correlated
with the number of parties that get votes but the strength of this correlation is not high enough for it to significantly affect the number parties that win seats. At least one coefficient for the linguistic ratio variable in each of the sets of models is significant. However, the coefficients are negative in ENP models and positive in CNP models. This suggests that on the one hand provinces with a significant exclusively francophone population elect more parties than exclusively anglophone provinces, but on the other hand, few parties receive votes in French speaking provinces. This is an interesting result. Why does a cleavage that reduces the number of parties that receive votes in an election also seem to increase the number of parties that are ultimately elected?

This result is not as paradoxical as it seems. The linguistic ratio compares English to French speakers in each province and the outlier in this variable is Québec. As intended the linguistic ratio acts as a proxy for measuring the social cleavage between the sovereigntist and nationalist populations. The regression results indicate how significant this division is. The oddly inverse relationship suggests that language is a powerful variable that is capable of narrowing the playing field. Its dominance has reduced the number of dimensions that parties compete on. Party politics in Québec has been played out on two dimensions, one ideological and the other nationalistic. In this two dimensional space three parties successfully staked out positions with relatively wide voter appeal. From the 1950s to the 1970s the three parties were Union Nationale, Social Credit and the Parti Québécois. In more recent years the three parties have been the Parti Québécois, Liberal, and Action Démocratique. Over the past fifty years these parties have been able to build support bases that win themselves seats and effectively shut out smaller parties. The consolidation of vote support has led to more proportional results.
In an electoral arena where institutional effects tend to constrain party system size this effect is an interesting inconsistency.

This existence of this curious relationship is reinforced by the religious variables. In CNP models the religious index is positive and significant indicating that religious diversity is negatively correlated with the number of parties receiving votes. As the least religiously diverse province, these regressions indicate that, *ceteris paribus* Québec will have more parties receiving votes than any other province. For ENP models the two that include the linguistic index are not significant. However, the two models that use the linguistic ratio are significant and the coefficients are negative. This indicates that there is a positive relationship between ENP and religious heterogeneity. Québec will, all else being equal, have fewer parties getting elected to legislatures than other provinces. In the four regression equations that include the linguistic ratio the effects of this variable and the religious index seem to cancel each other to a certain degree. There is a high degree of correlation between the two variables but they are both significant in two of the regression models.

Coefficients for the alienation scale are generally negative and most are significant at the 0.10 level. This indicates that there is a negative relationship between levels of alienation and number of parties that win votes and seats. Provinces with high levels of alienation will have fewer parties competing for and winning seats.

The coefficients for the battery of urban/rural variables indicate that residence is positively correlated with party system size. As provincial populations become more urbanized there is an increase in the number of parties that receive votes and win seats. While this result is not wholly unexpected it does seem to refute a traditional connection
made in Canadian politics between rural alienation and populist parties. The success of the Social Credit and Reform/Alliance parties at a federal level are past examples of political movements that have at their core rural grassroots followings. At different times in history, both parties successfully translated rural discontentment with urban centres into political representation for with considerable success. The results of this thesis do not disprove the effects of rural alienation; but they do suggest that the magnitude of the difference between rural and urban populations is not a significant catalyst in populist movements. Explaining the dynamics of rural politics is beyond the scope of this thesis but this is a clear area of study that deserves further attention with comparative provincial data.

**Testing the Models**

Tables 4.3 and 4.4 report the estimations of ENP and CNP for all provinces for two sets of election results. The estimates are derived from election data from around 1960 and 1990. The thirty year gap tests the validity of the models over a set time period and also gives a basic idea of shifts in party systems over time. The results in both tables are encouraging. The models do a decent job of estimating the ENP and CNP with the results reasonably matching the actual figures. On the whole, the ENP models have a slight tendency to over-estimate while the CNP models have an equally slight tendency to underestimate.
<table>
<thead>
<tr>
<th>Province (election year)</th>
<th>Actual ENP</th>
<th>Predictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>British Columbia (1991)</td>
<td>1.914</td>
<td>1.868</td>
</tr>
<tr>
<td>British Columbia (1963)</td>
<td>2.064</td>
<td>1.917</td>
</tr>
<tr>
<td>Alberta (1993)</td>
<td>1.900</td>
<td>1.843</td>
</tr>
<tr>
<td>Alberta (1959)</td>
<td>1.376</td>
<td>1.831</td>
</tr>
<tr>
<td>Saskatchewan (1986)</td>
<td>1.979</td>
<td>1.880</td>
</tr>
<tr>
<td>Saskatchewan (1956)</td>
<td>1.871</td>
<td>1.749</td>
</tr>
<tr>
<td>Manitoba (1986)</td>
<td>2.060</td>
<td>1.928</td>
</tr>
<tr>
<td>Manitoba (1962)</td>
<td>2.145</td>
<td>1.902</td>
</tr>
<tr>
<td>Ontario (1991)</td>
<td>2.135</td>
<td>1.931</td>
</tr>
<tr>
<td>Ontario (1959)</td>
<td>1.730</td>
<td>1.911</td>
</tr>
<tr>
<td>Québec (1989)</td>
<td>1.700</td>
<td>1.756</td>
</tr>
<tr>
<td>Québec (1962)</td>
<td>1.830</td>
<td>1.692</td>
</tr>
<tr>
<td>New Brunswick (1987)</td>
<td>1.536</td>
<td>1.866</td>
</tr>
<tr>
<td>New Brunswick (1956)</td>
<td>1.899</td>
<td>1.793</td>
</tr>
<tr>
<td>Nova Scotia (1956)</td>
<td>2.052</td>
<td>1.885</td>
</tr>
<tr>
<td>Newfoundland (1993)</td>
<td>1.825</td>
<td>1.691</td>
</tr>
<tr>
<td>Newfoundland (1962)</td>
<td>1.463</td>
<td>1.699</td>
</tr>
</tbody>
</table>

In terms of long-term trends there is a divergence between what the two sets of models suggest is occurring over time. The ENP models do not corroborate initial observations that ENP is changing over time. However, they do support the hypothesis that there are stable differences between provinces. There is evidence of variation over time and space for the CNP models. The inclusion of social heterogeneity in explanatory models of party systems indicates that provinces in polities with identical electoral
systems and only slight variations in district magnitude there are variables that heretofore have not been accounted for that affect the size of party systems.

In British Columbia the estimations for ENP are consistently lower than the actual figures while the estimations for CNP are consistently higher. This suggests that more parties then would be expected are winning seats in the province. The first and third models are better estimators of ENP for Alberta which indicates that the difference in treatment of linguistic cleavages has an impact on approximations of ENP. At first this is a perplexing finding as the linguistic ratio and linguistic index are both very close to one for all census periods in this study. This result indicates that overall it is not simply the existence of a linguistic cleavage but also its direction that is critical. The index which simply measures the magnitude of the cleavage between English and French speakers is not as significant as the ratio variable which measures the difference between the two linguistic camps. It is not just the lack of a linguistic cleavage but the lack of a significant population of French speakers that has a constraining effect on the number of parties elected. This effect is not limited to Alberta; however, it is with this province’s elections that the effect is quite noticeable. In models that do not use the ratio variable the estimations for ENP are consistently low. There is no discernable difference between models that estimate CNP for Alberta which indicates that the absence of a significant French speaking population does not affect the number of parties receiving votes.

For Saskatchewan and Manitoba the models tend to under-estimate ENP and CNP, the notable exception to this trend are the approximations for CNP in Saskatchewan for 1991 elections. In multivariate models it is hard to determine the specific cause for this but it does indicate that the effect of one or more of the variables is consistently
different from the other provinces. In both provinces the estimations are higher for the more recent period which mirrors the actual changes in party system size in these provinces. Estimation of CNP for Ontario generally hit the mark while approximations of ENP are over-estimated. The cause of this effect is identical to that identified in estimations for Saskatchewan and Manitoba except it is an opposite direction.

<table>
<thead>
<tr>
<th>Province</th>
<th>Actual CNP</th>
<th>Predictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td>British Columbia (1991)</td>
<td>2.985</td>
<td>2.578</td>
</tr>
<tr>
<td>British Columbia (1956)</td>
<td>2.946</td>
<td>2.923</td>
</tr>
<tr>
<td>Alberta (1986)</td>
<td>2.762</td>
<td>2.584</td>
</tr>
<tr>
<td>Alberta (1959)</td>
<td>2.546</td>
<td>2.710</td>
</tr>
<tr>
<td>Saskatchewan (1991)</td>
<td>2.627</td>
<td>2.778</td>
</tr>
<tr>
<td>Saskatchewan (1964)</td>
<td>2.808</td>
<td>2.675</td>
</tr>
<tr>
<td>Manitoba (1986)</td>
<td>2.856</td>
<td>2.752</td>
</tr>
<tr>
<td>Manitoba (1962)</td>
<td>2.807</td>
<td>2.805</td>
</tr>
<tr>
<td>Ontario (1991)</td>
<td>2.910</td>
<td>2.736</td>
</tr>
<tr>
<td>Ontario (1963)</td>
<td>2.642</td>
<td>2.827</td>
</tr>
<tr>
<td>Québec (1994)</td>
<td>2.485</td>
<td>2.420</td>
</tr>
<tr>
<td>Québec (1956)</td>
<td>2.111</td>
<td>2.326</td>
</tr>
<tr>
<td>New Brunswick (1987)</td>
<td>2.228</td>
<td>2.348</td>
</tr>
<tr>
<td>New Brunswick (1956)</td>
<td>2.073</td>
<td>2.256</td>
</tr>
<tr>
<td>Nova Scotia (1988)</td>
<td>2.698</td>
<td>2.578</td>
</tr>
<tr>
<td>Nova Scotia (1956)</td>
<td>2.121</td>
<td>2.808</td>
</tr>
<tr>
<td>Newfoundland (1989)</td>
<td>2.208</td>
<td>2.169</td>
</tr>
<tr>
<td>Newfoundland (1962)</td>
<td>2.086</td>
<td>2.234</td>
</tr>
</tbody>
</table>
In Québec, there is a large variation between elections in ENP but only a small variation in CNP. There is some variance in the measures of social heterogeneity although not very large. The difference in magnitude between the two estimations is largely due to the deviation between the estimated coefficients for the linguistic heterogeneity variable. For the ENP model the estimated coefficient is 2.595, for the CNP model it is 1.094. Overall, Québec has the highest variation between time periods for the language variables and this is demonstrated by the estimations for the province. The difference in linguistic heterogeneity between 1960 and 1985 (0.255) translates into approximately 0.66 parties on the ENP measure but only about 0.28 parties on the CNP measure. This partially describes why there is a sizable deviation in estimations between the two elections for ENP but not for CNP.

The models struggle to accurately explain the shape of party systems in the Maritimes. The models consistently over-estimate ENP and CNP for New Brunswick indicating that there is some unexplained aspect of New Brunswick which is not captured by any of the models. The same can be said for Nova Scotia except the models tend to under-estimate ENP and CNP. Some of the unexplained variation may be attributable to the longstanding party loyalties identified by Stewart. The province with the poorest overall fit is Newfoundland. It is likely that low levels of ethnic and linguistic heterogeneity are contributing to under-estimations of CNP and over-estimations of ENP. The difficulties with Maritime Provinces make a strong case for using dummy variables to capture the unique unexplained effects in each province. However, using dummy variables runs the risk of obscuring or masking the effects of the heterogeneity variables which is why they have not been used in this analysis.
Summary

It is clear that there is a relationship between social heterogeneity and party systems. Even when party systems are constrained by low district magnitude and plurality electoral systems, social cleavages are significantly related to the number of parties that win votes and seats. The two measurements of party system size used in this thesis have looked at the number of votes parties receive (CNP) and the number of seats that parties win (ENP). There is a correlation between both measurements and social heterogeneity. There is a reasonably strong relationship between CNP and social heterogeneity, with three of the four models significant at the 0.001 level or better. The strength of the relationship between ENP and social cleavage structures is moderately strong. Three of the four models are significant at the 0.05 level or better.

Social heterogeneity has been measured on several dimensions: ethnicity, religion, language, and the proportion of rural and agrarian populations. From this some generalizations are possible. Ethnicity is positively correlated with party system size for both ENP and CNP. More ethnic groups lead to slightly more parties winning seats and votes. There is a complex relationship between religion and party system size. Religion is positively correlated with ENP but negatively correlated with CNP. More religious groups tend to increase the number of parties that win seats but it also constrains the number of parties that receive votes. A similar relationship occurs with linguistic diversity. Two variables were used and they both indicate that the anglophone/francophone cleavage does have an effect on party system size. The size of the French speaking population has a positive relationship with the number of parties that win seats but a negative relationship with the vote distribution among parties. The size of a
province’s rural population is negatively correlated with party system size. Interestingly though, the proportion of a population that lives in agrarian communities has no effect on party system size.

These findings build upon the work of Taagepera and Shugart; Lijphart; Ordeshook and Shvetsova; and Cox and Neto. Their studies successfully argued that social heterogeneity is related to the size of party systems. However, few have been able to demonstrate this quantitatively. This paper has advanced their work by identifying specific areas of social heterogeneity that can be linked to party system size. In addition, this study has been able to test a model that shows promise as a framework for studying other states. An interesting application could be to the United States which for a variety of reasons is rigidly two-party. Applying this model would not be looking for cases why and where a third party might emerge but rather why one party tends to dominate another. Another set of countries that would be fruitful to explore are states that do not use plurality or majoritarian electoral systems and/or employ multi-member districts.

Two important conclusions can be drawn from this thesis. First, there is substantial evidence that social heterogeneity influences ENP and CNP. In the provinces studied, district magnitude is equal to or approaches one and all of the elections have been decided using the plurality electoral formula. Under these conditions, institutional approaches to party systems would suggest that the effects of societal fractionalization would have little or no effect on the ENP and the CNP. This thesis rejects the exclusively institutional explanation. The regression results suggest that social cleavages have a significant affect on the size of party systems.

76 Ordeshook and Shvetsova (1994).
The second conclusion is that this thesis has identified a largely untouched area of research on provincial party systems. For the last fifty years European theorists have used social structural approaches to build a richer understanding of the way in which societies and political parties co-evolve. This thesis has proved that these approaches have an important role to play on this side of the Atlantic. With respect to provinces, social structuralism provides an effective framework for understanding how social cleavages affect who wins votes and seats. By finding fruit this thesis proves there is an orchard to be explored.
Works Cited


Beck, Nathaniel; and Jonathon N. Katz. “What to do (and not to do) with Time-Series Cross-Section Data.” American Political Science Review. Vol. 89, No. 3. (Sep, 1995), 634-647.


Campbell, Angus; *et al.* *The Voter Decides.* Evanston: Row, Peterson & Co., 1954.


**Government Publications**


