

Are There Really “Two Political Worlds” in Canada? Evidence from Provincial and Federal Elections in Ontario

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Abstract: Scholars have long asserted that a significant part of the Canadian electorate displays distinct partisan identifications at the federal and provincial levels. Yet, the argument has mostly been tested at either the voter level or the provincial party system level but not at the riding level. This article attempts to expand the scope of the “two political worlds thesis” by assessing how similar actual electoral results are at the constituency level in both federal and provincial elections in Ontario. Altogether, I find that the extension of the “two political worlds thesis” is not supported by the data. As far as Ontario is concerned at least, the actual separation of federal and provincial politics has perhaps been overstated.

Introduction

A fundamental aspect of federal political systems is “the constitutional division of power between the government of an entire nation and the governments of the major political subdivisions of that nation” (Schmidhauser, 1960: 39). Canada perfectly fits this description. One major implication of this state of affairs when it comes to electoral politics concerns the relationship between federal and provincial levels. The question thus amounts to asking whether federal and provincial realms are completely hermetic to another or to the contrary, whether there is room for interaction and reciprocal influences among levels. This article tackles the issue of the separateness of federal and provincial worlds with respect to electoral results. More specifically, it is interested in finding whether political competition at the federal level mirrors political competition at the provincial level or whether they are “two distinct political worlds.”

The best way to address the problem is to start by reviewing a three-decade-old literature in Canadian politics that have focused on split-level partisan identification at the voter level (Blake, 1985; Stewart and Clarke, 1998; Uslander, 1990; Clough, 2007). These researches have shown and explained why and how a significant number of Canadians tend to hold different partisan identifications at the provincial and federal election levels. Taken as a whole, this line of research can be labeled the “two political worlds thesis.” While this argument makes a useful starting point, this paper goes further than reviewing extant research on split identification at the voter level and asks whether the “two political world thesis” holds when assessed at the riding level on the basis of actual electoral competition results. Findings that pertain to individual voters’ self-reported partisan identification at both levels may very well not coincide with aggregate results of elections.

In order to properly assess the “two political worlds thesis” at the riding level, this article unfolds as follows: the first section offers a detailed presentation of the classical “two political worlds thesis” at the voter level and at the provincial electoral system level. In the second section, I discuss how the aforementioned thesis can be extended to the comparative study of electoral competition at the riding level. The third section is devoted to the discussion of data sources, measures, and statistical methods. The last two sections of the article deal with the statistical results and discuss their implication for the comparison of provincial and federal electoral politics in Canada.

The classical “two political world thesis”

This paper is primarily concerned with the empirical assessment of the “two political worlds thesis” at the riding level. Yet, before we discuss it any further, it is crucial to define the thesis as it exists in the literature. The “two political worlds thesis” can be formulated at three different levels of analysis, two of which are discussed in this section while the third one that is detailed in the next section. At the voter level, the “two political worlds thesis” refers to the fact that a somewhat consequential portion of the Canadian electorate has been shown to hold distinct electoral preferences when it comes to vote for federal or provincial parliaments. At the provincial electoral system level, the “two political world thesis” refers to the fact that parties holding provincial Cabinets are

generally different from the party holding the federal Cabinet. At the riding level, the “two political worlds thesis” refers to the divergence between salient features of political competition in federal and provincial arenas.

The “two political worlds thesis” has originally been formulated at the voter level to account for the fact that a portion of the Canadian electoral had divergent partisan preferences at the provincial and federal levels (see Clarke et al., 1979). The specific expression “two political worlds” was coined shortly after (Blake, 1982, 1985; Elkins and Simeon, 1980). This focus on voters’ split-identification has been updated in the 1990s and 2000s.

Uslaner (1990) considers split identification at provincial and federal levels and tests for two explanations of this phenomenon: an institutional theory and a historical / cultural explanation. Overall Uslaner finds that in the 1980s, about 20% of Canadians were experiencing split-level identifications. Uslaner also acknowledges strong regional variations. In this respect, British Columbia and Quebec were having a lot of citizens holding distinct preferences, while much less voters in the Maritimes and Ontario were reporting separate partisan identifications.

Stewart and Clarke (1998) consider how and to what extent performance evaluations of provincial parties affect federal party identification. Here again, the goal is to account for split-level identification in a substantial part of the electorate. Stewart and Clarke (1998: 100-105) report for the period from 1974 to 1993 that despite huge regional variations, split-level identification has increased in all provinces.

Finally, Clough (2007) goes one step further and examines how and to what extent split-level identification affects vote choice at the federal level. In other words, she considers the effect of split-level identification rather than looking at its determinants.

By now it is clear that extant research has accounted for split-level identification or evaluated its consequences. It has not so much inquired however about its implication for actual voting behaviors. Previous research has relied on surveys such as the Canadian National Election Studies (Stewart and Clarke, 1998: 97; Uslaner, 1990: 965) and later the Canadian Election Study (Clough, 2007: 789). Naturally, survey research on split-level identification is fundamental for it is the only way to reliably know about voters’ self reported partisan identification. However, it hardly tells anything on the actual separation of provincial and federal electoral politics. The reason is that split identification at the voter level may very well not produce radically distinct electoral results. In other words, it does not follow from the “two political worlds thesis” at the voter level that federal and provincial electoral results should be really distinct from one another.

Stewart and Carty (2006) study the “two political worlds thesis” at the provincial party system level. They explain that there is a long-standing process in Canadian politics as a result of which federal and provincial party politics have become increasingly disentangled. According to these authors, “parties even with the same name that contest elections in the political system’s two different arenas are no longer necessarily linked organizationally nor are their fortunes obviously intertwined” (Stewart and Carty, 2006: 97). Furthermore, the authors show how provincial party systems and the federal party system are even more separate since the 1993 major realignment. Here again, the authors stress the peculiar status of British Columbia and Quebec party systems where the provincial and federal parties are much more separate than in any other part of Canada.

Such a macro-perspective is very interesting for it brings forward a useful complement to the focus of the original “two political worlds thesis” on the voter level. However, it can still be enhanced in two ways: first by comparing federal and provincial party politics in a given province rather than comparing global federal results (for all Canada) and provincial results (for each province), and second by taking the diversity of electoral contests into account rather than relying only on the mean vote share for parties. The approach developed in the next section addresses the aforementioned shortcomings in previous research on the so-called “two political worlds” of Canadian politics.

“The two political worlds thesis” at the riding level

While extant research on the “two political worlds thesis” has either focused on self-reported identification given by voters, or on comparing federal and provincial parties strengths within their respective party systems, in this paper, I propose to investigate the “two political worlds thesis” at the riding level. It is surprising that most prior research has neglected this level since it is the basic unit of electoral politics in Canada. In this vein, Carty and Eagles rightfully argue that ‘there are no nationally [provincially] elected political offices to fill in Canada. Rather, elections are conducted within the framework of a parliamentary system rooted in a single-member plurality electoral system. [...] in its most fundamental respect, a Canadian federal [provincial] election is a composite of several hundred [dozen] distinct, simultaneous constituency contests, and the fate of the national [provincial] parties is ultimately determined by the total number of races each party wins’ (Carty and Eagles, 2005: 2).¹

It is also important to stress that in Canada as in every representative democracy; only the aggregation of individual votes carries political significance and consequences.

In this article, I am interested in assessing how separate provincial and federal electoral worlds are, not with regard to voter self-reported partisan identification, but with respect to actual political competition results at both levels. Therefore, this research does not attempt to contradict or oppose previous research at the individual level rather it attempts to extend it at the level of actual electoral results that is at the riding level. The “two political worlds thesis” at the voter or system levels has received a great deal of empirical support, but does it hold at the riding level?

Our brief survey of the literature suggests formulating the hypothesis as follows: based on previous studies and my extension of the “two political worlds thesis” at the riding level, I hypothesize that the main features of political competition at the provincial level are somewhat different from the major aspects of electoral competition at the federal level. In other words, it is expected that political parties succeed in varied proportions when compared across levels. Concretely, the test of this hypothesis is conducted by assessing whether there is a significant correlation between the vote share for each party at the provincial level and the vote share for the party bearing the same name at the federal level or not. I will then be equipped to tell whether provincial and federal political worlds are made of a similar proportion of each party or if different mixes exist across levels. According to the “two political worlds thesis” we should expect the distributions of vote

¹I add words into brackets to refer to provincial politics. In their text, Carty and Eagles only consider federal politics.

shares to be different across levels. Should the reverse be observed, then the “two political worlds thesis” would be invalidated at the riding level.

Data, measures and methods

The goal of this study is to test whether federal parties and their provincial counterparts in Ontario enjoy similar fortunes at the riding level. Two reasons directed the choice of Ontario to offer the first assessment of the “two political worlds thesis” at the riding level. First, Ontario occupies a major place in Canadian federal politics for it has over a third of all seats in the House of Commons, and for it harbors both the biggest metropolis of Canada (Toronto) and its federal capital (Ottawa). Second, Ontario electoral map is unique in Canada for in this province federal and provincial elections have been contested in districts with the same boundaries since the Representation Act, 1996. The fact that Ontario uses “the federal constituency for the determination of provincial boundaries” (Perrella et al. 2008: 82) allows me to compare how provincial parties and their federal counterparts succeeded in elections without behind constrained by variable ridings boundaries. It should also been mentioned that since the Representation Act, 2005, there has been an additional northern seat at the provincial level. Therefore, Ontario provincial elections are held in 107 provincial ridings whereas federal elections are held in 106 federal constituencies.² In the dataset used in this article, there are 107 observations nonetheless because I attributed the median value of each federal level variable at the “missing riding” (Timiskaming-Cochrane).

In this study, I use a total of twelve variables collected from Elections Ontario and Elections Canada. Values for six variables were collected at each level. I chose to concentrate on two elections: the 2007 Ontario provincial election and the 2008 Federal election. The design is then purely cross-sectional. At each level, I collected data on the vote share for the Liberal party, the Conservative party, the New Democratic Party, the Green Party, and the remaining parties gathered in a residual category called “Others.” The sixth variable is nonvoting. It has been included based on the assumption that studying the political worlds of provincial and federal politics has to do not only with vote choice, but also with the decision of voting or abstaining. Not considering nonvoting would have misled the comparison of party vote shares at both levels since the significance of party scores depends in part on the turnout rate.

Including the vote share for the Liberal, Conservative and New Democratic parties is justified by the fact that the three parties are competitive in Ontario. All three of them have indeed governed the province in the 1990s (Williams, 1997: 221). Including the Green party at both levels is justified by the fact that both Ontario Green Party and the Green Party of Canada run candidates in each Ontario ridings in the 2007 provincial election and in the 2008 federal election, respectively. Also, in both provincial and federal elections Green candidates received 10% or more of the votes in a fifth of the ridings.

An important issue to consider for the test of the “two political worlds thesis” is that of the comparability of parties bearing the same name across levels. In other words, the question to answer is: can parties having the same name be considered equivalent? This is

² See Elections Ontario, <http://www.elections.on.ca/en-CA/Tools/ElectoralDistricts/>

not trivial because as rightfully pointed by Stewart and Carty (2006) except for the New Democratic Party, and to a lesser extent for the Green Party too, there are barely any formal connections between parties bearing the same name at provincial and federal levels. However, I follow what has become common practice in previous works (Uslaner, 1990; Stewart and Clarke, 1998; Stewart and Carty, 2006; Clough, 2007), that is considering that each federal party can be matched with its provincial counterpart (with the same name) except for the cases of provincial Liberal parties in British Columbia and Quebec. In these latter two cases, the association with the Liberal Party of Canada is dubious. On the contrary, in the case of Ontario, one would then expect provincial and federal parties bearing the same name to be straightforwardly comparable (Esselment, 2010). In other words, Ontario provincial Liberals, Conservatives, New Democrats, and Greens are expected to correspond to federal Liberals, Conservatives, New Democrats, and Greens, respectively.

Overall, the empirical strategy consists in comparing the vote shares for each party at both levels as well as nonvoting. In order to do so, I have devised a three-step empirical procedure that relies on simple and straightforward statistical tools. First, I present and discuss scatterplots displaying each bivariate relationship between one provincial party and its federal counterpart. Second, I perform two principal component analyses (PCA), one with provincial data and the other one with federal data. By doing so, I have in mind to empirically delineate the “political worlds” at each level. The third step consists in comparing PCA’s results at both levels. This concretely amounts to producing scatterplots of principal components at both levels.

Two points ought to be made with regard to the methodology used in the article: the first one details the basics of principal component analysis, while the second one emphasizes the geographical nature of the data used and the methodological consequences that ensue. The essence of PCA is to find a linear combination “that captures most of the information in the original variables” (Dunteman, 1989: 10). Cast in the parlance of *Geometric Data Analysis*³, PCA first consists in constructing a Euclidean cloud of points (which designates the individuals that is, in our case, ridings). The second step “consists in reducing the dimensionality of the cloud by determining its principal directions and variables” (Le Roux and Rouanet. 2004: 129). PCA thus aims at finding linear combinations of original variables and interpreting the resulting new variables based on a host of information available in the PCA estimation procedure. Therefore, PCA allows the researcher to interpret the results in terms of configurations. This implies that by using PCA, one can take the full multidimensionality of electoral politics into account. PCA indeed allows me to consider all parties’ vote shares simultaneously rather than being limited to the study of each party’s success separately.⁴

³ The term “Geometric Data Analysis” has been proposed by Patrick Suppes to two proponents of the methods: Brigitte Le Roux and Henri Rouanet. In these scholars’ own words (Le Roux and Rouanet, 2004: 1-2): “By Geometric Data Analysis (GDA), we designate the approach of Multivariate Statistics that represents multivariate data sets as *clouds of points* and bases the interpretation of data on these clouds. The methods developed by Benzécri and his colleagues around the “leading case” of Correspondence Analysis (CA) and Euclidean classification – known in France as ‘Analyse des Données’ – are for us the core of GDA. Of course GDA includes other methods than Correspondence Analysis among which Principal Component Analysis.” This latter method is the one used in this article.

⁴ It is worth mentioning at this point that alternative procedures such as classification procedures can also be used. These methods account for the multidimensionality of electoral politics as well. During the

Practitioners of PCA usually distinguish active variables and individuals from supplementary variables and individuals. According to Le Roux and Rouanet (2004: 146), the aforementioned terms can be defined as follows: “starting with an Individuals \times Variables table, one may on the one hand define the distance between individuals from a selected subset of variables, which are then called *active variables*; on the other hand, one may determine the principal axes from a selected subset of individuals, which are called *active individuals*. By *supplementary elements*, one designates individuals that do not participate in the determination of principal axes or variables that are not used for the distance calculation. In the analysis of data, supplementary variables are regressed on principal variables, and supplementary individuals are projected on principal axes.”

In this study, all variables are “active”, and so are most of the individuals (i.e. the ridings). In the dataset for the 2008 federal election, four ridings are treated as supplementary individuals. Political competition in these ridings had very specific features. In order to preemptively address problems that may result from using outliers in the determination of principal components, the four specific ridings are used as supplementary individuals. Those ridings are Bruce-Grey-Owen-Sound in which the Green Party of Canada made an exceptionally high score (over 27%); Guelph, where the Green Party scored high too at 21% of valid ballots cast; as well as Stormont-Dundas-South-Glengarry and Haldimand-Norfolk, where independent candidates made a higher score than the Green party candidates. Including these ridings in the computation has a slight effect on the components of PCA but does not radically change the results. In other words, had the four ridings been treated as active individuals, it would not have altered interpretations of components in a major way. However, excluding them produce more sound results.

In the PCA conducted on data for the 2007 provincial election, all variables and all but one riding were used. Here again, Bruce-Grey-Owen-Sound was not included in the determination of the axes since the provincial Green Party made an exceptionally large score in this riding (33% of the vote share). Note that in this case too, excluding the riding from the determination of the axes ameliorates the results but does not at all alter the interpretation of the principal components.

Before we delve into the “results” section of the article, I ought to briefly mention that although this paper focuses on correspondence among political competition patterns across electoral levels in Ontario ridings, a secondary yet important task of the analysis is to look for spatial patterns. This concern stems from the nature of the data used in the analysis. Since the unit of analysis is the riding, it is expected that values of the variables comprised in the dataset are not randomly scattered across space. While PCA is not sensitive to autocorrelation patterns in the data, it is nevertheless interesting in itself to consider the geographical arrangement of ridings with respect to political competition. At a minimum, one should look for patterns of spatial association that is the most basic step of any analysis with geographical data (Fortin and Dale, 2009). The most likely pattern to

exploratory stage of the research, I conducted one such analysis, a hierarchical ascending classification (HAC) which produced similar results to that of PCA. For the purpose of assessing the “two political worlds thesis” at the riding level the procedures yielded equivalent results. PCA’s results are the only ones presented in this article since PCA is more parsimonious than HAC. That said results from the HAC are naturally available for replication purposes upon request.

occur is that of positive spatial autocorrelation. This can be readily cast in the parlance of Tobler's so-called "first law of geography" according to which "everything is related to everything else, but near things are more related than distant things" (Tobler, 1970: 236). In short, expecting positive spatial autocorrelation amounts to hypothesizing that neighbors (in our case ridings) are more probably alike with respect to an attribute of interest than different with regard to this same attribute.

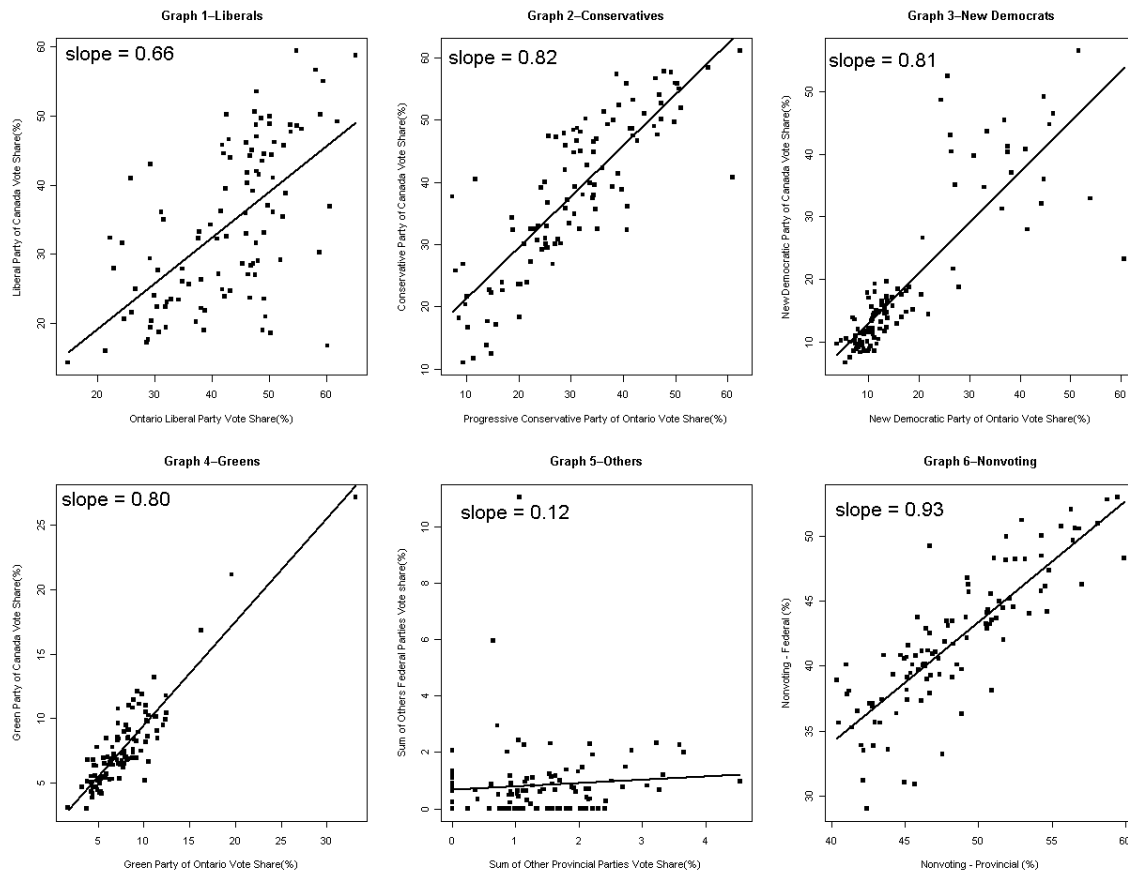
Statistical analyses and graphics presented in the next section were produced with the package FactoMineR (Husson, Josse, Lê, and Mazet, 2009) in the R environment and with Philcarto version 5.07 (Waniez, 2010). Principal component analyses were run as standard PCAs. In the terminology of PCA, it refers to mean-centering variables and scaling them with a standard deviation of 1 (Le Roux and Rouanet, 2004: 150-151).

Results

The goal of this article is to test the hypothesis of distinctive patterns of political competition at the provincial and federal levels. In order to best meet this objective, I present the results according to the three-step strategy outlined above.

Figure 1 displays the scatterplots of the vote share for federal parties and nonvoting in federal elections held in Ontario against the share of their provincial counterparts and provincial nonvoting. On each graph, the line represents the fitted regression line and the value of the slope designates how much of the provincial party vote share its federal counterpart could expect on average. For example, a slope of 0.82 in Graph 2 indicates that, on average, federal Conservative candidates ought to expect receiving approximately 82% of the score of the provincial Progressive Conservative Party of Ontario candidate. Since all slopes are not far from 1 and relationships between provincial parties and their federal counterparts are increasing and linear (except for the "other" parties), this first set of results offers *prima facie* evidence against the hypothesis of "two distinct political worlds." Bivariate analyses indeed show that where a provincial party scores high, its federal counterpart tend to score high as well. While Liberal and New Democratic voting clearly follows this general tendency (see Graphs 1 and 3 on Figure 1, respectively), we nonetheless notice that there is a little more variation in the relationship between provincial and federal scores for these parties than for the rest of the variables. It simply indicates that the correspondence between provincial and federal Liberals and New Democrats has more deviating cases from the general pattern — ridings that are far away from the regression line — than the matching of other parties across electoral levels.

Figure 1 – Scatterplots of bivariate relationships between federal and provincial parties share of the vote and nonvoting



While there is little chance that principal component analysis produces results that contradicts our previous remarks, using PCA will nonetheless enhance the assessment of the “two political worlds thesis.” PCA will indeed allow the simultaneous consideration of the score of each party and of the nonvoting rate. In other words, the added value of PCA is that it offers a way of depicting the multidimensionality of electoral politics in the ridings and thus to compare “electoral worlds” at the federal and provincial levels. Not only does PCA informs us on association among variables, but it also gives us a way to compare individuals (in our case ridings) (Le Roux and Rouanet, 2004: 129). For each principal component, I first comment on variables and then consider “individuals” (ridings) and their geographical distribution with respect to the principal components. Let us first consider the 2008 federal election. Table 1 displays relevant information about the variance of the Euclidean cloud of points accounted for by the first four components. Altogether, they account for 90% of the variance in the Euclidean cloud. Components are listed by decreasing order of importance. Therefore, by construction, the first component accounts more than any other components for “the variation present in the original variables” (Dunteman, 1989: 10). The second component offers the next best account and so forth.

Table 1 – Percentage of total variance accounted for by the four first components (Federal election)

Principal Components	Eigenvalues	%	Cumulative %
1	2.18	36.35	36.35
2	1.47	24.51	60.86
3	0.94	15.7	76.56
4	0.78	13.08	89.64

Table 2 contains three parts.⁵ The first part, referred to as “loadings”, indicates how each original variable “loads” on each of the four components retained for analysis. Numbers appearing in this section of the table are Pearson’s correlation coefficients. The section entitled “communalities” designates how much of a given variable is represented by each component. Numbers in these cells are percentages. For example, Table 2 indicates that 54.1% of the variable “Liberals” is represented by component 2. Rows sum to 100%.⁶ Finally, the section entitled “relative contributions” designates how much each variable contributes to a given component. For instance, Table 2 suggests that the variable “Liberals” accounts for 36.8% of component 2 while the variable “New Democratic Party” accounts for 48.2% of this same component. Columns sum to 100%.

⁵ So does Table 4 which is modeled after Table 2.

⁶ More precisely, since we have six original variables, the sum of the percentage of each variable on the six components sums to 100%. Since the goal of PCA is to reduce the dimensionality of the original data set, I only keep four components out of the six original variables. That is why in Table 2 rows do not sum to 100%.

Table 2 – Correlations of original variables with the Principal Components, Communalities, and Relative Contributions of Variables to Principal Components (Federal election).

	Component 1	Component 2	Component 3	Component 4
Loadings				
Liberal Party	0.534	0.735	0.299	-0.264
Conservative Party	-0.850	0.216	-0.157	0.443
New Democratic Party	0.487	-0.842	-0.201	-0.099
Green Party	-0.638	-0.144	0.165	-0.595
Others	-0.196	-0.390	0.864	0.219
Nonvoting	0.700	0.045	0.113	0.327
Communalities (%)				
Liberal Party	28.6	54.1	9	6.9
Conservative Party	72.2	4.6	2.5	19.6
New Democratic Party	23.7	70.8	4	1
Green Party	40.7	2.1	2.7	35.4
Others	3.8	15.2	74.7	4.8
Nonvoting	49.1	0.2	1.3	10.7
Relative Contributions (%)				
Liberal Party	13.1	36.8	9.5	8.9
Conservative Party	33.1	3.2	2.6	25
New Democratic Party	10.9	48.2	4.3	1.3
Green Party	18.7	1.4	2.9	45.1
Others	1.8	10.3	79.3	6.1
Nonvoting	22.5	0.1	1.4	13.6

Knowing that, it is now fairly straightforward to interpret each of the four components made from the federal variables. The first component alone accounts for about 36% of the variance in the cloud. It is primarily characterized by the opposition of Conservative voting and Green voting on the one side and nonvoting, voting for the Liberals and to a lesser extent voting for the New Democrats on the other side. We can see from the “communalities” section of Table 2, that the Conservative variable is very well represented on this component and that, to a lesser extent, so are nonvoting and Green voting. The “relative contributions” section of Table 2 indicates that these three variables alone contribute for about three fourth of the definition of component 1.

Now, speaking of how ridings are located with reference to the opposition of Conservative and Green voting on the one side to nonvoting, Liberal and New Democratic voting on the other side, a clear-cut geographical arrangement appears. Moran’s I statistic tells us how autocorrelated spatial observations are (Fortin and Dale,

2009; Ward and Gleditsch, 2008). Values for Moran's I and Geary's c amount to 0.56 and 0.52, respectively, which is quite consequential. It suggests positive spatial autocorrelation. Positive autocorrelation simply means that neighboring ridings tend to be similar with respect to political competition. High scores for Conservatives and somewhat too for the Greens are to be found mostly in the ridings of central and eastern Ontario. On the opposite side of component 1, we find ridings with high nonvoting rate, high scores for the Liberals and New Democrats. These constituencies are mostly located in northern Ontario, the Windsor area (extreme southwest), and downtown Toronto.

The second component of federal electoral politics in Ontario accounts for 25% of the variance in the cloud and clearly opposes ridings where Liberals voting is high and New Democratic voting is low to ridings where the opposite situation prevails. Both variables are highly correlated with the component and both represent it fairly well. Altogether, they represent 85% of the component.

Here again we find evidence of high geographical clustering (Moran's I = 0.49 and Geary's c = 0.49). Strong support for the Liberals with relatively small scores for the New Democrats are to be found in most (but not all) downtown Toronto ridings, as well as three out of four Ottawa ridings. Conversely, northern Ontario, Windsor and Hamilton are places where the New Democratic Party enjoys strong support to the detriment of the Liberals.

The third component accounts for 16% of the variance in the cloud and simply designates ridings where independent candidates scored relatively high. The "communalities" section indicates that the variable that captures voting for fringe parties is very well represented on this component, while the "relative contribution" section reveals that 80% of this component is due to that variable. This is particularly the case in two ridings where independent candidates scored relatively high (6% and 11%): Stormont-Dundas-South Glengarry (neighboring the province of Quebec) and Haldimand-Norfolk (west of Niagara Falls on Lake Erie). In both ridings, independent candidates who were locally well-known activists, made relatively important scores. Those ridings apart, the scores of independent and small parties' candidates are between 0 and 2%.

Finally, the fourth and last component representing federal electoral politics in Ontario discussed here accounts for 13% of the variance in the cloud. It opposes ridings with relatively high scores for the Green party to ridings with relatively low scores for the Greens but high scores for the Conservatives and a quite high percentage of nonvoters. This result only concerns a few specific ridings while the bulk of constituencies are not well represented on this component.

With the results for the "world of federal electoral politics" in mind, let us examine the "world of provincial politics", as it is described in Tables 3 and 4.

Proportions of the cloud's variance that are accounted for by the four first components are fairly similar in provincial politics to what they are in federal politics. Here again, the four first components account for about 90% of the variance in the cloud. Moreover, the proportion of the cloud's variance that is accounted for by each component is very close to what it is at the federal level. So component 1 accounts for 34% of the variance while components 2, 3, and 4 accounts for 25%, 17%, and 13%, respectively.

Table 3 – Percentage of total variance accounted for by the four first components (Provincial election)

Principal Components	Eigenvalues	%	Cumulative %
1	2.06	34.32	34.32
2	1.53	25.46	59.78
3	1	16.63	76.41
4	0.8	13.39	89.8

Now let us provide an interpretation of the principal components of provincial electoral politics in more details and look for similarities with those of federal politics.

Table 4 – Correlations of original variables with the Principal Components, Communalities, and Relative Contributions of Variables to Principal Components (Provincial election)

	Component 1	Component 2	Component 3	Component 4
Loadings				
Liberal Party	0.565	0.702	0.169	-0.067
Progressive Conservative Party	-0.885	0.272	0.196	0.081
New Democratic Party	0.505	-0.851	-0.128	0.051
Green Party	-0.471	0.016	-0.671	-0.538
Others	0.264	0.401	-0.681	0.520
Nonvoting	0.640	0.274	0.011	-0.480
Communalities (%)				
Liberal Party	31.9	49.3	2.9	0.4
Progressive Conservative Party	78.3	7.4	3.8	0.7
New Democratic Party	25.5	72.5	1.6	0.3
Green Party	22.2	0	45.1	28.9
Others	7	16.1	46.4	27
Nonvoting	41	7.5	0	23
Relative Contributions (%)				
Liberal Party	15.5	32.3	2.9	0.6
Progressive Conservative Party	38	4.8	3.9	0.8
New Democratic Party	12.4	47.4	1.6	0.3
Green Party	10.8	0	45.2	36
Others	3.4	10.5	46.5	33.6
Nonvoting	19.9	4.9	0	28.7

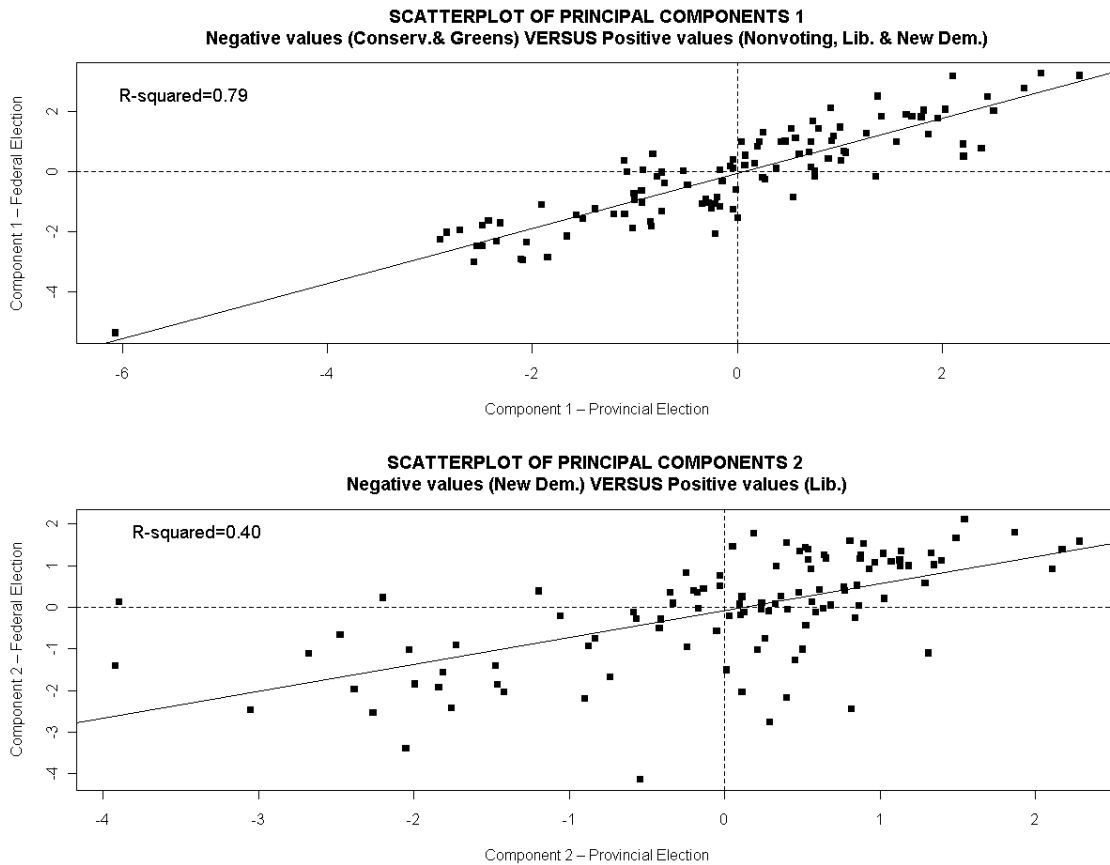
Here again, the first component is defined by an opposition between Conservative voting and to a lesser extent high scores for the Green Party of Ontario on the one side, and high nonvoting and to a lesser extent strong Liberal and New Democrat voting on the other side. The first component well represents the Conservative and Nonvoting variables and fairly well the Liberal, New Democrat, and Green variables. The relative contributions confirm that Conservative voting and Nonvoting are the primary contributors to the component.

Examining how the ridings are spatially arranged with respect to this opposition, we find a quite substantial geographical autocorrelation (Moran's $I = 0.39$ and Geary's $c = 0.35$). Here again, high scores for the Conservatives and somewhat too for the Greens are to be found mostly in the ridings of central and eastern Ontario. Ridings that define the opposite side of component 1, that is places with high nonvoting, good scores for the Liberals and the New Democrats, are mostly located in northern Ontario, the Windsor area (extreme southwest), and downtown Toronto.

The second component of provincial politics is defined in similar terms as the second component of federal politics: an opposition between ridings with high Liberal voting and relatively weak New Democratic voting on the one side and ridings where the reversed situation holds, on the other side. Spatial positive autocorrelation is substantial (Moran's $I = 0.35$ and Geary's $c = 0.48$). Here again, the opposition between high Liberal and high New Democratic voting suggests two clusters of Liberal strength (most of downtown Toronto and Ottawa as well as extreme eastern Ontario), and several pockets of New Democratic strength (in northern Ontario, Hamilton, a few ridings in downtown Toronto). Interestingly, the remaining two components of provincial electoral politics are quite different from what they are in federal politics. Indeed, the third component reflects ridings where both Green voting and voting for other parties are quite high. The fourth component designates an opposition between ridings where Green voting and nonvoting are high while voting for other parties is low and ridings where this situation is reversed. This is clearly different from the fourth component of federal politics which is characterized by the opposition between Green voting and Conservative voting.

Results of principal component analysis rejoin the conclusions drawn for the preliminary bivariate analysis, and strongly suggest that the "two political worlds thesis" considered at the riding level does not seem to account very well for the major features of electoral politics in Ontario. Figure 2 displays the plots of each of the two components at both electoral levels. It has been previously said that the first two components had the same meanings in both electoral settings; Figure 2 helps us ensure that the same ridings are on the same side of the component both at the federal and electoral levels. This is generally the case; especially for components 1 where off diagonal points are rare. The latter are a little more frequent in the graph of components 2, meaning that the "two political worlds thesis" has a little more resonance for these components. Of course, it would make no sense to plot components 3 and 4 since they depict different realities at the provincial and federal levels, which in itself is indicative of different settings. But since by construction components 3 and 4 are less important than components 1 and 2, their being different across levels does not suffice to rescue the "two political worlds thesis" at the riding level.

Figure 2 – Plots of 1st and 2nd Components for Federal and Provincial Elections



Discussion

The main result of the empirical analysis conducted in the previous section is that recent provincial and federal elections held in Ontario yielded similar ridings' profiles with respect to political competition. In other words, major parties at each level enjoyed vote shares that very closely mirrored that of their counterpart at the other level. The same is true of nonvoting. To that extent, it is clear that the "two political worlds thesis" does not apply to these elections insofar as one considers the riding level. Of course, as the principal component analysis suggested, federal and provincial elections do not produce exactly identical results. Yet, since nuances mainly concern small parties, it is not enough to rescue the "two political world thesis."

In my opinion, this result should not be underestimated and should raise questions about the implication of the "two political worlds thesis" at the riding level. It is fair to recall that the original thesis has been formulated and tested at the individual level and has concerned partisan identification rather than actual electoral behavior. Therefore, the results presented here should not be taken as contradicting prior research. Rather, they help extend it to another area of inquiry. That being said, it is however interesting to note that when it comes to actual behaviors and their aggregation, which is once again the only

thing that matters *in fine* (only aggregated results are electorally relevant, not individual behaviors), the “two political worlds thesis” is much less supported. This article thus indicates that even though split-level identification is a reality for a non-negligible part of the Canadian electorate, perhaps its consequences on actual political competition are not that important. The worlds of provincial and federal electoral politics may then be closer to one another than what has been commonly assumed. In any case, further research should clarify why and how consequential split-level identification observed at the individual level does not translate into actual disconnection as shown when comparing actual electoral results.

The clear-cut refutation of the “two political worlds thesis” forwarded here would perhaps be challenged on the relevance of the choice of Ontario to conduct the empirical test. One may object that this choice was deemed to bring to the rejection of the “two political worlds thesis” since among Canadian voters, Ontarian voters have long been the most consistent with respect to their votes (see for example Stewart and Clarke, 1998; Uslander, 1990). While this is an interesting and relevant point, it does not *per se* weaken so much the result forwarded here for even Ontario has been experiencing a continuous increase in split-level identification over election years (Stewart and Clarke, 1998).

It remains that further research should pursue the task started here and assesses the “two political worlds thesis” at the riding level in other provinces. Such an enterprise could start with British Columbia and Quebec where split-level identification has been repeatedly shown to be the highest in Canada. This is how we will ultimately be able to tell whether the “two political worlds thesis” is to be considered refuted at the riding level.

Conclusion

This paper set the objective of extending a theory formulated at the voter level, that of split-level partisan identification, in two ways: first by considering the riding level (the real and fundamental level of Canadian politics), and second, by considering actual aggregated behaviors rather than individual self-reported identifications.

The results drawn from the empirical investigation are clear; the thesis according to which political competition in provincial and federal politics yielded very different results is clearly rejected, at least in the case of Ontario. On the contrary, I find that the structure of political competition is remarkably similar at both electoral levels in the most populous province of Canada, notwithstanding the scores of fringe parties.

In this regard, one cannot but urge scholars interested in Canadian elections to extend the comparison to other provincial and federal elections. Needless to say that the rejection of the “two political worlds thesis” at the riding level as formulated in this article may be nuanced or in any event enriched by the analysis of other provinces and other elections.

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