An ‘Unintegrated’ Province? Examining the Extent of Spatial Cleavages in Public Opinion in Nova Scotia

by

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Submitted in partial fulfilment of the requirements
for the degree of Master of Arts

at

Dalhousie University
Halifax, Nova Scotia
October 2014

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Abstract

Place is a common theme in depictions of Nova Scotian politics. The Ivany Commission, for example, describes in its recent report deep attitudinal cleavages between urban and rural residents, who seem "almost to occupy different worlds" (Nova Scotia 2014: 10). Using the Ivany Report as a starting point, this thesis tests the assumption that spatial factors explain differences in attitudes. Respondents to the 2013 Comparative Provincial Election Project survey are assigned to geographic categories, and regression models are developed to identify the relationship between these categories and attitudes. The results provide mixed evidence for the spatial hypothesis. Whereas some variables exhibit no spatial variation, others indicate that rural and Mainland residence is correlated with economic and moral conservatism and a preference for government attention to rural issues. Systematic spatial variation in public opinion therefore does exist, although it is less dramatic than the stark divisions identified by the Ivany Commission.

List of Abbreviations Used

CA	Census agglomeration
CES	Canadian Election Survey
CMA	Census metropolitan area
CSD	Census subdivision
CPEP	Comparative Provincial Election Project
GIS	Geographic information system
GSS	General Social Survey
HRM	Halifax Regional Municipality
MIZ	Metropolitan Influenced Zone
NDP	Nova Scotia New Democratic Party
PC	Progressive Conservative Party of Nova Scotia

Acknowledgements

I am enormously grateful for the support of my supervisor, Professor Louise Carbert, whose guidance and thoughtful feedback improved how I think and write about politics and were crucial to the successful completion of this thesis. In particular, I deeply appreciate her enthusiastic support for my interest in learning and using GIS software. I am also grateful to my committee members, Professors Robert Finbow and Jennifer Smith, whose comments improved the clarity and rigor of my analysis.

I would like to thank James Boxall and Alyssa Harder at the Dalhousie GISciences Centre for their invaluable assistance with all things GIS. As well, I am grateful to Professor Scott Matthews and participants at the 2014 Atlantic Provinces Political Science Association conference for their helpful feedback on an excerpt of the thesis. Thanks also to Arun Krishnamurti, whose careful edits improved key portions of several chapters. Funding for the Nova Scotia CPEP survey was provided by Elections Nova Scotia.

Special thanks to my friends and family for their support, humour and generosity throughout the thesis-writing process, which overlapped with a cross-country move and involved my temporary appropriation of several dining room tables across three provinces. Above all, I am grateful to Gillian, my partner, whose encouragement and unwavering confidence in me were a source of constant inspiration.

Chapter 1: Introduction

> Clearly no summary phrase can be adequate to explain the behavior of so unintegrated a province (Brebner 1937: 352).

Place is a common theme in depictions of Nova Scotian politics. Despite its size, the province is said to contain at least three distinct regions, each of which has a unique political history and identity. Cape Breton was for decades home to a well-organized labour movement centered on its coal industry, and before that its politics were shaped by the Catholic Scottish immigrants who comprised the bulk of its population (Campbell and MacLean 1975). In the rural mainland, politics are thought to retain the influence of early loyalist settlers, who brought from the former American colonies a preference for representative government and local autonomy (MacKinnon 1988). Halifax represents the province's administrative and commercial hub, and the region's politics are described as a function of its accelerating urbanization and diversity, its white collar workforce and its traditional role as home to colonial and, later, provincial elites.

Often, commentators argue that these regional differences are secondary to a broader rural-urban division. According to this view, the rift of primary interest is between Halifax and the rest of the province. This rivalry is longstanding, dating back to the establishment in 1758 of the provincial House of Assembly and the intensification of competition between Haligonian merchants – the so-called "clique at Halifax" (Campbell and MacLean 1975: 240) – and rural, mainly agricultural communities for control of colonial institutions. The perceived balance of power between urban and rural Nova Scotia remains a key issue given their differential rates of population and economic growth.

Place, meaning either regional or rural-urban location, is thus frequently used as a framework for interpreting provincial politics. Although not its sole fault line, spatial cleavages are certainly among its most important. As Adamson emphasizes, although many provinces "have their cultural, political, and geographic divisions … the divisions within Nova Scotia are as great as these, and in fact, they may even be more pronounced" (1985: 52).

The significance of place received renewed attention in 2014 following publication of the report of the Nova Scotia Commission on Building Our New Economy (or simply the Ivany Commission, after its chair, Acadia University president Ray Ivany). The Commission was mandated to investigate the barriers to economic development facing the province and, after consulting with the public, to formulate advice to government, business and non-profit leaders. In highlighting the systemic causes of the province's sluggish economic performance, it was hoped that the Commission's final report (or, as it is more commonly known, the Ivany Report) would pave the way for a comprehensive, province-wide plan for stimulating long-term growth.

The Report offers a blunt assessment of the province's prospects. Its title, *Now or Never*, underscores the precariousness of Nova Scotia's economic position. In the report's conclusion, the Commission writes that "the province is on the verge of a serious crisis in the viability of its communities and the capacity to sustain the current standard of living for citizens and the quality of public services" (2014:70).

Importantly, the Commission cites as a primary obstacle to economic development the presence of stark divisions between rural and urban Nova Scotians. Reflecting on the public input received during the consultation process, the Report

emphasizes that “perhaps the most serious area where participating citizens seemed almost to occupy different worlds had to do with urban/rural differences” (2014: 10). Ivany and his colleagues write that rural communities are hindered by uncompetitive businesses, parochial attitudes, distrust of immigrants and the absence of an innovative and ambitious entrepreneurial spirit (2014: 4, 10, 25-26, 60).

The report is also critical of urban areas. The point, however, is that the Commission affirms the importance of the rural-urban divide for understanding Nova Scotia. At the heart of the economic and political challenges facing the province are urban/rural tensions, which must be resolved in order to achieve modernization and progress. The issue is ultimately a spatial one.

The goal of this thesis is to test the conclusions of the Ivany Report, particularly with respect to the presence and nature of the rural-urban gap in Nova Scotia. In doing so, it also tests the validity of spatial explanations of Nova Scotian politics more generally. The underlying question of this thesis, in short, is whether place of residence determines attitudes on issues related to economic development. Are rural residents really more parochial and distrustful of immigrants than urban residents? What about on other topics, such as preferences regarding government’s role in the economy or the extent to which traditional moral values should guide social policy?

The Ivany Report offers some preliminary data on these questions. In addition to gathering qualitative evidence during its consultation process, the Commission funded a survey to “determine whether any attitudinal barriers exist that would prevent Nova Scotia from being more successful economically” (2014: 219). The survey, conducted by telephone, gathered data from 402 Nova Scotians over the age of 18. The results are

presented according to region of residence, with respondents identified as living in Cape Breton, the Halifax Regional Municipality (HRM) or the Rest of Mainland. The descriptive data are generally consistent with the Commission's conclusions. Mainland respondents, for example, reported being less supportive of increasing immigration rates and in favour of private sector-led economic growth. Cape Breton respondents, on the other hand, were less likely to agree in the value of decreasing provincial reliance on government.

Using a different data set, this thesis seeks to replicate the findings of the Ivany study. In doing so, it offers a further empirical test of the validity of the Report's conclusions. Moreover, this thesis represents one of the first studies to examine cleavages in Nova Scotian opinion from an academic perspective. Indeed, I am aware of very few examples of published scholarly research that use quantitative data to analyze the presence of spatial variation in Nova Scotian attitudes. Ian Stewart, in an empirical study of the provincial party system, emphasizes succinctly that "there is very little evidence on political attitudes in Nova Scotia" (1994: 76).[1] Yet even Stewart's research is largely uninterested in spatial variation, focusing instead on the degree of ideological differences between political parties.

The relevance of this thesis therefore stems from two related factors, the first practical and the second theoretical. With respect to the first, this thesis adds context to the recommendations of the Ivany Report by determining whether provincial spatial cleavages are as dramatic as suggested. Through the use of regression models, I am also able to uncover detail regarding the significance and direction of spatial effects. This is

[1] Although written 20 years ago, Stewart's claim remains an accurate assessment of the literature.

important because it facilitates an understanding of the extent to which observed variation is due to compositional effects – demographics, for example, or the distribution of partisan affiliation – versus contextual ones – that is, due to place of residence. For those keen on facilitating the changes envisioned by the Ivany Commission, this information is useful in ensuring policy makers understand the nature of Nova Scotia in all its complexity.

In terms of the second factor – theory – the relevance of my thesis is related to the modest contribution it makes to the political geography literature. Specifically, it provides a further test of the core assumption that geography matters when it comes to explaining political attitudes and behaviour. As well, it interrogates the view that rural voters are politically disaffected and socially and economically conservative. In this way, it helps improve our theoretical understanding of how Nova Scotians differ across regions and rural-urban categories. Similarly, in focusing on public opinion variation among sub-provincial units, my research breaks from much of the existing Canadian scholarship on the role of spatiality in politics, which focuses primarily on cultural differences among provinces or regions. More broadly, this thesis is connected peripherally to debates about the meaning of rural and urban, at least insofar as it clarifies the relationship between demographic and administrative definitions of these concepts and political attitudes.

The data for my analysis come from the Comparative Provincial Election Project (CPEP). As part of this project, a survey was administered online to 797 Nova Scotians from October 9-30, 2013. The survey period immediately followed the 39th Provincial General Election, held October 8, 2013. My analysis of the data involved the use of a geographic information system (GIS) to reference each respondent to a set of geographic

coordinates based on their postal code. I then assigned respondents to a regional category and to a rural-urban one, and applied statistical methods to identify how place of residence correlates with responses to several questions deemed relevant to economic development.

This thesis contains six chapters, including the present one. In the second chapter, I review the relevant literature, highlighting in particular recent developments in political geography, political culture, theories of urban and rural and empirical studies of spatial differences in attitudes. The third chapter provides a detailed overview of the data set and my methodology. Chapter 4 reports the results of my statistical analyses, and Chapter 5 discusses their theoretical and practical implications, paying special attention to the extent to which they support or dispute existing theoretical accounts. As well, I consider the implications of my results for the Ivany Report, and to the potential consequences of future alignment between ideology, partisanship and place of residence. Finally, in Chapter 6 I offer some concluding remarks with respect to future research.

Chapter 2: Literature Review

The literature surveyed in this chapter covers a wide and diverse body of scholarship. In general, however, the chapter proceeds along the following lines. First, I address the gradual introduction into political science of an awareness of the spatial determinants of public opinion and political behaviour. Second, I distinguish between political culture and public opinion, in part to emphasize my interest in the latter over the former but also to acknowledge the tendency of Canadian political scientists to associate spatial variation with regional cultural differences rather than attitudinal cleavages (and, in particular, rural-urban cleavages). Third, I address the main theoretical approaches to understanding the concepts rural and urban. Finally, I survey previous empirical research on attitudinal differences between rural and urban residents in the United States, Canada and Nova Scotia.

Politics and Spatiality

This thesis is concerned with the degree of spatial variation in Nova Scotian politics. At issue is whether differences in place account for recent trends in provincial public opinion. In characterizing attitudes as a function of spatiality, I draw on literature associated with the so-called 'spatial turn' in the social sciences. The main contribution of this work has been to extend across disciplinary boundaries the theories and methodologies of political geography, which reject earlier treatments of place as simply a "predefined territorial container of political life" (Pugh 2009: 579). The spatial turn thus represents a break from the aspatial orientation that has long defined the major political

science paradigms. In particular, it signals a departure from the individualist ontology of behaviouralism. It is also problematic for many critical approaches, which are generally disinterested in questions of geography. Marxism, to take one example, assumes the eventual obliteration of geographic distinctions between societies (see Ethington and McDaniel 2007: 130; Hooks and Lobao 2010: 368-369). In sum, and to borrow from Edward Soja, the spatial turn challenges the "essentially historical epistemology" that "pervade[s] the critical consciousness of modern social theory" (Soja 1989: 10).

Rethinking Place and Space

The adoption of a spatial perspective opens new analytical dimensions for political scientists. It also necessitates a reconsideration of concepts such as space, place, territory and scale, which hold special meaning for geographers. Compared to space (an abstract concept) place refers to a particular unit or area (Hooks and Lobao 2010: 368). A territory is a circumscribed place that provides context for human relationships and action and is infused "with a particular identity and characteristics" (Jones et al., 2004: 3). Scale refers to the manner in which territories are nested within other territories – the household within the town, the town within the province, and so on (Bulkeley 2005: 876).

Political geographers combine these concepts with conventional political variables to structure their analyses, producing multi-dimensional frameworks for explaining political phenomena. This represents a relational approach to the study of politics – as opposed to an essentialist or taxonomic one (Hooks and Lobao 2010: 370) – in which political behaviour is understood as emanating from the ongoing interaction of various spatial and non-spatial factors. Jones et al. (2004: 2-4), for example, describe

political geography in terms of two triangles, the first connecting power, politics and policy and the second connecting space, territory and place. Elazar adopts a wider scope with his concept of location, which includes spatial, temporal and cultural dimensions. "All human beings and groups," he explains, "are located in a particular space, in a particular time, and in a particular culture. It is necessary to understand all three facets of location in order to understand how people behave and why they behave as they do" (Elazar 1999: 876).

Another way of putting this is to say that political geography depicts politics as the interplay of place and space. Here, space refers to the abstract planes on which most political science theory operates (McDaniel 2010: 4-5). Traditional behavioural approaches, for instance, posit a defined political space in which causal variables produce effects more or less independently of geography. Thus, as Agnew points out, American intellectuals and politicians historically assumed a society that was "uniform and nationalized, with little, if any, internal variation (except perhaps some racial, gender, and class differences that we are all working at removing)" (2002: 3). Although Agnew's characterization oversimplifies the considerable diversity within American political thought, it calls attention to the way in which place-to-place differences were treated as residual or marginal in much of the early political science literature.

Explaining Spatial Clustering

The analytical utility of adopting a spatial approach began to be uncovered in the 1960s and 1970s in the field of quantitative electoral geography (Jones et al. 2002: 8-9). The introduction of place added a contextual layer to studies of voting patterns, making

possible a scholarship that considered the "rules and norms for behavior that vary by political sub-community across the national electorate" (Campbell et al. 1960: 119). Subsequent work in this vein focused on the spatial clustering of political attitudes and behaviour. Its aim was to draw out the political implications of an individual's local network of friends and acquaintances, a concept later described as the "neighbourhood effect" (Agnew 1996a: 165; Dietz 2002: 540). Context, from this perspective, was a product of social interaction networks. A leading scholar of this work was Huckfeldt, who emphasizes that "social interactions take different forms: standing in line at the post office, getting together with friends, talking across a backyard fence or on a street corner, sharing the same public facilities … None of the interactions are politically neutral" (1980: 231; see also 1979).

Later scholars became critical of the "weak contextualism" of neighbourhood effects research (Ethington and McDaniel 2007: 134). At issue is the tendency of this research to treat the influence of geography as exogenous, thereby falling into the old trap of relegating place to the status of neutral container (McDaniel 2010: 8). Instead, Agnew encourages political scientists to account for the scalar quality of place, and to grasp

> the hierarchical (and non-hierarchical) 'funnelling' of stimuli across geographic scales or levels to produce effects on politics and political behavior. These effects can be thought of as coming together in *places* where micro (localized) and macro (wide-ranging) processes of social structuration are jointly mediated (Agnew 1996b: 132).

A given place, in other words, ought to be perceived as both a container of individuals and a territory linked vertically to other places. The second dimension – the scalar links between places – produces additional spatial variety, because the relationship between levels differs from place to place. Provincial-federal relations, to take one

example, vary considerably across the country. The term context, therefore, represents more than social networks: it includes an awareness of macro-level interactions, including how places fit into broader cultural and historical dynamics.

Ultimately, the goal should be to integrate individual-level considerations (that is, considerations not constrained to specific locations) with the relational particularities that are unique to each place. According to its proponents, this context-as-place approach underscores the "two-way, interactive bond between individual behaviour and contextual setting" (Ethington and McDaniel 2007: 134) and enables a more nuanced understanding of political attitudes and behaviour.

At present, the literature remains divided on why political attitudes and behaviour exhibit spatial clustering. Cho and Rudolph (2008: 274-278) group the arguments into four main explanations for why spatial clustering occurs. These explanations vary with respect to the influence they afford to structural factors versus agential ones. First, self-selection theory, which emphasizes individual agency, asserts that like-minded people choose to live close to one another. This view is closest to a pure behaviouralist approach, because contextual effects from this perspective are mainly the product of "a self-sorting mechanism in which people make residential decisions based on individual-level criteria" (Cho and Rudolph 2008: 275). This theory is controversial, and empirical studies of its validity have produced mixed evidence. Cho et al. (2013), for example, highlight data showing that Americans consider partisanship "in selecting a relocation destination" (866). Abrams and Fiorina (2012), on the other hand, argue that there is "no evidence that a geographic partisan 'big sort' … is ongoing," and, even if there were, it

would be relatively unimportant since neighbours rarely talk to each other about politics (208).

The second theory considers the effects of elite processes, and specifically the way in which election campaigns target certain neighbourhoods for mobilization. This theory, however, may be broadened to incorporate other political phenomena; the point is that, from this perspective, neighbourhood effects are produced through top-down conditioning by political elites.

The third theory incorporates structural considerations by considering how repeated social interactions gradually bring neighbours into attitudinal alignment. "Social interaction thus triggers a social learning process in which citizens are exposed to the prevailing sentiments of their social network. Views that are consonant with those of the social network are met with positive reinforcement while dissonant views are subject to negative reinforcement" (Cho and Rudolph 2008: 276). Contra Abrams and Fiorina (2012), this theory assumes that neighbourhoods remain important centres of political discussion.

The final theory moves even further into structural territory by arguing that attitudes are moulded by casual observations made during "the slow drip of everyday life" (Baybeck and McClurg 2005: 498). Simply by paying attention to "low-intensity neighbourhood cues such as the display of yard signs, bumper stickers … how neighbours dress and behave, what types of cars they drive, or how well their garden is groomed" (Cho and Rudolph 2008: 277), citizens adopt shared political opinions even in the absence of extensive verbal interaction. Walks (2004) describes this in terms of the consumption patterns common to certain neighbourhood types, such as home ownership

in suburbs. As he succinctly puts it, homeowners “have a particular stake in their investment that is not shared by tenants” (Walks 2004: 273).

Spatial Concepts in Historical Institutionalism

The contributions of the spatial turn may be illustrated by drawing parallels to the emergence of new institutionalism in political science, and particularly its historical variant. Briefly put, historical institutionalism explains political outcomes by examining “the way the institutional organization of the polity and the economy structures conflict so as to privilege some interests while demobilizing others” (Hall and Taylor 1996: 937). Even more succinctly, Immergut writes that “historical institutionalists view causality as being contextual” (1998: 19), which echoes geographers’ arguments about spatial context as a determinant of political behaviour. Historical institutionalism consequently shares with political geography a concern for the locational aspects of politics and governance. This is further highlighted through the concept of path dependence – prominent in historical institutionalism – which suggests that the institutional patterns of a given state are a function of its unique history. According to Hall and Taylor, path dependency

> rejects the traditional postulate that the same operative forces will generate the same results everywhere in favour of the view that the effect of such forces will be mediated by the contextual features of a given situation often inherited from the past (1996: 941).

To this, political geographers would add that the relevant operative forces are also mediated by features attached to spatial location. In any case, the theoretical developments produced by the spatial turn are similar in many respects to those pioneered by historical institutionalism. To borrow from Ethington and McDaniel, it is

"remarkable how close the historical institutionalists have come to a geographic framework, without realizing it" (2007: 139). Both reject strict ontological individualism, favouring instead a balanced view that considers how institutions, broadly stated, structure decision-making. As well, these interactions are fluid rather than static, with changes in one affecting the other.

To reiterate – and to conclude this section – the political geography literature is relevant to the present study because it provides the theoretical basis for hypothesizing that spatial factors explain variation in Nova Scotian political attitudes. In addition, Agnew's context-as-place approach encourages a nuanced view of how individual-level variables are mediated by place, facilitating the useful combination of structural and agential factors in spatial analysis. To borrow from Andrew Gelman and colleagues, who articulate the importance of space in American politics, perhaps the key lesson is simply that

> [g]eography matters politically. States are not merely organizational entities – mere folders that divide individuals for convenience. Nor are the differences cosmetic; a y'all here, a Hahvahd Yahd there. No – states have real, significant cultural and political differences. And despite the centripetal tendencies of a national media, drastically lower transportation costs, and a consumer economy frequently indistinguishable along regional lines (Starbucks everywhere) – regional political differences seem, if anything, to be getting more pronounced in the last decade or two (Gelman et al. 2007: 365).

Indeed, replace state with province or region – and y'all and Hahvahd Yahd with their Canadian equivalents – and one gets a sense of the importance of place to Canadian politics as well.

Political Culture or Public Opinion?

In considering spatial variation in attitudes it is important to distinguish between political culture and public opinion. The two concepts are closely linked, but nevertheless distinct. Although definitions of political culture vary, they generally speak to the enduring political orientation of a specific place, such as a region, province or state. In Wiseman's terms, political culture is the "way of life of a political community or polity" (2007:13). Wesley defines it as "the set of common political values and assumptions that underpin a given political system" (2011: 4). Importantly, the main features of a political culture remain stable over time. They are "embodied in [a community's] shared rituals and symbols, entrenched in its institutions, echoed in the attitudes of its residents, reflected in the behaviour of its political actors, and illustrated in its general style of politics" (Wesley 2011: 4).

Political culture differs from public opinion in two important ways. First, political culture is enduring whereas public opinion is volatile. Even casual observers of elections and opinion polls are likely familiar with the propensity for public opinion to fluctuate rapidly over short periods. Culture represents the durable framework within which these fluctuations occur. Stewart provides the helpful analogy that political culture is to public opinion as climate is to weather (2002: 21), which Wiseman adapts in his evocative description of culture as "more like climate than like the weather, whose buffeting storms are transient" (2007: 13).

Second, political culture is more holistic than public opinion. Put differently, political culture is more than the aggregate of individual attitudes or preferences. It is

therefore also different than ideology. Political culture operates beyond the individual level, existing as "a set of available meanings embedded within mass society" (Fine and Fields 2008: 132). This has methodological implications, because it means that researchers cannot extrapolate cultural details from individual attitudes or behaviour. As Wesley notes, doing so represents an inversion of the ecological fallacy, which occurs when inferences about micro-level actors are made based on macro-level data (2011: 6). Echoing this point, Johnson argues that "it is not obvious that the aggregate distribution of orientations in a population constitutes 'culture' in any useful, distinct conceptual sense" (2003: 99).

The political geography literature is often silent on the difference between culture and opinion. Yet I address it here for two reasons. First, the data I use – the results of a public opinion survey – are more appropriate for studying current attitudes than for commenting on the dynamics and character of Nova Scotia's political culture. Although an awareness of the provincial and regional culture is useful for contextualizing my analysis, I am concerned primarily with trends in public opinion at the time of the 2013 provincial election.

Second, in the Canadian context, studies that incorporate spatial determinants of political behaviour tend to focus on variation across provincial or, often, regional cultures. As Walks puts it, research "on the role of space in Canadian political studies has most often focused on the role of regionalism to the exclusion of other spatial differences" (2004: 275). Much of this scholarship is inspired by the research of Simeon and Elkins, whose work posits "substantial regional divergences in some of the basic attitudes towards politics and political activity displayed by mass publics which cannot be

accounted for by any plausible control variables” (1974: 398). This thesis, on the other hand, is concerned with cleavages at the sub-provincial and sub-regional level. That is, it considers whether regions *within* Nova Scotia are significant with respect to shaping political attitudes. As well, it focuses on the presence of rural-urban cleavages, which may or may not transcend sub-provincial regional boundaries. Certainly, in Nova Scotia the two dimensions often overlap, with Halifax generally ascribed urban characteristics and the Mainland rural ones. The point, however, is that this thesis departs from much of the existing Canadian literature on spatial variation in politics insofar as its units of analysis exist at the sub-provincial and sub-regional levels.

Theorizing Urban and Rural

Related to the spatial turn is the ongoing discussion, primarily in sociology, over the meaning of the concepts ‘rural’ and ‘urban’. A central problem for this field is the formulation of generalizable criteria for differentiating between the two categories. Moreover, there is the problem of distinguishing between degrees of rurality (or urbanity), because reality rarely provides a clean break between city and country. Finally, and more recently, there is the issue of whether rurality has disappeared altogether given continued and accelerating urbanization. Given its clear relevance to the current thesis, I present in the following section a brief overview of the main features of this literature.

Ecological Definitions

The city has long been the subject of scholarly attention. A particularly influential definition comes from Louis Wirth's 1938 article, "Urbanism as a Way of Life" (Lichter and Brown 2011: 568-569; Molotch 1976: 309). Wirth rejects the use of simple population thresholds for separating cities from other types of communities. Instead, he proposes a theory of cities based on three variables: population, density and heterogeneity. Wirth thus writes that for "sociological purposes a city may be defined as a relatively large, dense, and permanent settlement of socially heterogeneous individuals" (1938: 8). By quantifying the presence of each variable one may classify a community along the rural-urban continuum, with larger, denser and more diverse communities possessing stronger urban characteristics. These characteristics include, among other things, distinct patterns of land use and value, advanced transportation and communication infrastructure, weak social networks and numerous and highly differentiated interest groups.

Wirth's definition reflects an attitude towards place that mirrors the weak contextualism of some neighbourhood effects research. His theory is premised on the assumption that social life is "organized into coherently bounded spatial envelopes ('human settlements') that [can] be neatly typologized, and whose demographic properties (including his classic triad of size, density and heterogeneity) [engender] distinctive forms of social behavior within those boundaries" (Brenner and Schmid, 2014: 738-739). Cities that possess the same proportion of population, density and heterogeneity should, according to Wirth's scheme, manifest the same urban social forms.

This method for distinguishing between rural and urban ties into earlier, materialist depictions of rural culture. These accounts argue that economies based on agriculture share similar social and cultural characteristics. Ferdinand Tönnies, in one of the first expressions of this idea, writes that rural society (*Gemeinschaft*) embodies "the lasting and genuine form of living together," whereas urban society (*Gesellschaft*) is "transitory and superficial" and a "mechanical aggregate and artefact" (1887/2002: 35). More recent studies offer similar explanations of the economic sources of attitudinal differences between rural and urban residents. Knoke and Henry, for instance, trace rural suspicion of urban centers to the prevalence among rural Americans of, among other things, "individualistic self-help" values stemming from the difficult and solitary conditions of agricultural work (1977: 52). Simlarly, Gimpel and Karnes explain that "economic individualism shows up not only in the indisputably conservative attitudes of rural Americans toward welfare but is also reinforced by two cornerstone aspects of the rural economy: self-employment and widespread property ownership" (2006: 469).

Wirth's influence remains considerable. In government, for example, demographic definitions are common. Consider, for example, Statistics Canada's definition of a population centre (i.e. an urban area), which "is an area with a population of at least 1,000 and a density of 400 or more people per square kilometre" (Canada, 2012c). Implicit in this definition – as in Wirth's model – is the notion that as the presence of certain demographic variables increases, communities undergo important social, economic and political transformations. This approach is therefore an ecological one, because it is concerned with how context – meaning in this case the urban space – shapes interactions between individuals and, over time, produces unique values specific

to the urban experience. As Castells emphasizes, there is “an assumed correspondence between ecological forms and a cultural content” (1977: 15).

Critical Approaches

Wirth’s definition, which occupied a central place in the sociological orthodoxy of the early and middle twentieth century (Scott and Storper 2014: 2), came under sustained scholarly critique starting in the 1960s. Dewey (1960), for example, argues that Wirth and others confuse temporary cultural characteristics for inherent features of urban areas. The characteristics described by Wirth as belonging to cities – specific land use patterns, advanced technology, weak social networks and so on – are, according to Dewey, simply temporal correlates, or features that happened to be common to cities during that era.[2] Pahl (1964) musters empirical evidence to make a similar point, highlighting for example urban villages – close-knit communities at the heart of metropolises whose residents display what Wirth would classify as non-urban behaviour. Pahl also addresses the scalar quality of urban and rural ways of life, emphasizing how tension between the local and the national shapes relationships within communities. He recommends that scholars turn their attention to these scalar effects, and to “imagine a whole series of meshes of different textures superimposed on each other, together forming a process which is creating a much more complex pattern” (Pahl 1964: 327), evoking the context-as-place approach promoted by Agnew.

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[2] As Dewey emphasizes, it is easy to “glance through … Wirth's long lists and, on the basis of historical and ethnological data, to identify what is clearly cultural in nature and what is not intrinsic to city life or urbanism. If one contrasts the clearly rural but wealthy and industrialized farm communities of Illinois or Iowa, on the one hand, and the present and past cities which are preindustrial and in some degree preliterate, on the other, it becomes clear that many alleged urban items are common in midwestern American rural farming areas and scarce or absent in numerous cities (1960: 63).

A notable critique of Wirth comes from the Marxist sociologist Manuel Castells, who dismisses the whole field of urban studies as an ideological effort to normalize and legitimate capitalist social relations. In *The Urban Question*, Castells argues that the link between "space, the urban, and a certain system of behaviour regarded as typical of 'urban culture' has no other foundation than an ideological one: it is a question of an ideology of modernity, aimed at masking and naturalizing social contradictions" (1977: 431). For Castells, the ecological perspective espoused by Wirth distracts from more pressing issues stemming from the city as a spatially-concentrated from of industrial capitalism. Put differently, for Castells "there is nothing especially urban about the questions studied under the banner of urban sociology because in the end they are simply questions about society at large" (Scott and Storper 2014: 2).

Importantly, despite his ostensible rejection of Wirth's main argument, Castells "unwittingly concurred with Wirth that purely empirical and territorial definitions of the urban … would remain doomed to arbitrariness, inconsistency and nearly immediate obsolescence" (Brenner and Schmid 2014: 739). That is, both scholars reject the notion that urbanity can be translated wholly into quantitative terms, or demarcated on the basis of a single number. To say that a city means any community beyond a certain population is unhelpful and, ultimately, meaningless. Instead, the concept of urban must remain an abstraction. As Brenner and Schmid emphasize, the urban "is not a pregiven, self-evident reality, condition or form – its specificity can only be delineated in theoretical terms, through an interpretation of its core properties, expressions or dynamics" (2014: 749).

This conclusion guides much of the recent work on critical urban theory. Its significance is reinforced by the accelerating dynamics of globalization and the

worldwide migration from countryside to city. The result is a new and complex type of urbanity, integrated into the global economic order and, at the local level, unrelenting in its absorption of rural spaces. Scholars herald the arrival of an urban age, in which the process of urbanization is ubiquitous rather than confined to peri-urban border zones. Merrifield describes a new sort of habitat,

> neither meaningfully urban nor exclusively rural, but a blurring of both realities, a new reality the result of a push-pull effect, a vicious process of dispossession, sucking people into the city while spitting others out of the gentrifying center, forcing poor urban old-timers and vulnerable newcomers to embrace each other out on the periphery, out on assorted zones of social marginalization, out on the global *banlieue*. The urbanization of the world is a kind of exteriorization of the inside as well as interiorization of the outside: the urban *unfolds* into the countryside just as the countryside *folds* back into the city (2011: 474).

A parallel development has seen scholars, particularly those working in postcolonial paradigms, reject efforts to develop generalizable theories in favour of ethnographic studies based on a form of strict particularism. According to Scott and Storper, given the “bewildering degree of individuality” exhibited by cities around the world, it is unsurprising “that so many analysts are tempted to treat every city as a special case and to insist on the futility and dangers of conceptual abstraction” (2014: 11). Moreover, the variation among cities only continues to expand as urbanization accelerates, including in the global South.

The concept of rurality is similarly challenged by these changes. Rural theory, in other words, has been forced to grapple with the changing economic and demographic realities of rural – or formerly rural – places. Woods (2006) identifies a transition in rural political discourse away from traditional rural politics, whose concern was the management of resource extraction, to a politics of the rural, which deals with the

definition of rural space and the policies necessary for its regulation and preservation. Masuda and Garvin identify a similar change, and argue that rurality now represents "a site of meaning as well as a tool used by powerful groups to manipulate present and future action" (2008: 112). To be sure, this is not a new phenomenon: Pratt, for instance, notes how Italian fascists glorified "the reified idea of the rural and the customs, beliefs and ways of life articulated to it" (1996: 76). The key difference is that the social characteristics associated with rurality are increasingly disconnected from a specific set of economic and social institutions. Cloke describes this in terms of the "signs and significations of rurality [being] freed from their referential moorings in geographical space" (1997: 368). In this way, the localism of pre-industrial rurality is giving way to a social logic that is indistinguishable from "the logic that structure[s] the world outside" (Cruickshank 2009: 98; see also Mormont 1990).

Scalar and Temporal Dimensions

My purpose in highlighting this literature is not to suggest that rural and urban are unusable categories, or that all variability between the two forms has vanished. Rather, my goal is to underscore their complexity and contested nature. As I show in the following section, rural and urban communities certainly retain distinct characteristics, notwithstanding the arguments of critical theorists. Moreover, the research design of this thesis rests on the (ultimately arbitrary) classification of the Nova Scotian population along the rural-urban continuum and into regional categories at the sub-provincial level. Still, there is contextual value in acknowledging the debate over the meaning of these concepts, for two reasons.

First, as there is in the political geography literature, the theoretical work on rurality and urbanity exhibits a scalar dimension. By this, I mean that there is a tension between the role of particular historical and cultural factors and broader, non-spatial factors such as demographics or, in Castells' view, social relations. An ongoing debate in the literature is the extent to which these opposing sets of variables ought to be combined in defining both urban and rural. In the case of urban theory, write Amin and Graham, the "complex interlinkage between place-based rational webs and distantiated ones is a central concern" (1997: 418). The same is true of rural theory. At the risk of oversimplification, the debate may be thought of as a continuum: at one end are the postcolonialists, who conceive of each city as a *sui generis* phenomenon, and at the other end are Wirth and others who seek to define urban in terms of generalizable, quantitative variables.

Second, the literature surveyed here reminds us that rural and urban communities are not sealed containers but social constructs subject to continuous pressure by forces at multiple levels. The French sociologist Henri Lefebvre thus describes the urban "not as an accomplished reality, situated behind the actual in time, but, on the contrary, as a horizon, an illuminating virtuality" (1970/2003: 16-17). Communities are not static. They are subject to changing material conditions as well as to re-interpretation by residents and outsiders alike. Indeed, the connotation of the terms rural and urban likely differs from place to place and over time. This point is important to bear in mind when contemplating the public policy implications of the data presented in the following chapters.

Previous Empirical Studies

Despite the theoretical and methodological issues alluded to in the previous section, a substantial scholarship exists on the question of whether there are systematic differences in public opinion between rural and urban residents. These studies necessarily delimit urban and rural areas on the basis of one or more empirical qualities. The methodologies used for this purpose vary from paper to paper, and include criteria such as occupational categories, administrative boundaries, population density and commuter flows. These studies generally start from the hypothesis that rural residents are more conservative than their urban counterparts. This reflects the entrenched influence of Wirth and other early urban theorists, whose ecological perspective serves as the default null hypothesis for rural-urban researchers.

In the following section I address some of the main findings of previous studies of attitudinal differences between rural and urban areas. I begin with the American literature and then turn to Canadian and Nova Scotian research. I include studies that address issues relevant to politics, including religion, moral traditionalism, environmentalism and political tolerance. Also included are comments regarding methodological developments that have opened new avenues of research.

United States

In the United States, rigorous statistical analyses of rural-urban public opinion cleavages became increasingly common in the 1950s thanks to advances in quantitative methods

and the publication of compendia of polling data (Erskine, 1973: 630).[3] Often, this research used data on farmers to represent the rural population. These initial studies provide conflicting evidence for the notion that rural residents are more conservative than urban residents. Some research, for example, indicates that farmers are more likely than non-farmers to exhibit Puritanism, individualism, loyalty, traditionalism (Beers 1953: 8), and are less informed, more prejudiced, less tolerant of deviance and less trusting of people than urban residents (Glenn and Alson 1967: 384-393). As well, rural marriages are said to end less frequently in divorce (Lillywhite 1952) and rural children are more shy and suspicious of others than urban children (Hathaway et al. 1959). In contrast, Haer (1952) finds no evidence that rurality is correlated with conservatism, and concludes that "the notion of a rural-urban continuum must be discarded" (346). Reiss (1959), in an examination of rural and urban social networks, reports that "residential setting may be less important than occupational situs in determining the range of social contact" (188).

Subsequent research, however, which has benefited from the continued improvement of statistical methods and geographic tools, has generally supported the hypothesis that rural residence is correlated with conservative attitudes. Much of this research is based on data from the General Social Survey (GSS), which began in 1972. As well, given the decline in the American farming population, there is a transition in the literature away from occupational definitions of rurality towards population and administrative definitions. There is also a growing acknowledgement of the significance of regional effects.

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[3] These compendia include Hadley Cantril's *Public Opinion 1935-1946*, *Public Opinion Quarterly's* "The Quarter's Polls," and, later, *The Gallup Poll: Public Opinion 1935-1971* (Erskine 1973: 630).

With respect to religion, the more recent literature is consistent that rural Americans tend to be more orthodox (Nelsen et al., 1971), traditionalist (Glenn and Hill, 1977) and evangelical (Dillon and Savage, 2006) than urban Americans. However, as noted, regional cleavages are also evident. In fact, both Chalfant and Heller (1991) and Dillon and Savage (2006) report that regional variations account for more of the difference in religiosity than urban-rural variations.

On the environment, studies indicate that rural respondents are less likely than urban respondents to be concerned about conservation and sustainability. According to Huddart-Kennedy et al. (2009), this is explained by the "utilitarian value orientation, or extractive commodity hypothesis, [which] refers to the likelihood of rural residents having an economic dependence on resource extraction, thus valuing economic growth over environmental protection" (311; Jones et al., 2003). Yet some studies suggest that environmental attitudes and behaviour are more influenced by demographic characteristics than place of residence (Jones et al., 1999; Tarrant and Cordell, 1997), which in turn suggests that "differences in environmental concern between rural and urban individuals may be diminishing" (Huddart-Kennedy et al., 2009: 311).

Studies using GSS data suggest that rural residents tend to favour socially conservative policies. Compared to urban voters, rural voters have been found to be less supportive of gun control and labour unions, less likely to identify as politically liberal (Glenn and Hill 1977) and less willing to extend civil liberties to groups that hold unpopular views (Wilson 1985). As with religiosity, however, regional variation also appears to have a significant effect (Abrahamson and Carter 1986, Knoke and Henry 1977).

Other scholars have turned their attention to the political attitudes of suburban voters, whose electoral significance has grown in step with their population. This research remains inconclusive. Gainsborough (2005) argues that suburban voters represent a distinct bloc and are more likely than urban voters to support Republican presidential candidates. McKee and Shaw (2003), however, report that this proclivity had vanished by the 2000 election, although the authors also identify an emerging regional cleavage between southern and non-southern suburbs. Teixeira and Rogers (2000) reject altogether the idea of a separate suburban politics, arguing instead that suburban voters are effectively identical to rural ones.

The political implications of rural-urban attitudinal differences received renewed attention in the mid-2000s following the apparent solidification of the ideological division between Republican-supporting 'red' states and Democratic-supporting 'blue' states. Yet despite the prevalence of national maps shaded blue and red, careful inspection reveals that the red versus blue cleavage is not a state-level phenomenon but rather an urban-rural one (Gimpel and Karnes 2006; McKee 2008). Manifested most clearly in presidential elections, this division provides strong evidence of the conservative orientation of rural Americans.

In his widely-read book, *What's the Matter with Kansas?*, Frank explains the red-blue divide by arguing that working-class voters – including those in poor rural counties – have been convinced to vote according to "cultural wedge issues like guns and abortion … whose hallucinatory appeal would ordinarily be far overshadowed by material concerns" (2004: 245). In other words, rural conservatism is misplaced because it contradicts the material interests of poor voters, who should support redistributionist

policies. Frank's book triggered significant debate and produced a variety of critical responses. Gimpel and Karnes (2006), for instance, argue that the "individualistic ethic and legacy of self-employment and home-ownership" in rural areas means that sympathy for the Republican party is not inconsistent with the cultural and material conditions of rural voters (471). Others muster empirical data to challenge the underlying premise of Frank's argument. These data suggest that the poor have become more Republican only in the South and, in any case, uneducated, working-class voters continue to attach less significance to social issues than better educated voters (Bartels, 2006). As well, income remains correlated with support for Republican candidates in every state (the poor everywhere vote consistently for Democrats), but in blue states there is greater variation in support among rich voters than in red states (Gelman et al. 2007). In rural states, in other words, elites vote en masse according to their economic interests (i.e. Republican), whereas in urban states elites are more evenly split between the two parties.

In general, the recent American scholarship on these and related issues highlights the impressive analytical power of advanced statistical techniques. Gelman et al., for example, produce their results using "repeated cross-sectional analyses" and "varying-intercept, varying-slope multilevel models" (2007: 346). When paired with geographic information system (GIS) software, these methods permit the examination of attitudinal differences at new levels of precision. The ability to geocode data – that is, to assign individuals or events to a set of specific geographic coordinates – makes it possible to "study the relationship of behavior to social and political milieu at multiple scales" (Cho and Gimpel 2012: 457). For each observation, individual characteristics may be analyzed in light of contextual factors. In addition, GIS software includes a host of spatial statistics

that such permit analysts to visualize and study the degree of spatial autocorrelation in a data set.[4]

These sorts of techniques have been used to study, among things, the manner in which voters' perceptions of the national economy are influenced by individual and local economic conditions (Reeves and Gimpel 2012), the effect of ethnic origin on the voting behaviour of New England towns (Gimpel and Cho 2004) and the impact of local political influences on turnout (Darmofal 2006). Notably, despite the relatively widespread adoption of advanced methods by American scholars, there is less evidence of their use by scholars of Canadian political science.

Canada

In Canada, studies of attitudinal cleavages often assume a regional perspective. Consequently, they tend to be rooted in the political culture literature described above. In some cases this research conflates regional attitudinal differences for rural-urban differences. The popular view of western Canadians, for instance, as "hewers of wood and ploughers of fields" means that Western public opinion is often implicitly assumed to be analogous to rural opinion (Cutler and Jenkins 2000: 1; for example, Wrong 1963). Recently, however, scholars have increasingly turned their attention to rural-urban cleavages that cut across regional lines, in large part due to the rise of the Reform party and its successors. The failure in 2006 of the Conservative party to win a seat in Canada's three largest urban centres provided additional impetus for this work (Wasko and O'Neill 2007: 1), as did the election in 2010 of Mayor Rob Ford (for example, Taylor 2011).

[4] These include Moran's I, Geary's c fit, LISA, the Getis-Ord G_i statistic, Ripley's K and Besag's L (Cho and Gimpel 2012: 450)

In general, research underscores the importance of local conditions to political behaviour and attitudes. In an early study, Grossman analyzes election results in Ontario and determines that rural seats are safer than urban ones, which he attributes to the lack of interest group competition in rural areas. "The rural member," he suggests, "can hardly do any wrong as long as he simply stands up for the rights of farmers" (1963: 371). More recently, research has shown that local economic conditions and a candidate's place of residence (whether they are from the local area) also have significant effects on Canadians' political preferences (Cutler 2001a; 2001b)

More recently, several studies support the notion that rural Canadians tend to be more conservative, particularly with respect to social issues. Thomas, for instance, argues that a cleavage exists in Canada between two groups, "1) progressive-heterogeneous-large urban; and 2) conservative-homogenous-smaller cities … and rural areas" (2001: 438). This thesis is supported by data that indicates that rural Canadians are less supportive than urban Canadians of abortion rights, gun control, immigration and public health (Blais et al, 2002). As well, Henderson (2004), who divides Canadian Election Survey (CES) data into nine geographic clusters based on cultural characteristics, demonstrates that voters in rural electoral districts report lower perceived political efficacy than urban voters in 'have' provinces (2004: 605-606).

Other studies are less conclusive. Turcotte, for instance, divides CES respondents into seven spatial categories, from metropolis (meaning residence in Toronto, Vancouver or Montreal) to rural. His analysis indicate that rural and urban Canadians exhibit similar levels of political tolerance (2001a) and, except for residents of metropolises, similar attitudes on moral traditionalism (2001b). Cutler and Jenkins (2000) also use CES data,

although they divide respondents into four categories according to the demographic characteristics of their census subdivision (CSD).[5] The authors uncover a significant rural-urban cleavage on attitudes about homosexuals and, to a lesser extent, feminists and immigration policy, which they attribute to educational differences. However, on other issues, such as national unity and facilitating accommodation for racial minorities, they report only small variations. They conclude therefore that despite significant attitudinal differences on specific issues, on the whole the exaggerated image of the "intolerant rural hick is a straw man" (2000: 17).

Wasko and O'Neill (2007) also use CES data geocoded to census geography. They divide respondents into three categories – urban, suburban and rural – using criteria based on population and proximity to an urban core. They measure differences among the three groups with respect to social conservatism, post-materialism and political cynicism. Their results suggest insignificant differences on post-materialist attitudes, weak but statistically significant differences on political cynicism and a large cleavage on social conservatism, with rural and suburban respondents reporting greater cynicism and more support for social conservatism than urban respondents. McGrane and Berdahl (2012) use CPEP data (the same data set used in the present study) to examine the spatial correlates of political attitudes, and in particular conservatism. Using GIS, they divide their sample into four zones according to a mix of census boundaries and distance thresholds. Respondents who did not live in a census metropolitan area (CMA) or census a

[5] A CSD is "a municipality or an area that is deemed to be equivalent to a municipality for statistical reporting purposes" (Canada, 2012b).

agglomeration (CA)[6] are categorized as rural. Respondents who lived in a CA are categorized as small urban. Residents who lived more than 10 kilometres from city hall in a large CMA (more than 500,000 people) or five kilometres in a small CMA (less than 500,000 people) are categorized as suburban, and residents who lived within either of these radii are categorized as urban. McGrane and Berdahl's results suggest that inner city residents are more post-materialist and less market liberal than others, although in terms of specific policy preferences there is less variation between the four zones (2012: 16).

On environmental attitudes and behaviour the recent literature suggests few differences between rural and urban Canadians. Huddart-Kennedy et al. (2009) divide survey data from a private marketing firm into rural and urban categories based on population and commuter linkage criteria. They report few differences between rural and urban respondents on either cognitive or behavioural indicators of environmental concern. In fact, the only clear distinction occurs with respect to stewardship activities, which are more prevalent among rural Canadians than urban Canadians. The authors attribute this to the "availability and ownership of land [in rural areas] on which to plant trees and conserve" (Huddart-Kennedy et al. 2009: 326). In analyzing a survey of Albertans, McFarlane and Boxall (2003) classify residents of Calgary and Edmonton as urban and all others as rural. Their analysis suggests that residence is not correlated with environmental behaviour. That is, "those who participate in behaviors that have the potential to influence natural resource policy and management are distributed among socio-economic groups and are found in both urban and rural environments" (McFarlane

[6] A CMA is an area of at least 100,000 people with 50,000 living in a core. A CA must have a core population of at least 10,000 (Canada, 2012a).

and Boxall 2003: 85). McFarlane and Hunt (2008), on the other hand, divide data from a survey of Ontarians into northern and southern categories and, using hierarchical modeling, uncover evidence of interactive effects between region of residence and psychological and cultural variables, particularly with respect to environmental activism. Membership in an environmental organization, in particular, is correlated with different behaviour in northern Ontario than in southern Ontario (McFarlane and Hunt 2008: 282).

On partisanship and political opinion, the evidence appears to confirm the conservatism of non-urban voters. For example, in their study of the 2000 federal election, Gidengil et al. report that rural voters were more likely than others to vote for the Alliance party although, in Atlantic Canada, the "rural/urban cleavage failed to emerge" (2001: 5-6). However, Bittner (2007), using CES data, finds that access to information narrows the gap between urban and rural voting behaviour, with politically-informed voters in urban and rural areas exhibiting similar (although not identical) voting patterns.

Beyond the rural-urban cleavage, there is a burgeoning scholarship dedicated to suburban public opinion. Taylor (2011), for example, uses GIS software to conduct an ecological analysis of the 2010 Toronto mayoral election. He finds that the strongest predictor of Ford support was location of residence, with suburban residents voting for Ford at higher rates than urban residents (Taylor, 2011: 21). A leading scholar in this area is geographer R. Alan Walks, who has studied suburban-urban cleavages in voting behaviour and political attitudes. Using CES data, Walks reports that intra-urban place of residence (where in a city a voter lives) became an increasingly important determinant of political behaviour between 1965 and 2000, with inner cities favouring the NDP and

outer suburbs favouring Progressive Conservative and Alliance candidates (2004). A subsequent study based on election results and census data provides additional support for this conclusion (2005). In accounting for this trend, Walks highlights the combined effects of "self-selection, local experience, and, to a lesser extent, mode of consumption" (2006: 390). Walks also argues that morphological distinctions between urban and suburban (those based on lifestyle differences) are more relevant than jurisdictional ones in understanding spatial variation in voting behaviour (2007).

Building on Walks' methodology, Roy and colleagues (forthcoming) use CPEP data from eight provinces (New Brunswick and Nova Scotia were excluded) to determine whether rural, urban or suburban residence has an effect on voting behaviour. To distinguish between the three residential categories, the authors use responses to a question that asked participants to self-identify whether they lived in a rural, urban or suburban area. After controlling for demographic variables, Roy et al. report significant correlations between rural residence and support for a conservative party in Manitoba and Saskatchewan, and between suburban residence and conservative party support in five provinces.

As noted above, the Canadian literature on the spatial determinants of political attitudes tends to rely on conventional statistical modeling. There is limited evidence of adoption of the advanced quantitative methods espoused by American scholars. Canadian studies typically treat contextual data as individual-level attributes, rather than as second-level variables that explain variation across geographic units. This is not to say that Canadian results are insignificant or invalid, but rather that there is room in the Canadian scholarship for the expanded use of advanced methods that may add new insights to the

nature of rural-urban cleavages in public opinion. Already, preliminary studies such as those by McGrane and Berdahl (2012), Taylor (2011) and McFarlane and Hunt (2008) point to the potential value of geospatial and multilevel modelling techniques to the study of Canadian public opinion.

Nova Scotia

As with Canadian politics, in accounts of Nova Scotian politics regional differences often stand in for rural-urban cleavages. For this purpose the province is usually divided into three regional categories: Halifax, Cape Breton and the counties on the mainland. Cameron and Hobson, for instance, report that there "are really three Nova Scotias: Cape Breton, greater Halifax and environs, and the rural mainland" (2009: 167). Carbert, similarly, emphasizes that all "aspects of provincial politics are overlaid on the basic economic structure in which prospects vary greatly across the province's three areas: mainland Nova Scotia, Cape Breton Island, and Halifax" (Carbert forthcoming: 3). She also argues that geography "has emerged as the dominant cleavage in the province. There is no other city in the province (or the region) to balance Halifax … In many respects this cleavage can be considered as a rural-urban divide" (Carbert forthcoming: 5). Finbow makes the case for even greater diversity within the province, underscoring that the province's "agrarian, fishing, mining, forestry and urban communities are distinct worlds, making it curiously difficult to govern" (2010: 487). Yet he too detects a rural-urban divide, noting in particular a disagreement "between urban and rural municipalities over fiscal equalization" (Finbow 2010: 488).

There has been limited empirical work on the implications of Nova Scotia's rural-urban divide for political attitudes and behaviour. Carbert, in an analysis of interviews with rural women community leaders in Atlantic Canada, reports that patron-client relations in the context of economic development are deeply embedded in the region's rural politics (2003). Grant et al. (2008) conducted interviews with individuals involved in economic and social development in Halifax. They note that several respondents "described a rural-urban divide that rendered political leaders more interested in rural constituencies than in urban areas" (Grant et al. 2008: 519).[7] Fletcher argues that several features, including the province's "rural over urban control, a lack of immigration, small populations, and tightly controlled economic and political systems," explain the role of clientelism in its politics, particularly in rural communities (1994). Also methodologically relevant are quantitative studies that have been published on rural-urban divisions with respect to access to health services (Johnston et al. 2004; Veugelers et al. 2003).

The lack of research in this area may be unsurprising given Nova Scotia's small population. At the same time, the absence of academic interest may be a function of the assumed homogeneity of the province's (and the region's) political culture. It is common practice for researchers to treat Nova Scotia as sharing an Atlantic political culture with New Brunswick, Newfoundland and Labrador and Prince Edward Island. The region is said to share a "pervasive disaffection from the political process" (Simeon and Elkins 1974: 433) and a cultural orientation that is deferential to elites, conservative, traditional (Wiseman, 2008), cautious, parochial, cynical (Dyck 1996) and based on "traditional

[7] At the time of their research – the summer of 2006 – the Progressive Conservative party was in government.

British Toryism" (Anderson and Goodyear-Grant 2005: 1037-1038). Stephen Harper famously captured the negative implications of these characteristics when he asserted that there "is a dependence in the region that breeds a culture of defeatism" (CBC News 2002). Although other research challenges the extent to which Atlantic Canada is traditionalist or disaffected (O'Neill and Erickson 2003; Conrad 2003; Smith 2000; Stewart 1994), the idea of a single Atlantic (or, in other cases, Maritime) political culture appears to be entrenched in the literature. That sub-regional attitudinal cleavages could exist within Nova Scotia is a possibility that, as yet, seems overlooked in the scholarship on Canadian public opinion.

Summary

The literature surveyed above paints a complex theoretical and empirical picture. Yet it is possible to discern from this diverse scholarship a few main themes. First, it is clear that space matters when it comes to understanding political attitudes and behaviour. Spatial variation is a consistent observation in empirical studies of public opinion and voting patterns. Second, there is an ongoing theoretical debate over the causes of spatial variation. Some scholars attribute the geographic distribution of public opinion to compositional factors. That is, by parsing the demographic and socioeconomic characteristics of a place it is possible to understand its politics. Proponents of demographic definitions of urban (and rural) or neighbourhood effects research suggest that social networks play an important role. Others emphasize the cultural and historical particularities associated with specific places, and the linkages between places at different

geographic scales. Still others argue in favour of some combination of the latter two perspectives, with non-spatial and spatial variables contributing jointly to a comprehensive explanation of attitudinal cleavages.

Third, previous empirical studies provide on certain issues compelling evidence of the conservatism of rural residents. On other issues, the evidence is less conclusive. In the United States, rural residents appear to be more religious, politically intolerant and socially and politically conservative than their urban counterparts. On environmentalism, however, the rural-urban cleavage appears to be disappearing. Moreover, the significance of regional cleavages (and in particular the division between the South and the rest of the country) appears to be growing.

In Canada, the evidence seems to suggest little difference between urban and rural residents on environmental values. As well, the data are mixed on the moral traditionalism of rural residents, with some studies uncovering strong evidence for it and other studies uncovering none. More consistent is evidence that rural Canadians exhibit low levels of perceived political efficacy, and that both rural and suburban voters tend to prefer conservative candidates and parties over progressive ones at all three levels of government.

Finally, the literature on Nova Scotia is relatively silent on rural-urban cleavages in public opinion. Although entrenched in popular and academic discourse, the idea that rural and urban Nova Scotia are distinct has rarely – if ever – been tested in a systematic, empirical fashion. Indeed, the study conducted on behalf of the Ivany Report represents perhaps the first such effort, and to my knowledge no peer-reviewed studies have been

published on the subject. There is, in short, a lacuna in our understanding of the spatial determinants of Nova Scotian politics.

Chapter 3: Data and Methods

Broadly speaking, my analysis of the CPEP data involved two steps. The first step was to geocode the data and assign respondents to regional and rural-urban categories. The second step involved applying quantitative methods to investigate possible connection between where respondents live and their attitudes on various issues related to the findings of the Ivany Report. This chapter describes these steps in detail.

The CPEP survey itself was administered online to 797 Nova Scotians from October 9-30, 2013. The survey period immediately followed the 39th Provincial General Election, held October 8, 2013. Respondents were recruited by Abacus Data and selected on the basis of achieving a representative sample of the eligible voter population.[8]

Geocoding Respondents

The CPEP survey asked respondents to provide their postal code. Of the 797 initial survey responds, 778 provided valid postal codes. Using a database maintained by DMTI Spatial Inc.,[9] these postal codes were geocoded, meaning they were associated with specific geographic coordinates. The geocoded data were then imported into ArcGIS (version 10.1), a geographic information system program, and plotted on a map of Nova Scotia (see Figure 1). Respondents were then categorized into both rural-urban and regional categories.

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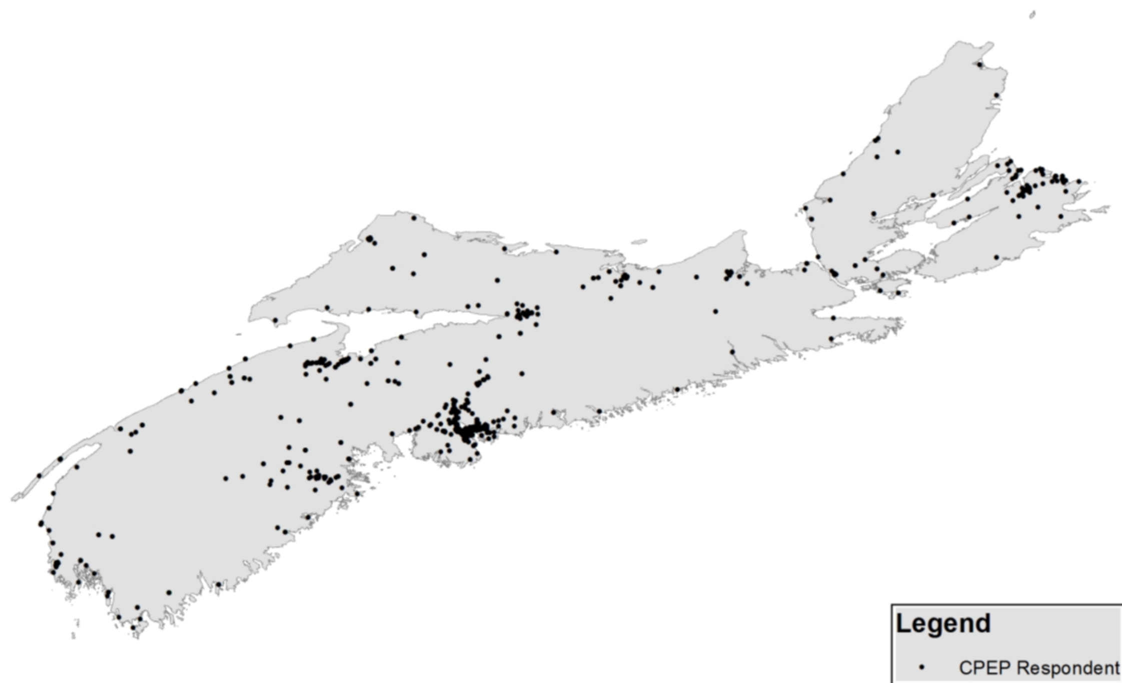
[8] A full description of the CPEP methodology is available online at http://cpep.ualberta.ca/.
[9] This database was accessed through a license held by the Dalhousie GISciences Centre.

Figure 1: Location of CPEP Respondents



Rural-Urban Categories

As emphasized in the preceding chapter, efforts to delineate between rural and urban are numerous and contested. Even among scholars who accept that urban and rural are ultimately demographic categories (that is, putting aside the concerns of critical theorists such as Castells) there are competing methods in the academic literature for distinguishing between communities along the rural-urban continuum. Nor is there agreement among national and international statistical agencies. The United States federal government alone uses at least two definitions.[10]

[10] The first, used by the U.S. Census Bureau, identifies Urbanized Areas, which contain more than 50,000 people and Urban Clusters, which have less than 50,000 but more than 2,500 people. The second is used by the White House Office of Management and Budget. It designates counties as Metropolitan (containing an urban core with 50,000 or more people), Micropolitan (containing an urban core of at least 10,000 but less than 50,000 people) or neither. Other agencies use variations of these definitions (United States, n.d.).

Statistics Canada identifies urban areas through the population centre concept, which is any area that has a population of at least 1,000 and a density of 400 or more people per square kilometre (Canada 2012c). All other areas are considered to be rural. This straightforward definition belies a rather complex hierarchy of underlying census units. Population centres are composed of dissemination blocks (DBs), which are equivalent to city blocks. DBs also serve as the constituent units of census subdivisions (CSDs), which reflect municipal boundaries. A population centre is therefore a demographic construct, whereas a census subdivision is an administrative one.

To address the vast spectrum of ‘urban’ communities, Statistics Canada combines CSDs and population centres to form two higher level units, census metropolitan areas (CMAs) and census agglomerations (CAs). A CMA is one or more CSDs that together have a population of more than 100,000, at least half of which live in a core population centre. A CA is one or more CSDs around a population centre core of at least 10,000. CMAs and CAs generally contain both urban and rural communities, yet their association with a common urban core captures linkages based on commuter patterns. CSDs outside of CMAs and CAs are designated metropolitan influenced zones (MIZs), and assigned to one of four categories depending on their degree of integration (measured by commuter flows) with nearby CAs and CMAs.

For researchers using census data, these units permit the operationalization of the rural-urban continuum in a variety of ways. Cutler and Jenkins (2000), for example, divide a CES data set into four rural and urban categories using CSD, CA and CMA boundaries. Of course, other methods exist. Henderson (2004), for instance, who also uses CES data, sorts between rural and urban respondents based on their electoral district.

This thesis adapts the methodology of McGrane and Berdahl (2012) for the purpose of assigning CPEP respondents to rural and urban categories. To reiterate, McGrane and Berdahl (2012) divide their sample into rural (those who live in an MIZ, meaning anywhere outside of a CMA or CA), small urban (those who live in a CA), suburban (those who live beyond five kilometres of city hall in the case of small CMAs such as the Halifax Regional Municipality) and urban (those who live within five kilometres of city hall). There are several benefits to this approach. First, it enables comparison across the CPEP data set, since McGrane and Berdahl use data from the same survey (although for different provinces). Second, it captures to some extent the difference between towns such as Kentville, which have relatively large populations but are comparatively remote, and small communities within the Halifax Regional Municipality (HRM), which have small populations but share important commuter linkages with downtown Halifax. Third, the five kilometre threshold provides a helpful starting point for dividing between suburban and urban residence (see Figure 2).

Figure 2: Five Kilometre Radius around HRM City Hall

The establishment of such a radius is, ultimately, an arbitrary process. For McGrane and Berdahl (2012), its necessity is clear given their comparison of multiple cities. In the case of this thesis, however, which deals with only one CMA (the HRM), adhering to the five kilometre limit was deemed less important. Instead, the urban category was expanded to include all of the former cities of Halifax and Dartmouth. Notably, this approach has been used elsewhere to differentiate between inner city and suburban neighbourhoods within HRM (see Millward and Spinney 2011).

The resulting rural-urban categories are illustrated in Figure 3. In ArcGIS, each CPEP respondent was assigned to a category based on their geocoded postal code.

Figure 3: Rural-Urban Categories

The number of respondents contained in each category is listed in Table 1. The sample size of each category was deemed sufficient to proceed with inferential statistical analyses.

Table 1: Assignment of CPEP Respondents to Rural-Urban Categories

Category	Census Unit	Description	N
Urban	CMA	Halifax and Dartmouth	169
Suburban	CMA	HRM communities around Halifax and Dartmouth	104
Small Urban	CA	Kentville, Truro, New Glasgow and CBRM[11]	168
Rural	MIZ	Areas not in a CMA or CA	337

Regional Categories

Respondents were also categorized according to their sub-provincial region of residence. As noted in Chapter 2, depictions of Nova Scotia often treat regional differences as analogous to urban-rural ones. From this perspective, HRM represents the province's urban centre and the rest of the mainland its rural hinterland. Cape Breton is a unique, third category, blending low population densities with a history of industrial coal mining centred in Sydney (now the Cape Breton Regional Municipality). Wilson, acknowledging Cape Breton's unique character, notes as an example of the minor cultural differences between Nova Scotia and the other Atlantic provinces "the physically and culturally isolated mining communities of Cape Breton Island, which have from time to time exhibited the electoral behaviour of at least an industrial society" (1974: 463).

Other depictions posit even greater regional diversity. Recall from above Finbow's comment about the governance challenges posed by the province's various economic communities. A key source of this political diversity, in addition to economics, is the historical distribution of settlement patterns across the province. As Carbert explains,

[11] Cape Breton Regional Municipality. Unless otherwise stated, I use the term Cape Breton to refer to the entire island.

> political cleavages began as a product of the ethnic and religious identities that prevailed at the time of the province's founding. Mainland Nova Scotia was settled by English Protestants who voted Conservative and Cape Breton was settled by Scottish Catholics who voted Liberal. Following their enfranchisement, Acadians also voted Liberal (forthcoming: 5).

Also significant to the province's politics are "German speakers in Lunenburg, African-Canadian settlers, and indigenous Mi'kmaqs" (Finbow 2010: 487).

For the purposes of this study, respondents were initially sorted according to the regional groupings used by Elections Nova Scotia and the Nova Scotia Electoral Boundaries Commission. These groupings are based on provincial electoral districts, which generally reflect county boundaries – particularly in rural areas – and therefore have historical significance. As well, at the time of writing, the electoral district boundaries were available online in digital format, which facilitated their easy importation into ArcGIS.

Under Elections Nova Scotia's system there are seven regions: Annapolis Valley, Cape Breton, Central Nova, Fundy Northeast, HRM, South Shore and Southwest Nova Scotia. The location of each region is illustrated in Figure 4, and the number of CPEP respondents from each region is contained in Table 2.

Figure 4: Regional Categories

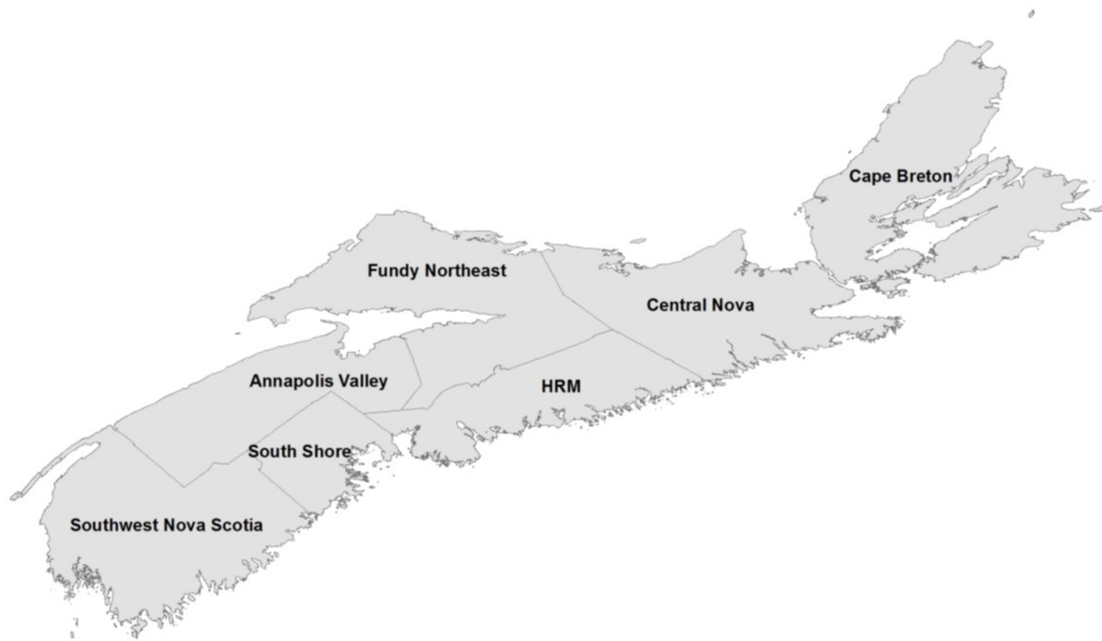


Table 2: Assignment of CPEP Respondents to Seven Regional Categories

Region	N	Electoral Districts	Estimated Eligible Voters
Annapolis Valley	120	5	76,653
Cape Breton	99	8	105,702
Central Nova	55	5	59,418
Fundy Northeast	84	6	84,724
Halifax Regional Municipality (HRM)	273	20	287,600
South Shore	64	3	43,999
Southwest Nova Scotia	83	4	53,462

Source: Nova Scotia (2012: 40)

The use of these groupings would have enabled a high degree of granularity in my analysis. However, the sample size in some regions was too small to achieve a minimum acceptable confidence level (see Butler, 2007: 65). Therefore, I combined the Annapolis Valley, Central Nova, Fundy Northeast, South Shore and Southeast Nova Scotia regions into a single Mainland category. Despite foregoing important detail, this categorization reflects the conventional, three-region characterization of Nova Scotia and, moreover, allows for greater confidence in the significance of the statistical analyses presented below. Table 3 contains the updated distribution of CPEP respondents by region.

Table 3: Assignment of CPEP Respondents to Three Regional Categories

Region	**N**	**Electoral Districts**	**Estimated Eligible Voters**
Cape Breton	99	8	105,702
Halifax Regional Municipality (HRM)	273	20	287,600
Mainland	406	23	318,256

Statistical Methods

Once CPEP respondents were assigned to rural-urban and regional categories, the data was exported from ArcGIS and imported into SPSS (version 22), a statistical software package. In SPSS, the rural-urban and regional assignments were tied to the survey results. The next step was to create dependent variables to measure relevant attitudes.

Attitudinal Measures under Investigation

As dependent variables I used responses to CPEP questions related to economic conservatism, moral traditionalism, political efficacy, localism, sympathy for outsiders, and environmentalism. In general, the CPEP questions are structured similarly to those on the CES survey and the Ivany Report survey, enabling comparisons with the literature cited above as well as to the Ivany Report itself. The following section outlines the steps used to prepare each dependent variable for use in regression models.

Economic Conservatism

The CPEP survey included several questions related to economic and fiscal public policy. Rather than investigate each question separately, an index was created to gauge respondents' underlying attitudes with respect to the role of government in the economy. Indexes are a common tool in survey analysis. By combining respondents' scores on multiple questions, indexes provide a more comprehensive, stable and plausible indication of opinion than individual variables (Sapsford, 2006: 222-223).

The first step in creating the index was to conduct a principle component analysis (PCA) of the 11 variables deemed relevant to economic attitudes. PCA organizes variables according to components that explain dimensions in the data, enabling the researcher to focus on those variables that capture the most common information (Vyas and Kumaranayake, 2006). This method identified three candidate questions, which asked respondents to indicate on a scale of 0 to 10 their position on economic and fiscal issues. The questions were designed such that a low score indicates a left-wing attitude

and a high score a right-wing attitude. An option for ‘Unsure’ was also provided. The questions are reproduced in Table 4.

Table 4: CPEP Questions Used in Index of Economic Attitudes

Question		Scale		
Q6. Please indicate where on these scales you would place yourself:				
Taxes and Spending	0 = Favours raising taxes to increase public services	1 2 3 4 5 6 7 8 9	10 = Favours cutting public services to cut taxes	Unsure
Market Regulation	0 = Favours high levels of regulation and control of the market	1 2 3 4 5 6 7 8 9	10 = Favours deregulation of markets at every opportunity	Unsure
Environment and Environmental Growth	0 = Supports protection of the environment, even at the cost of economic growth	1 2 3 4 5 6 7 8 9	10 = Supports economic growth, even at the cost of damage to the environment	Unsure

Next, a reliability analysis was conducted to determine the internal consistency of responses to the three questions. This test highlights the degree to which the variables in question measure the same phenomenon. In this case, the resulting Cronbach’s alpha score ($\alpha = 0.70$) indicates satisfactory internal validity for combination into an index (Bland and Altman, 1997: 572).

The final step was to determine how to treat ‘Unsure’ responses. Simply omitting these respondents would have significantly reduced the sample size: ‘Unsure’ comprised 15.5%, 23.5% and 11.4% of responses, respectively. As well, discarding these responses

may have affected the responsiveness of the sample, since previous research indicates that attraction to unsure, or no-opinion, options is greatest among low-education respondents (Krosnick et al., 2002).

There is little consensus in the literature regarding the proper treatment of these variables in survey analysis. Statistical studies of this question have produced varied results, precluding the formulation of general principles for using and scoring such categories (DeMars and Erwin, 2004). There is some precedent, however, for counting unsure responses as neutral scores. Granberg and Westerberg (1999) construct indexes using 'Don't Know' responses as the mid-point score between two extreme positions, and compare the results to similar indexes that omit these responses. The result is minimal difference with respect to reliability, and a similarly negligible effect when the indexes are used as dependent variables in regression analyses. DeMars and Erwin (2005) administer surveys of four-point Likert scale questions with two additional options, 'Neutral' and 'Unsure.' They report no consistent difference between those who chose 'Neutral' and those who chose 'Unsure,' and conclude that it therefore "seems reasonable to combine these categories for scoring" their survey (DeMars and Erwin, 2005: 9).

The same approach was chosen for the present study. Among CPEP respondents, an 'Unsure' answer was counted as a 5, or as a mid-point score between 0 (an extreme left-wing response) and 10 (an extreme right-wing response). After recoding the data accordingly, a second reliability analysis was run to check the internal consistency of the new variables. The resulting Cronbach's alpha score ($\alpha = 0.65$) indicates a small reduction in reliability, but sufficient overall internal consistency to justify the continued use of the variables in an index.

The final step was to sum each respondents' scores on all three questions. The resulting index of economic attitudes, measured by the ECONATT variable, spans from 0 (an extreme left-wing score) to 30 (an extreme right-wing score), with a mean of 15.89 and a standard deviation of 5.32.

Moral Traditionalism

As in the preceding section, the first step in the analysis was to identify whether relevant variables could be combined into an index. The data highlighted for this purpose come from the following questions.

Table 5: CPEP Questions Related to Moral Traditionalism

Question		Scale		
Q6. How do you feel about:				
Feminists?	0 = Really dislike the group	1 2 … 98 99	100 = Really like the group	
Gays and Lesbians?	0 = Really dislike the group	1 2 … 98 99	100 = Really like the group	
Q64. Please indicate where on this scale you would place yourself:				
Moral Policies	0 = Favours more traditional policies on matters such as abortion, homosexuality, and euthanasia	1 2 3 4 5 6 7 8 9	10 = Favours less traditional policies on matters such as abortion, homosexuality, and euthanasia	Unsure
Q127. For each of the following statements, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.				
This country would have fewer problems if there were more emphasis on traditional family values.	1 = Strongly Agree	2 3	4 = Strongly Disagree	
The world is always changing and we should adapt our view of moral behaviour to these changes.	1 = Strongly Agree	2 3	4 = Strongly Disagree	

An initial reliability test on these variables indicated insufficient correlation (α = 0.41) for combination in an index. A test of the two questions regarding opinions of feminists and homosexuals produced a stronger correlation coefficient (α = 0.63), although it remained slightly too low to justify combination (and, in any case, the resulting index would have measured only two variables). Instead, responses to individual questions were tested separately as dependent variables. 'Unsure' responses to the question regarding moral policies were recoded as 5s.

Political Efficacy

Two sets of questions on the CPEP survey addressed respondents' perceived political efficacy. These questions are listed in Table 6.

Table 6: CPEP Questions Related to Political Efficacy

Question		Scale		
Q12. Thinking about all types of governments:				
I don't think they care much what people like me think.	1 = Strongly Agree	2 3	4 = Strongly Disagree	
Sometimes politics and government seem too complicated to understand.	1 = Strongly Agree	2 3	4 = Strongly Disagree	
People like me don't have any say about what government does.	1 = Strongly Agree	2 3	4 = Strongly Disagree	
Generally, those elected to office soon lose touch with the people.	1 = Strongly Agree	2 3	4 = Strongly Disagree	
How satisfied are you with the way democracy works				
Q9. At the federal level?	1 = Very satisfied	2 3	4 = Not at all satisfied	
Q10. At the provincial level?	1 = Very satisfied	2 3	4 = Not at all satisfied	
Q11. In your municipality?	1 = Very satisfied	2 3	4 = Not at all satisfied	
Q68. Please indicate where on this scale you would place yourself:				
Urban-Rural Interests	0 = Promotes urban interests above others	1 2 3 4 5 6 7 8 9	10 = Promotes rural interests above others	Unsure

The final question in Table 6, which deals with the prioritization of rural versus urban issues, is not explicitly about political efficacy. However, it arguably addresses a potential source of disaffection, which is perceived government neglect. If rural residents recorded higher scores on this question than urban residents – in other words, if they more consistently emphasized their preference for the prioritization of rural issues – it may be evidence that rural Nova Scotians feel distant from, or even mistreated by, the provincial government.

An initial reliability test of all eight questions in Table 6 suggested that their data were not consistent enough to be combined into a single index. A factor analysis indicated that two separate indexes would be appropriate, the first containing the first four questions and the second containing the three questions regarding satisfaction with democracy. The final question was retained as a separate variable.

Subsequent reliability tests confirmed these assumptions. The first four questions were combined to form the POLEFF variable ($\alpha = 0.71$), with scores ranging from 4 (an expression of low perceived political efficacy) to 16 (an expression of high perceived efficacy). The questions about satisfaction with democracy were combined into the SATDEM variable ($\alpha = 0.73$), ranging from 3 (very satisfied with the operation of democracy) to 12 (very unsatisfied with democracy).

Localism

The Ivany Report suggests that Nova Scotians need to adopt a provincial perspective to economic development. According to the report, a narrow localism currently prevails in many communities, leading to the prioritization of short-term but unsustainable gains –

inefficient government subsidies, for example – over temporary sacrifices that could translate into long-term growth. As the Ivany Report puts it, "out province and our people need 'a new attitude' and a greater sense of being citizens of Nova Scotia and not just of their local area" (6). To examine whether this is the case I used data from two questions, which are contained in Table 7.

Table 7: CPEP Questions Related to Localism

Question		**Scale**		
Q4. How much do you identify with:				
Your city/town?	1 = A great deal	2 3	4 = None at all	
Nova Scotia?	1 = A great deal	2 3	4 = None at all	
Q16. How interested are you in:				
Municipal politics?	0 = No interest	2 3 4 5 6 7 8 9	10 = Great deal of interest	Unsure

The responses to these questions did not exhibit sufficient internal consistency to justify the creation of an index. Again, as with the questions combined to form the ECONATT variable (the index of economic attitudes), 'Unsure' responses to the question about regarding interest in municipal politics were coded as 5s.

Sympathy for Outsiders

My interest in analyzing attitudes towards outsiders stems from the Ivany Report's call to address the reluctance by some Nova Scotians, particularly in rural communities, to expand efforts to attract and retain immigrants (25-26). The CPEP survey did not include any questions about immigration policy or about immigrants in general. Therefore, I used

as a proxy measure responses to two questions on attitudes towards visible minorities (see Table 7). Although not identical to attitudes towards immigrants, the attitudes measured by these questions provide an approximate indication of how Nova Scotians feel about perceived outsiders. Data from each question were used separately as a dependent variable in my analysis.

Table 8: CPEP Questions Related to Sympathy for Outsiders

Question	Scale		
Q6. How do you feel about:			
Racial minorities?	0 = Really dislike the group	1 2 … 98 99	100 = Really like the group
Q43. For the following statement, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.			
It is more difficult for non-whites to be successful in Canadian society than it is for whites.	1 = Strongly Agree	2 3	4 = Strongly Disagree

Environmentalism

To test environmentalist attitudes I used three questions, which are contained in Table 9. Again, the data from each question were treated as separate dependent variables. That is, due to insufficient internal consistency I did not combine these responses into an index.

Table 9: CPEP Questions Related to Environmentalism

Question	Scale		
Q6. How do you feel about:			
Environmentalists?	0 = Really dislike the group	1 2 … 98 99	100 = Really like the group
Q45. Should your provincial government spend more, less, or about the same as now on:			
The environment?	1 = More	2	3 = Less
Q127. For the following statement, please indicate if you strongly agree, somewhat agree, somewhat disagree, or strongly disagree.			
Protecting the environment is more important than creating jobs.	1 = Strongly Agree	2 3	4 = Strongly Disagree

Province-wide Averages of Attitudinal Measures

In total, I identified 15 attitudes to be investigated as dependent variables. Of these, seven are categorical and eight are interval. To ease interpretation and improve analytical efficiency, I recoded the categorical variables into binary variables. Statements of strong agreement (e.g. ‘Strongly Agree’ or ‘A great deal’) were coded as 1 and all others as 0. As with the decision to use three regions rather than seven, this decision involved sacrificing some detail, particularly with respect to modest attitudinal variation between spatial categories. Yet, on the other hand, it facilitates the identification of large differences between regions and rural-urban categories, which is the goal of this thesis.

Table 10 reports the means and standard deviations of these dependent variables.

Table 10: Dependent Variable Measures of Central Tendency

Variable	Description	Values	Mean	Standard Deviation
Economic Conservatism				
ECONATT	Index of economic attitudes	0-30	15.50	5.43
Moral Traditionalism				
FEMATT	How do you feel about feminists?	0-100	59.29	29.73
GLATT	How do you feel about gays and lesbians?	0-100	75.09	25.99
MORAL	Favour traditional policies on moral issues?	0-10	6.74	3.13
TRADVAL	Less societal problems if greater emphasis on traditional family values?	0-1	0.24	0.43
ADAMOR	Adapt view of moral behaviour?	0-1	0.15	0.35
Political Efficacy				
POLEFF	Index of perceived political efficacy	4-16	9.31	2.63
SATDEM	Index of satisfaction with democracy	3-12	7.09	1.93
GOVPRI	Urban interests or rural interests?	0-10	5.65	2.02
Localism				
IDTOWN	Identifies with city/town?	0-1	0.43	0.50
IDPROV	Identifies with Nova Scotia?	0-1	0.53	0.50
MUNIPOL	Interested in municipal politics?	0-10	6.59	2.51
Sympathy for Outsiders				
RMATT	How do you feel about racial minorities?	1-100	73.65	26.04
NONWHI	More difficult for non-whites than whites to succeed?	0-1	0.15	0.36
Environmentalism				
ENVATT	How do you feel about environmentalists?	0-100	67.35	26.21
ENVSPE	Should provincial government spend more, the same or less on the environment?	0-1	0.42	0.49
ENVJOB	Protecting the environment is more important than creating jobs?	0-1	0.13	0.34

Demographic and Socioeconomic Measures

When investigating possible connections between where respondents live and their attitudes, it is important to control for other characteristics which may affect those attitudes. The CPEP survey asked respondents to provide basic demographic and socioeconomic information. A summary of these data is provided in Appendix 1. Many of these indicators are nominal with no clear hierarchical order. To include them as independent variables in subsequent quantitative analyses, I transformed the data into binary variables. A value of '1' indicates that a respondent exhibited the characteristic in question whereas a value of '0' indicates the opposite. In certain cases, I combined categories; the BRITISH variable, for example, includes respondents who identified as possessing 'British', 'English' or 'Scottish' heritage. Other measures of ethnicity, including for Aboriginal and African-Nova Scotian respondents, were omitted due to the very small number of respondents who selected these options (32 respondents identified as Aboriginal and 8 as African-Nova Scotian).

The independent variables are listed in Table 2, along with province-wide measures of their central tendency. AGE is an interval variable measured in years, obtained from a question asking year-of-birth. INCOME is an interval variable measuring a respondent's total annual household income in units of $10,000. Respondents who selected 'Prefer not to say' in response to the income question were omitted from the mean and standard deviation calculations. The scale for INCOME responses spans from 1, 'Less than $20,000', to 10, 'More than $100,000.'

Table 11: Independent Variable Measures of Central Tendency

Variable[12]	Description	Mean	Standard Deviation
AGE	Age of respondent	49.94	14.80
INCOME	Total annual household income	5.99	3.12
FEMALE	Gender is female	0.51	0.50
UNIGRAD	Holds at least one university degree	0.49	0.50
MARRIED	Is married	0.60	0.49
OWNHOME	Home is owned by a family member	0.83	0.38
EMPLOYED	Employed full- or part-time	0.60	0.49
ACADIAN	Of Acadian descent	0.09	0.29
BRITISH	Of British descent	0.73	0.44
CHRISTIAN	Belongs to a Christian denomination	0.58	0.50
VERYREL	Religion is very important	0.23	0.42
LIB	Identifies with the NS Liberal Party	0.29	0.45
NDP	Identifies with the NS NDP	0.19	0.39
PC	Identifies with the NS PC Party	0.15	0.36
OTHERPARTY	Identifies with no party or a minor party	0.36	0.48
IDRURAL	Identifies as residing in a rural area	0.53	0.50
IDSUBURBAN	Identifies as residing in a suburban area	0.22	0.41
IDURBAN	Identifies as residing in an urban area	0.25	0.43

My decision to use partisan affiliation as an independent variable warrants justification. Other studies, including for example Roy et al. (forthcoming), use party support as the dependent variable in their analysis of spatial variation in political attitudes across Canada. I diverge from this approach for two reasons. The first is simply that the

[12] AGE and INCOME are interval variables, and their mean and standard deviation should be interpreted differently than those of the other variables, which are binary.

Report, perhaps understandably, is mostly silent on questions of partisanship. Its focus instead lies with attitudes and behaviours relevant to economic development, which may or may not align with ideological or policy differences between parties. This, in turn, speaks to the second reason, which is that partisan affiliation is often a function of non-ideological factors. In Nova Scotia, as Carbert notes, politics are often a family affair, operating “on a remarkably personal and accessible scale: it sometimes seems that almost everyone has a politician somewhere in the family tree and can claim some sort of political lineage” (forthcoming: 2). As well, the assumption that partisanship patterns do not align strictly to the left-right continuum ties into the aforementioned political culture literature, some of which argues that Nova Scotian politics are generally non-ideological. Beck, for instance, reports in a study of the party system that “differences in principle between the old parties are practically non-existent” (1976: 178).

Finally, in addition the variables listed above, I also generated interaction terms to account for potential non-additive interactive effects between demographic traits. Previous research, for example, suggests that education and gender are interactive with respect to support for feminism, in that higher education fosters support feminism more so for women than for men (Howell and Day, 2000). As another example, income and gender have been found to be interactive with respect to environmental attitudes and behaviour (Tindall et al., 2003). In addition, given the different occupational structures traditionally associated with rural and urban economies, one may reasonably expect income and education to be interactive as well. That is, as income rises, attitudes may be expected to change more quickly among university-educated respondents than among others. I therefore created three interaction terms to include in the regression analyses,

FEMALE*UNIGRAD, FEMALE*INCOME and INCOME*UNIGRAD.[13] These variables were designated REM*UNI, FEM*INC and INC*UNI, respectively.

Quantitative Investigation of Spatial Variation of Attitudes

I began my analysis by running chi-square tests on respondents' self-identification as rural, suburban or urban, which serves as an indication of the extent to which regional differences are perceived by Nova Scotians to be equivalent to rural-urban ones. Next, I applied chi-square and ANOVA tests to make a preliminary determination regarding the extent of spatial variation in the dependent variables. The goal in this step was to determine whether the distribution of attitudes in each regional and rural-urban category differed from one another.

Chi-square and ANOVA are different tests and therefore their results should be interpreted slightly differently. ANOVA is suitable for analyzing differences in means where the independent variable is categorical and the dependent is an interval variable. Chi-square tests, on the other hand, are appropriate for testing the independence of two categorical variables (Seltman, 2014). Consequently, in my analysis, I applied chi-square tests to the categorical dependent variables and ANOVA tests to the interval variables.

Based on these results, I selected seven dependent variables for further analysis. I developed regression models to identify the specific nature of the relationship between the two sets of spatial categories (regional and rural-urban) and the seven dependent variables, after controlling for the independent variables described above.

[13] The interaction terms were mean centered using the formula $(x_1 - (\Sigma(x_1 \dots x_n)/n))*(y_1 - (\Sigma(y_1 \dots y_n)/n))$.

Two types of regression models were used, OLS linear and binary logistic. The former were used for the interval dependent variables and the latter for the categorical dependent variables. To ensure the validity of the OLS results I conducted diagnostics to check that the assumptions of the OLS model were met. To test for heteroscedasticity I generated plots of residuals versus predicted values. Normality was assumed in all cases, because each interval dependent variable has at least 10 values. This is close to the threshold suggested by Seltman, who notes that although there "is no hard-and-fast rule … 11 different values might be considered borderline, while, e.g. 5 different values would be hard to justify as possibly consistent with a Gaussian distribution" (2014: 173). To test for multicollinearity, I used the collinearity diagnostics included in SPSS.[14] In each case, the results indicated that the OLS model was appropriate.

In constructing the models, I chose not to apply weighting to the data. The literature is unclear about whether sampling weights ought to be applied in linear regression analysis (Pfefferman, 1993: 317; Solon et al., 2013: 1). A rather simple solution is offered by Winship and Radbill (1994), who recommend running both weighted and unweighted models and comparing the parameter estimates. "If the parameter estimates are substantively similar," they write, "then the OLS [unweighted] estimates are preferable because they are more efficient and the estimated standard errors will be correct" (Winship and Radbill, 1994: 253). In the models presented below, the results are generally similar in both cases (weighted and unweighted). Small but not substantial differences were observed in goodness-of-fit values, and the significance of the NDP variable was reduced slightly. For the most part, however, the parameter

[14] These include eigenvalue condition indices, tolerances, variance inflation factor (VIF) values and regression coefficient variance-decomposition matrices.

estimates remained substantively similar. Moreover, given the sufficient sample sizes for the variables of primary interest – the rural-urban and regional categories – I was satisfied that weighting could be safely left off.

Hypotheses

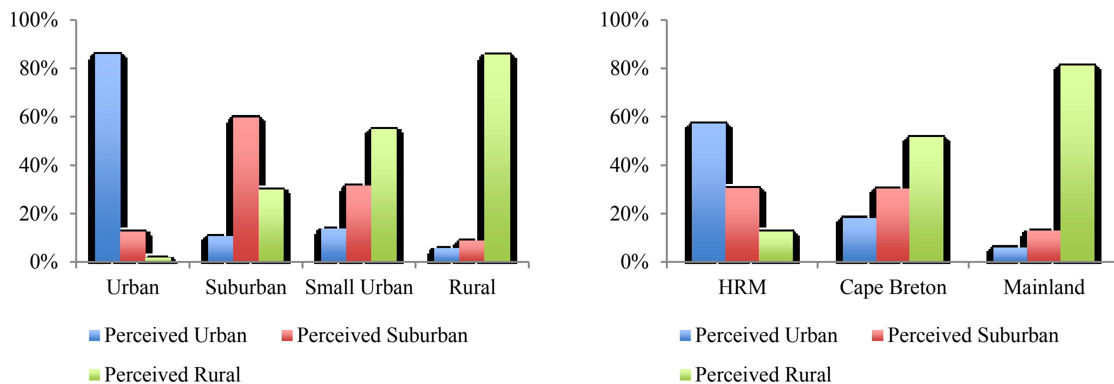
Based on the literature review presented in Chapter 2 as well as the findings of the Ivany Report, I expect to find evidence that attitudinal variations in Nova Scotia correlate with place of residence. Beyond that, I expect my analysis to uncover specific evidence for the conservatism of non-urban residents, expressed as a preference for right-wing economic policies, traditional values and less sympathy than urban residents for outsiders. The literature on Atlantic Canadian political culture leads me to predict that non-urban and non-HRM residents will exhibit higher levels of localism and lower levels of perceived political efficacy. Finally, given recent studies of environmental attitudes, I expect to find rural and Mainland residence to be correlated with slightly higher support for economic development at the expense of environmental protection. These statements may be recast as a series of formal hypothesis statements, with the null hypothesis in each case representing the notion that place of residence is independent of public opinion.

Chapter 4: Analysis and Results

Perceived Rurality

As a preliminary test I used crosstabs to compare residents' actual residence with their perception of the rurality of their community. The data for these tests were drawn from a CPEP question that asked respondents to self-identify their community as rural, urban or suburban. Comparing these responses to my categories permits an initial estimation of the extent to which Nova Scotians' perceptions of rural and urban reflect administrative and demographic definitions of these concepts. It also provides a sense of the degree to which, in Nova Scotia, rural and urban are code words for regional differences. Finally, it speaks to the literature referenced in Chapter 2 regarding the effect of local cultural and historical particularities in shaping perceptions of place. The results of the crosstabs are illustrated in Figure 5.

Figure 5: Overlap of Perceived Rurality with Place of Residence



$\chi^2 = 582.21$ (p = 0.00)

$\chi^2 = 341.56$ (p = 0.00)

The chi-square values for both crosstabs illustrated in Figure 5 support rejection of the null hypothesis that where an individual lives is independent of how they perceive the rurality (or urbanity) of their community. More specifically, the results indicate considerable overlap between respondents' perception of rurality and the demographic and administrative definitions that underlie my two sets of categories. In my urban and rural categories (see the left graph in Figure 5), nearly every respondent identified their community as rural or urban, respectively. The suburban and small urban categories appear to be less consistent, although in the suburban category approximately 60% of respondents reported living in a suburban area. The small urban category, which is based on Statistics Canada's census agglomeration (CA) concept, includes one or more census subdivisions (CSDs) around a population centre core that has a population of at least 10,000. In plain terms, this means that the small urban category covers both densely- and sparsely-populated areas. The diversity in responses in this category is therefore not surprising. Overall, however, the suburban and small urban categories appear to reflect relatively similar (although certainly not identical) patterns of perceived rurality, which in turn provides preliminary evidence to suggest that there may be attitudinal similarities between suburban HRM and small urban respondents.

The second graph provides mixed evidence for the notion that regional differences are analogous to rural-urban ones in Nova Scotia. The Mainland category offers the strongest evidence for this assumption – indeed, it is particularly striking in this respect – with over 85% of respondents indicating that they live in a rural area. The HRM, on the other hand, exhibits greater diversity. A majority of HRM respondents (57.1%) identified their area of residence as being urban, with about a third (30.4%)

selecting suburban and a small minority (12.5%) selecting rural. The results for the Cape Breton category offer evidence of the region's unique character, which contains both the remnants of "a dynamic and prosperous industrial community" (Frank 1977: 6) and sparsely-populated and remote highland villages. Although a small majority of Cape Breton respondents (51.5%) indicated living in a rural community, significant proportions perceived their communities to be suburban (30.3%) and urban (18.2%). Yet the overall pattern for all three regions is not as convincing as one might expect were the two categories – rural-urban and region – identical.

Although perhaps slightly peripheral to the main focus of this thesis, these crosstabs are useful to consider for at least two reasons. First, they provide some reassurance that the categories I have applied for sorting respondents correspond to how respondents themselves think about Nova Scotia's regions and places. These categories are, to a certain extent, meaningful. Second, the crosstabs illustrate that my use of both rural-urban and regional categories is warranted, because it is not clear that regional variations correspond exactly to rural-urban ones. In closing, it is important to emphasize that these findings are (very) preliminary, and serve only as the starting point for further analysis.

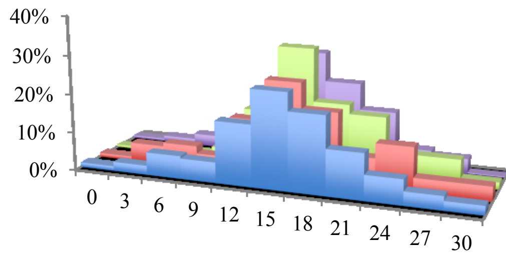
Initial Evidence of Spatial Variation without Controls

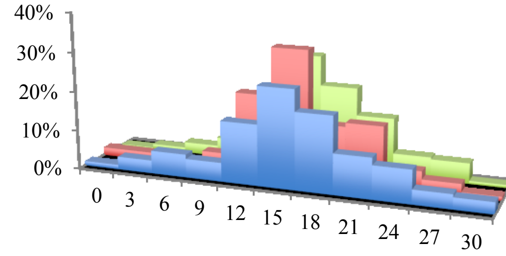
The next step was to depict the distribution of the dependent variables in each spatial category using, as appropriate, crosstabs and histograms. The results were further analyzed using chi-square and ANOVA tests. My goal here was to identify how attitudes

differ across the province and across the rural-urban spectrum. These tests provide an initial sense of the degree to which space is correlated with attitudes. The results are depicted in Figure 6, which lists the variables in the same order as Table 4. Also reported are the mean values for each category. Chi-square (χ^2) and ANOVA results that are significant at the 0.10 level are bolded. Small p values arising from large χ^2 or F values indicate significant differences based on where a respondent lives. Conversely, p values above 0.10 arising from small χ^2 or F values indicate a lack of evidence for attitudinal differences based on where a respondent lives.

Figure 6: Spatial Distribution of Dependent Variables

ECONATT – Index of economic attitudes (left-wing to right-wing).





Urban Suburban Small Urban Rural

HRM Cape Breton Mainland

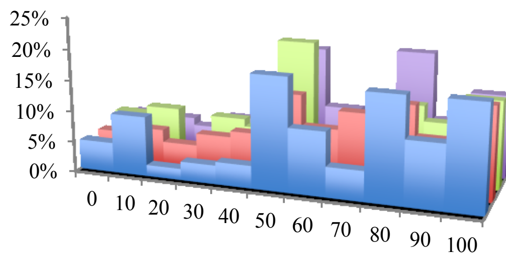
F = 2.11 (**p = 0.10**)

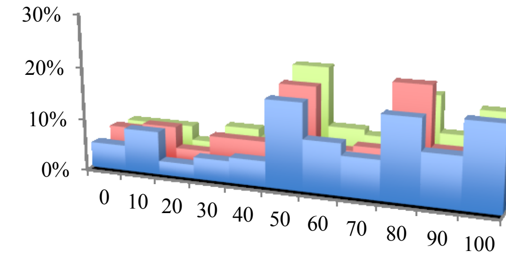
Urban	Suburban	Small Urban	Rural
14.99	15.38	16.36	15.27

F = 1.38 (p = 0.25)

HRM	Cape Breton	Mainland
15.14	15.08	15.77

FEMATT – Attitudes towards feminists (dislike to like).





Urban Suburban Small Urban Rural

HRM Cape Breton Mainland

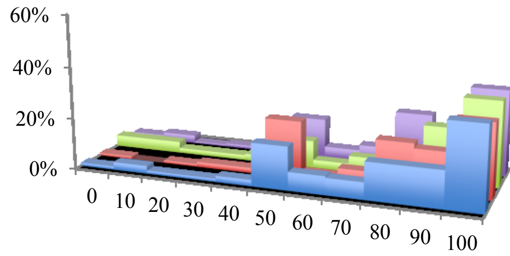
F = 0.54 (p = 0.66)

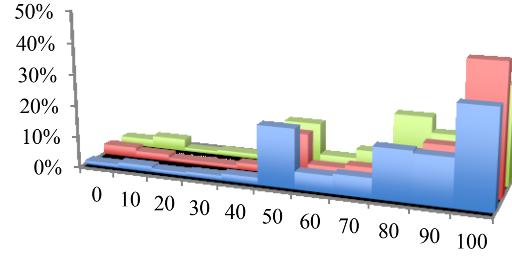
Urban	Suburban	Small Urban	Rural
60.65	59.59	56.80	59.33

F = 0.51 (p = 0.60)

HRM	Cape Breton	Mainland
60.25	56.67	59.34

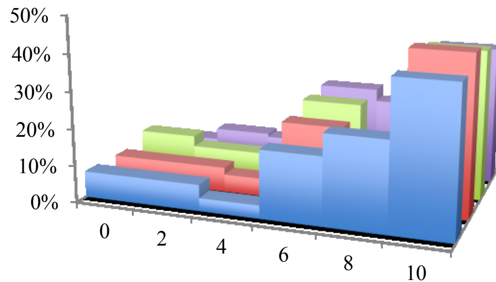
GLATT – Attitudes towards gays and lesbians (dislike to like).

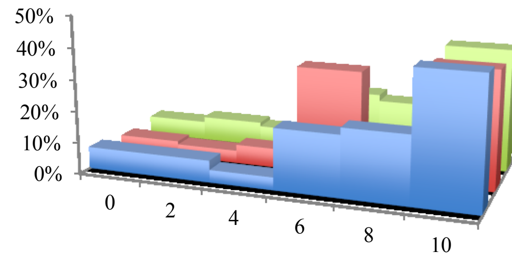




F = 0.20 (p = 0.90)				F = 0.48 (p = 0.62)		
Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
67.42	68.12	66.85	67.69	75.07	77.41	74.48

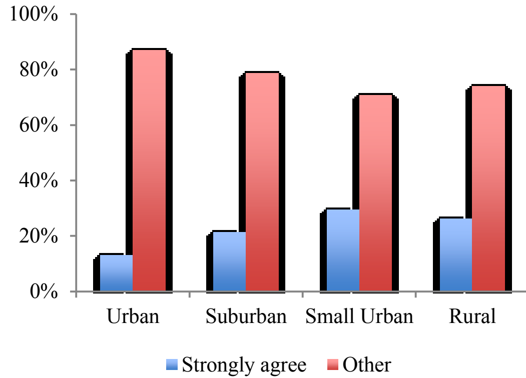
MORAL – Favours traditional or non-traditional policies on matters such as abortion, homosexuality, and euthanasia (traditional to non-traditional).

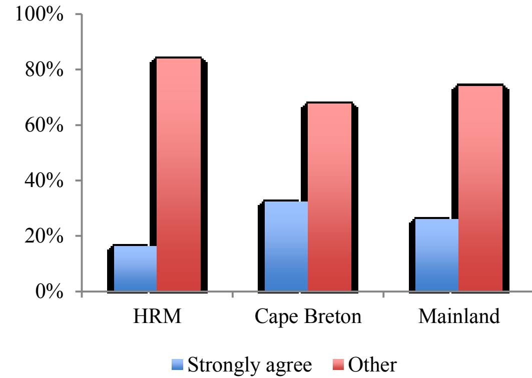




F = 0.48 (p = 0.69)				F = 0.32 (p = 0.73)		
Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
6.87	6.86	6.50	6.77	6.86	6.71	6.67

TRADVAL – This country would have fewer problems if there were more emphasis on traditional family values.

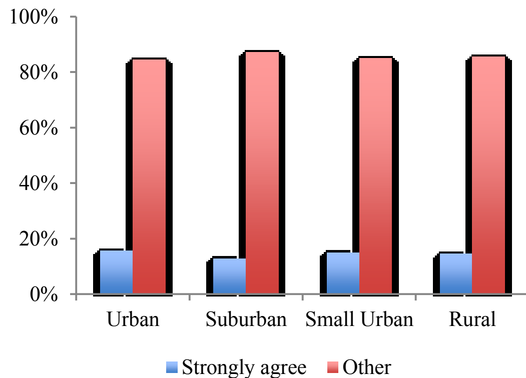


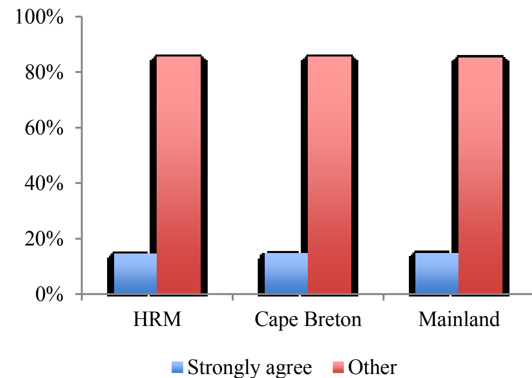


$\chi^2 = 15.12$ (**p = 0.00**) $\chi^2 = 13.70$ (**p = 0.00**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.13	0.21	0.29	0.26	0.16	0.32	0.26

ADAMOR – The world is always changing and we should adapt our view of moral behaviour to these changes.

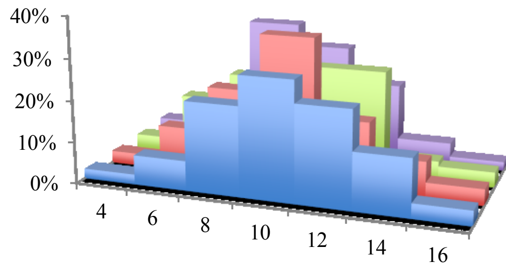


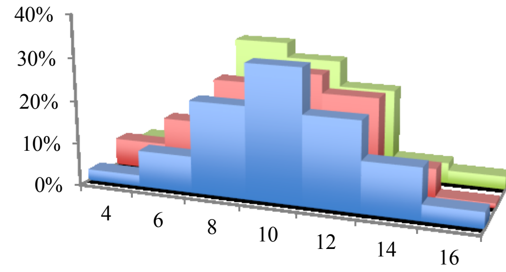


$\chi^2 = 0.43$ (p = 0.94) $\chi^2 = 0.01$ (p = 1.00)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.16	0.13	0.15	0.15	0.14	0.15	0.15

POLEFF – Index of perceived political efficacy (low efficacy to high efficacy).

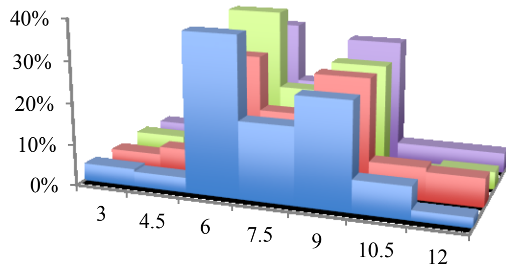


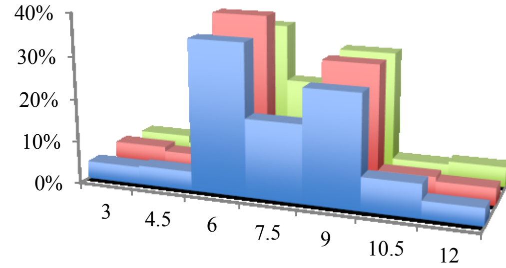


F = 4.61 (**p = 0.00**) F = 5.44 (**p = 0.01**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
9.92	9.38	9.18	9.02	9.71	8.97	9.09

SATDEM – Index of satisfaction with functioning of democracy (very satisfied to very unsatisfied).

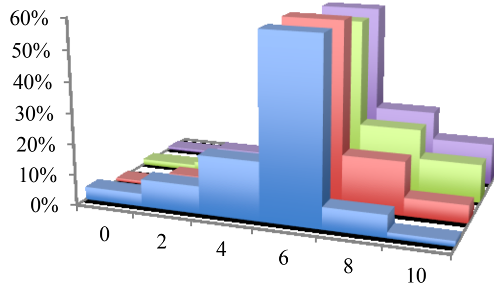


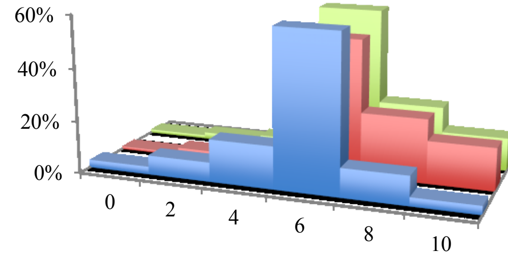


F = 0.97 (p = 0.40) F = 0.20 (p = 0.82)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
6.97	7.27	6.97	7.18	7.09	7.00	7.13

GOVPRI – Preference for government prioritization of rural and urban issues (urban to rural).

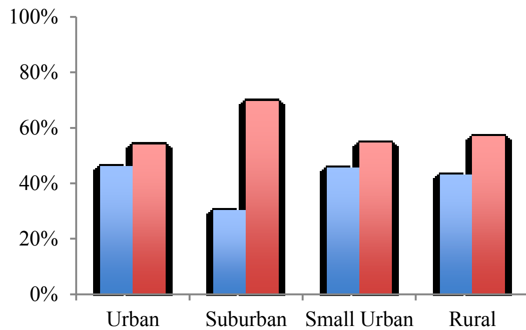


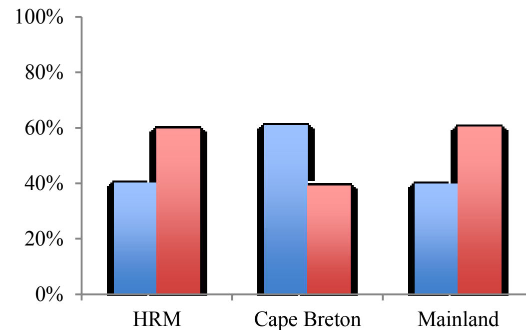


F = 26.16 (**p = 0.00**) F = 33.77 (**p = 0.00**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
4.59	5.35	5.96	6.11	4.88	6.20	6.02

IDTOWN – How much do you identify with your city/town?

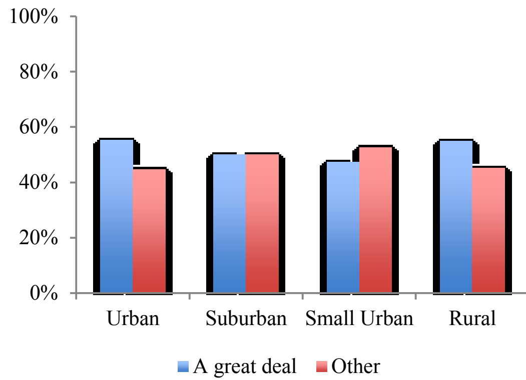


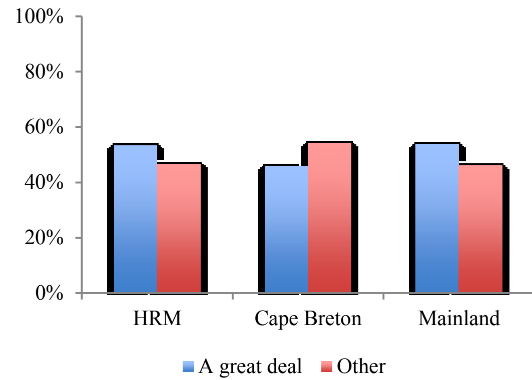


χ^2 = 7.57 (**p = 0.06**) χ^2 = 15.12 (**p = 0.00**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.46	0.30	0.46	0.43	0.40	0.61	0.40

IDPROV – How much do you identify with Nova Scotia?

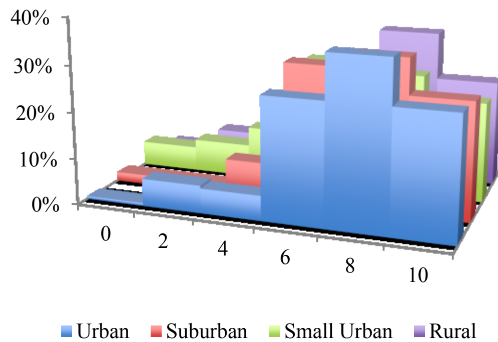


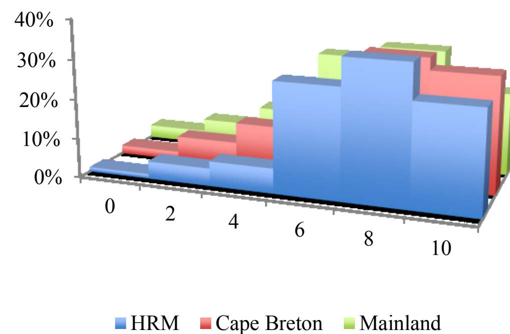


$\chi^2 = 3.34$ (p = 0.34) $\chi^2 = 2.08$ (p = 0.35)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.55	0.50	0.47	0.55	0.53	0.46	0.54

MUNIPOL – Interest in municipal politics (not at all to a great deal).

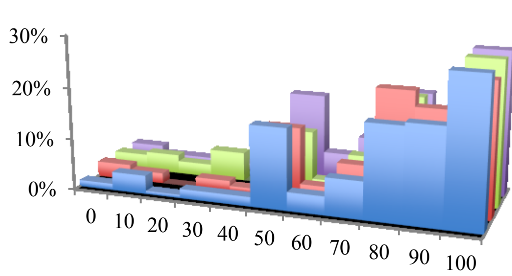


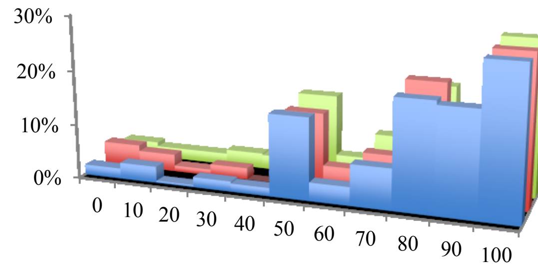


F = 3.69 (**p = 0.01**) F = 4.91 (**p = 0.01**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
7.30	7.33	6.53	6.82	6.92	6.73	6.31

RMATT – Attitudes towards racial minorities (dislike to like).

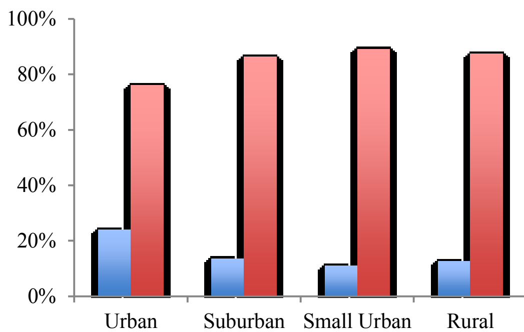


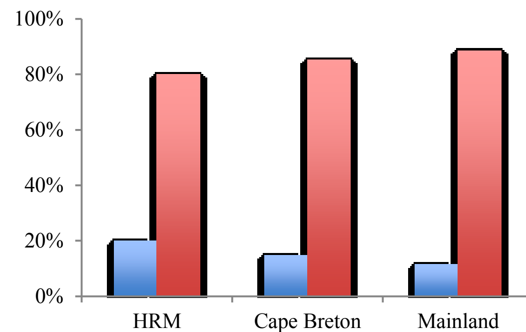


F = 0.57 (p = 0.64) F = 0.83 (p = 0.44)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
74.89	75.68	72.50	72.71	75.19	72.99	73.55

NONWHI – It is more difficult for non-whites to be successful in Canadian society than it is for whites.

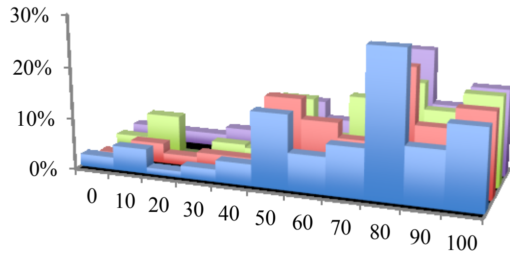


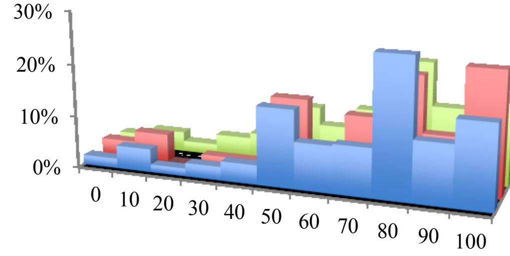


χ^2 = 14.36 (**p = 0.00**) χ^2 = 9.35 (**p = 0.01**)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.24	0.14	0.11	0.13	0.20	0.15	0.11

ENVATT – Attitudes towards environmentalists (dislike to like).

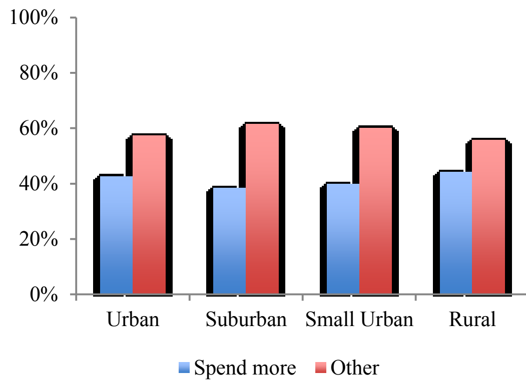


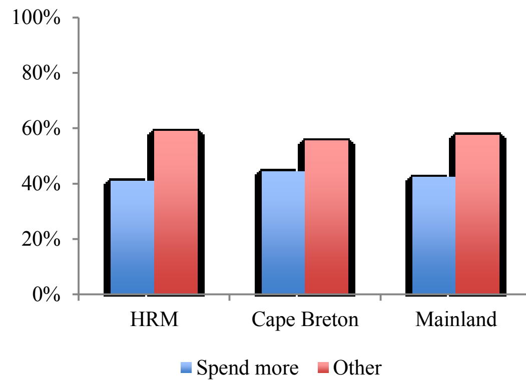


F = 0.06 (p = 0.98) F = 0.39 (p = 0.68)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
67.69	69.52	66.91	57.51	67.69	69.52	66.91

ENVSPE – Should your provincial government spend more, less or about the same on the environment?

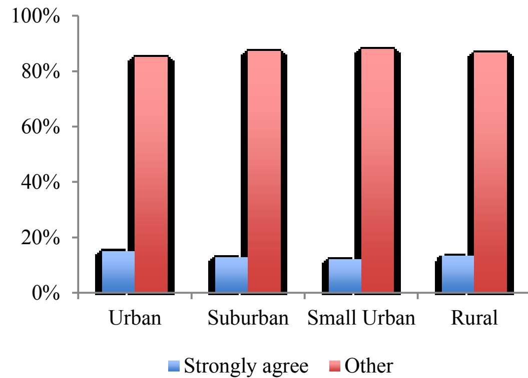


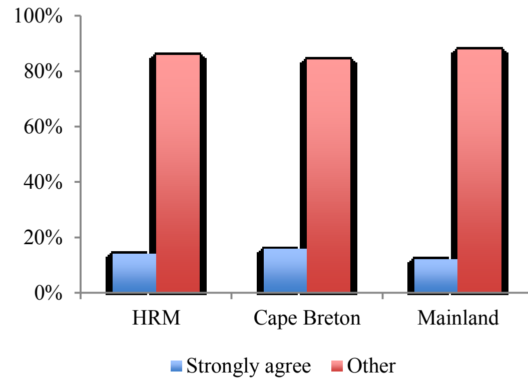


χ^2 = 1.54 (p = 0.67) χ^2 = 0.36 (p = 0.83)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.43	0.38	0.40	0.44	0.41	0.44	0.42

ENVJOB – Protecting the environment is more important than creating jobs.





$\chi^2 = 1.10$ ($p = 0.58$)

$\chi^2 = 0.66$ ($p = 0.88$)

Urban	Suburban	Small Urban	Rural	HRM	Cape Breton	Mainland
0.15	0.13	0.12	0.13	0.14	0.16	0.12

The preceding tests suggest that place of residence is correlated with variation in the following dependent variables: ECONATT (although only for the rural-urban categories), TRADVAL, POLEFF, GOVPRI, IDTOWN, MUNIPOL and NONWHI. Notably, none of the themes identified above for grouping the dependent variables – moral traditionalism, political efficacy and so on – were consistent with respect to associations between their constituent variables and rural-urban and regional categories (except economic conservatism, whose sole measure is the ECONATT variable). Of the variables assumed to measure moral traditionalism, for example, only one – TRADVAL, which indicates respondents' support for the notion that a return to traditional values would result in fewer societal problems – is dependent on place of residence. Similarly, with respect to political efficacy, a respondent's perceived political efficacy and support for the prioritization by government of rural issues are dependent on place of residence, but their satisfaction with how democracy is functioning is not.

Finally, although the tests applied above provide little data about the magnitude of the differences between the spatial categories, a brief visual review of the graphs in Figure 6 reveals few instances of dramatic divergence. For the most part, it seems that the categories exhibit broadly similar distributions. There are, however, some exceptions. Cape Breton residents, for example, appear to support traditional values at higher rates than HRM and Mainland respondents, and they also report higher rates of identification with their town (measured by the IDTOWN variable). Rural and Mainland respondents are skewed further to the left than other respondents with respect to their perceived political efficacy (POLEFF). The urban and HRM categories exhibit greater moderation in terms of whether government should prioritize urban or rural issues (GOVPRI), greater interest in municipal politics (MUNIPOL) and higher support for the notion that it is more difficult for non-whites than whites to succeed in Canadian society (NONWHI).

Multivariate Analysis with Controls

The next step in my analysis was to introduce controls for demographic characteristics and partisan affiliation. At issue is whether the identified spatial variation is the result of differences across the province in education, income and so forth, or due to some other, geographic effect. The following tables contain the results of the regression models developed for the seven dependent variables identified in the previous section. In each case two models were developed, the first to test the effects of the rural-urban variables and the other for the regional variables. The regression models enter predictor variables in sets of blocks. The first block contains demographic and socioeconomic variables such

as AGE, INCOME, FEMALE, etc. The second block enters the interaction terms for FEMALE, INCOME and UNIGRAD. The third block enters the partisan affiliation variables. Because these binary variables sum to one, a variable must be assigned as the reference category and omitted from the model. Here, the reference variable is LIB, which measures whether a respondent identifies with the NS Liberal party. Finally, the fourth block enters the binary spatial explanatory variables. HRM and urban were set as the reference categories. Consequently, the parameter estimates for the non-reference variables (RURAL, MAINLAND, etc.) illustrate the differential effect of residence in non-reference categories compared to reference categories.

The benefit of a block-wise approach lies in its identification of the contribution of each block to the overall model's goodness-of-fit. By isolating the separate effects of, in this case, demographic variables versus partisan and spatial ones it is possible to get a sense of their relative importance in explaining overall variation in the dependent variable. The results of the models are organized below according to the five themes for which spatial variation was identified: economic conservatism, moral traditionalism, political efficacy, localism and sympathy for outsiders.

The goodness-of-fit values reported at the bottom of each table reflect the goodness-of-fit of the entire model; the change in R^2 resulting from each block are reported separately in a table at the end of this section. Finally, note also that in the tables below, unstandardized coefficients are reported in the columns labelled 'B' for the OLS models (i.e. for ECONATT, POLEFF, GOVPRI and MUNIPOL), whereas odds ratios are reported in the columns labelled 'Exp(B)' for the binary logistic models (TRADVAL,

IDTOWN and NONWHI).[15] An odds ratio significantly less than 1 indicates that the variable in question suppresses the attitude; whereas an odds ratio significantly greater than 1 indicates that the variable enhances the attitude. For ease of reference, statistically significant parameter estimates are bolded.

[15] Odds ratios give the odds of "having an event occurring versus not occurring, per unit change in an explanatory variable, other things being equal" (Liao, 1994: 16). For example, in Table 13, the odds ratio associated with the CHRISTIAN variable in the rural-urban model indicates that Nova Scotians who identify with a Christian denomination are 2.31 times more likely than others to strongly agree with the importance of traditional values.

Table 12: Regression Models for Economic Conservatism

	OLS: ECONATT			
	Rural-Urban		**Regional**	
	B	**S.E.**	**B**	**S.E.**
Constant	**13.11**[a]	1.19	**13.52**[a]	1.18
Block 1				
AGE	**0.03**[b]	0.02	**0.03**[c]	0.02
FEMALE	**-1.29**[a]	0.40	**-1.30**[a]	0.40
UNIGRAD	**-1.55**[a]	0.42	**-1.54**[a]	0.42
INCOME	**0.26**[a]	0.08	**0.27**[a]	0.08
EMPLOYED	-0.09	0.46	-0.11	0.46
MARRIED	-0.49	0.45	-0.52	0.46
OWNHOME	-0.43	0.56	-0.32	0.56
CHRISTIAN	**1.81**[a]	0.41	**1.88**[a]	0.42
VERYREL	-0.04	0.47	-0.01	0.47
ACADIAN	**-1.56**[b]	0.68	**-1.67**[b]	0.68
BRITISH	-0.39	0.45	-0.32	0.45
Block 2				
FEM*UNI	0.64	0.82	0.49	0.82
FEM*INC	**-0.34**[a]	0.13	**-0.34**[b]	0.13
INC*UNI	-0.06	0.13	-0.07	0.13
Block 3				
PC	**2.42**[a]	0.62	**2.36**[a]	0.63
NDP	**-2.14**[a]	0.56	**-2.17**[a]	0.56
OTHERPARTY	0.07	0.48	-0.05	0.48
Block 4				
SUBURBAN	0.81	0.67	-	-
SMALLURBAN	**1.50**[b]	0.62	-	-
RURAL	0.64	0.54	-	-
CAPEBRETON	-	-	0.22	0.67
MAINLAND	-	-	0.66	0.44
	$R^2 = 0.19$		$R^2 = 0.19$	
	Adj. $R^2 = 0.17$		Adj. $R^2 = 0.17$	

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$. Unstandardized coefficients are the unstandardized coefficients of the final regression model. ECONATT values range from 0 (a left-wing view of government's role in the economy) to 30 (a right-wing view).

Table 13: Regression Models for Moral Traditionalism

	Binary Logistic: TRADVAL			
	Rural-Urban		Regional	
	Exp(B)	**S.E.**	**Exp(B)**	**S.E.**
Constant	**0.12**[a]	0.73	**0.17**[b]	1.18
Block 1				
AGE	1.01	0.01	1.01	0.01
FEMALE	0.90	0.24	0.89	0.24
UNIGRAD	**0.35**[a]	0.42	**0.37**[a]	0.25
INCOME	**0.86**[a]	0.05	**0.87**[a]	0.05
EMPLOYED	0.86	0.25	0.84	0.25
MARRIED	**1.93**[b]	0.27	**1.93**[b]	0.27
OWNHOME	1.06	0.31	1.15	0.30
CHRISTIAN	**2.31**[a]	0.25	**2.29**[a]	0.25
VERYREL	**3.89**[a]	0.24	**3.91**[a]	0.24
ACADIAN	0.96	0.39	0.97	0.39
BRITISH	0.78	0.26	0.83	0.25
Block 2				
FEM*UNI	0.77	0.50	0.68	0.49
FEM*INC	**0.80**[a]	0.08	**0.81**[a]	0.08
INC*UNI	1.06	0.08	1.06	0.08
Block 3				
PC	**2.31**[a]	0.30	**2.31**[a]	0.31
NDP	**0.40**[b]	0.38	**0.40**[a]	0.38
OTHERPARTY	0.93	0.26	0.93	0.26
Block 4				
SUBURBAN	**2.21**[c]	0.41	-	-
SMALLURBAN	**2.25**[b]	0.37	-	-
RURAL	**1.81**[c]	0.33	-	-
CAPEBRETON	-	-	1.52	0.36
MAINLAND	-	-	1.36	0.25
	Nagelkerke $R^2 = 0.34$		Nagelkerke $R^2 = 0.33$	

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$. Odds ratios are the odds ratios of the final regression model. TRADVAL values are 1 (responded 'strongly agree' to the statement, 'This country would have fewer problems if there were more emphasis on traditional family values') and 0 (all other responses).

Table 14: Regression Models for Political Efficacy

	OLS: POLEFF				**OLS: GOVPRI**			
	Rural-Urban		**Regional**		**Rural-Urban**		**Regional**	
	B	**S.E.**	**B**	**S.E.**	**B**	**S.E.**	**B.**	**S.E.**
Constant	**7.90**[a]	0.60	**7.72**[a]	0.59	**5.08**[a]	0.46	**5.28**[a]	0.45
Block 1								
AGE	**0.02**[b]	0.01	**0.02**[b]	0.01	-0.01	0.01	-0.01	0.01
FEMALE	-0.14	0.20	-0.14	0.20	-0.05	0.15	-0.06	0.15
UNIGRAD	**1.43**[a]	0.21	**1.43**[a]	0.21	-0.03	0.16	-0.05	0.16
INCOME	0.04	0.04	0.03	0.04	-0.02	0.03	-0.02	0.03
EMPLOYED	-0.05	0.23	-0.04	0.23	-0.01	0.18	-0.02	0.18
MARRIED	-0.17	0.23	-0.16	0.23	**0.43**[b]	0.18	**0.43**[b]	0.18
OWNHOME	-0.08	0.28	-0.15	0.28	-0.31	0.22	-0.22	0.21
CHRISTIAN	0.02	0.21	0.01	0.21	0.15	0.16	0.12	0.16
VERYREL	0.25	0.24	0.23	0.24	0.16	0.18	0.19	0.18
ACADIAN	**0.64**[c]	0.34	**0.66**[c]	0.34	0.22	0.26	0.22	0.26
BRITISH	**0.41**[c]	0.22	**0.39**[c]	0.22	0.17	0.33	0.18	0.17
Block 2								
FEM*UNI	-0.27	0.41	-0.20	0.41	**0.73**[b]	0.32	**0.67**[b]	0.32
FEM*INC	0.07	0.07	0.07	0.07	0.02	0.05	0.02	0.05
INC*UNI	0.08	0.07	0.08	0.07	-0.07	0.05	-0.07	0.05
Block 3								
PC	0.27	0.31	0.27	0.32	0.04	0.24	0.04	0.24
NDP	-0.20	0.28	-0.20	0.28	-0.21	0.21	-0.19	0.22
OTHERPARTY	**-0.95**[a]	0.24	**-0.94**[a]	0.24	-0.15	0.19	-0.13	0.19
Block 4								
SUBURBAN	-0.51	0.33	-	-	**0.65**[b]	0.26	-	-
SMALLURBAN	-0.48	0.31	-	-	**1.15**[a]	0.24	-	-
RURAL	-0.31	0.27	-	-	**1.35**[a]	0.21	-	-
CAPEBRETON	-	-	-0.16	0.34	-	-	**1.00**[a]	0.26
MAINLAND	-	-	-0.15	0.49	-	-	**1.01**[a]	0.17
	$R^2 = 0.15$		$R^2 = 0.15$		$R^2 = 0.11$		$R^2 = 0.10$	
	Adj. $R^2 = 0.13$		Adj. $R^2 = 0.13$		Adj. $R^2 = 0.08$		Adj. $R^2 = 0.07$	

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$. Unstandardized coefficients are the unstandardized coefficients of the final regression models. POLEFF values range from 4 (low perceived efficacy) to 16 (high perceived efficacy). GOVPRI values range from 0 (prioritize urban issues) to 10 (prioritize rural issues).

Table 15: Regression Models for Localism

	Binary Logistic: IDTOWN				OLS: MUNIPOL			
	Rural-Urban		Regional		Rural-Urban		Regional	
	B	S.E.	B	S.E.	B	S.E.	B.	S.E.
Constant	0.76	0.50	0.52	0.50	**3.71**[a]	0.58	**3.54**[a]	0.57
Block 1								
AGE	1.00	0.01	1.00	0.01	**0.04**[a]	0.01	**0.05**[a]	0.01
FEMALE	1.21	0.17	1.24	0.17	**0.52**[a]	0.19	**0.53**[a]	0.19
UNIGRAD	0.94	0.18	0.97	0.18	0.06	0.20	0.06	0.20
INCOME	0.97	0.03	0.96	0.03	**-0.09**[b]	0.04	**-0.10**[b]	0.04
EMPLOYED	1.01	0.20	1.02	0.20	**0.57**[b]	0.22	**0.57**[b]	0.22
MARRIED	1.00	0.19	1.01	0.19	0.25	0.22	0.26	0.22
OWNHOME	1.02	0.23	0.89	0.23	**0.78**[a]	0.27	**0.75**[a]	0.27
CHRISTIAN	**1.67**[a]	0.18	1.58	0.18	**0.60**[a]	0.20	**0.54**[a]	0.20
VERYREL	1.35	0.20	1.30	0.20	0.32	0.23	0.31	0.23
ACADIAN	1.55	0.28	**1.65**[c]	0.28	-0.38	0.33	-0.32	0.33
BRITISH	1.22	0.19	1.20	0.19	0.15	0.22	0.12	0.22
Block 2								
FEM*UNI	0.64	0.41	0.68	0.35	-0.51	0.40	-0.46	0.40
FEM*INC	1.09	0.06	1.09	0.06	0.01	0.06	0.01	0.06
INC*UNI	1.06	0.06	1.06	0.06	0.03	0.06	0.03	0.06
Block 3								
PC	**0.59**[c]	0.27	0.64	0.27	**-0.52**[c]	0.30	-0.47	0.30
NDP	1.08	0.24	1.11	0.24	-0.02	0.27	0.01	0.27
OTHERPARTY	0.85	0.20	0.89	0.20	**-0.49**[b]	0.23	**-0.41**[c]	0.23
Block 4								
SUBURBAN	**0.44**[a]	0.30	-	-	-0.21	0.32	-	-
SMALLURBAN	0.79	0.26	-	-	**-0.82**[a]	0.30	-	-
RURAL	0.74	0.23	-	-	-0.36	0.26	-	-
CAPEBRETON	-	-	**1.92**[b]	0.28	-	-	-0.10	0.33
MAINLAND	-	-	0.92	0.19	-	-	**-0.49**[b]	0.21
	Nagelkerke $R^2 = 0.07$		Nagelkerke $R^2 = 0.07$		$R^2 = 0.14$ Adj. $R^2 = 0.11$		$R^2 = 0.14$ Adj. $R^2 = 0.11$	

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$. Unstandardized coefficients and odds ratios are those of the final regression models. IDTOWN values are 1 (responded ‘a great deal’ to the question, ‘How much do you identify with your city/town?’) and 0 (all other responses). MUNIPOL values range from 0 (no interest in municipal politics) to 10 (a great deal of interest).

Table 16: Regression Models for Sympathy for Outsiders

	Binary Logistic: NONWHI			
	Rural-Urban		Regional	
	Exp(B)	**S.E.**	**Exp(B)**	**S.E.**
Constant	**0.23**[b]	0.71	**0.18**[b]	0.71
Block 1				
AGE	1.01	0.01	1.01	0.01
FEMALE	1.27	0.26	1.30	0.26
UNIGRAD	**2.33**[a]	0.27	**2.40**[a]	0.27
INCOME	0.94	0.05	0.94	0.05
EMPLOYED	1.00	0.28	1.03	0.28
MARRIED	0.76	0.27	0.77	0.27
OWNHOME	1.31	0.34	1.14	0.33
CHRISTIAN	**0.52**[a]	0.25	**0.53**[b]	0.25
VERYREL	1.47	0.28	1.39	0.28
ACADIAN	1.35	0.39	1.40	0.39
BRITISH	**0.55**[b]	0.26	**0.54**[b]	0.25
Block 2				
FEM*UNI	1.44	0.53	1.48	0.53
FEM*INC	1.04	0.08	1.04	0.08
INC*UNI	1.01	0.09	1.01	0.09
Block 3				
PC	**0.42**[c]	0.52	0.44	0.53
NDP	**2.05**[b]	0.31	**2.04**[b]	0.30
OTHERPARTY	0.90	0.31	0.91	0.31
Block 4				
SUBURBAN	**0.48**[c]	0.38	-	-
SMALLURBAN	0.60	0.36	-	-
RURAL	**0.48**[b]	0.31	-	-
CAPEBRETON	-	-	0.99	0.41
MAINLAND	-	-	**0.62**[c]	0.27
	Nagelkerke $R^2 = 0.18$		Nagelkerke $R^2 = 0.17$	

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$. Odds ratios are the odds ratios of the final regression model. NONWHI values are 1 (responded ‘strongly agree’ to the statement, ‘It is more difficult for non-whites to be successful in Canadian society than it is for whites’) and 0 (all other responses).

Table 17: Regression Model Change Statistics

	ΔR^2 or ΔNagelkerke R^2			
Model	**Block 1**	**Block 2**	**Block 3**	**Block 4**
ECONATT				
Rural-urban	**0.12**[a]	**0.01**[b]	**0.06**[a]	0.01
Regional	**0.12**[a]	**0.01**[b]	**0.06**[a]	0.00
TRADVAL				
Rural-urban	**0.26**[a]	**0.03**[a]	**0.04**[a]	**0.01**[c]
Regional	**0.26**[a]	**0.03**[a]	**0.04**[a]	0.00
POLEFF				
Rural-urban	**0.12**[a]	0.00	**0.03**[a]	0.00
Regional	**0.12**[a]	0.00	**0.03**[a]	0.00
GOVPRI				
Rural-urban	**0.03**[b]	**0.01**[c]	0.00	**0.06**[a]
Regional	**0.03**[b]	**0.01**[c]	0.00	**0.05**[a]
IDTOWN				
Rural-urban	**0.04**[b]	0.01	0.01	**0.02**[b]
Regional	**0.04**[b]	0.01	0.01	**0.02**[b]
MUNIPOL				
Rural-urban	**0.12**[a]	0.00	**0.01**[c]	**0.01**[b]
Regional	**0.12**[a]	0.00	**0.01**[c]	**0.01**[c]
NONWHI				
Rural-urban	**0.12**[a]	0.01	**0.04**[a]	**0.02**[c]
Regional	**0.12**[a]	0.01	**0.04**[a]	**0.01**[b]

[a] $p < 0.01$; [b] $p < 0.05$; [c] $p < 0.10$.

Interpreting the Results

This chapter began with a preliminary analysis that found significant spatial variation on seven important attitudinal measures. To determine how much of this variation could be explained by spatial differences in demographics, socioeconomics and party affiliation, I controlled for these factors using regression analysis. For the most part, spatial differentiation remained, with a small number of exceptions, meaning that attitudinal differences can in part be attributed to context associated with place of residence.

Notable results include the correlation of the small urban category – which, to reiterate, captures respondents living in the province's four CAs of Kentville, Truro, New Glasgow and CBRM – with greater economic conservatism and lower interest in municipal politics than the urban category. Residence in suburban Nova Scotia – the HRM communities surrounding Halifax and Dartmouth – is correlated with a reduced identification with one's community compared to urban residence. The suburban category is also correlated with lower sympathy for outsiders, as is the rural category. All three non-metropolitan categories variables exhibit a significant positive effect on support for both traditional values and government prioritization of rural issues.

The regional variables evince similar effects. Compared to the HRM category, residence in the Mainland category is associated with lower interest in municipal politics and lower sympathy for outsiders. Cape Breton residence is correlated with a strong identification with one's town or community. As with the rural-urban variables, living outside HRM, whether in Cape Breton or mainland Nova Scotia, is positively correlated with support for government prioritization of rural issues.

Surprisingly, and contrary to my hypothesis, place of residence has no effect on perceived political efficacy and, aside from the small urban variable, no effect on opinion of government's role in the economy. Also notable is the absence of a statistically significant correlation between region of residence and support for traditional values. This is unusual given the strong effect of rural-urban residence on the same variable.

The effects of the other independent variables appear to be straightforward. Age, for instance, is positively correlated with economic conservatism and an interest in municipal politics. Females are also more likely to be interested in municipal politics, as well as more likely to express left-wing attitudes with respect to economic policy. The interaction term for females and income is correlated with left-wing economic views and, when controlling for rural-urban place of residence, lower support for traditional values. All else being equal, this may be interpreted to mean that as household income rises females report increasingly left-wing attitudes on economic and moral issues compared to males (Brambor et al., 2006: 71-73; see also Friedrich, 1982). The interaction term for females and university education is statistically significant in the context of government's prioritization between urban and rural issues. Separately, however, the FEMALE and UNIGRAD variables are not significant. Therefore, when UNIGRAD is 0 (that is, when an individual does not have a university education), gender has a negligible effect on support for government prioritization of either rural or urban issues. However, among individuals who have obtained a university degree, females support the prioritization of rural issues at higher rates than men.

As a separate variable, UNIGRAD is correlated with left-wing economic views and reduced odds of supporting an emphasis on traditional family values, as well as

higher rates of perceived political efficacy and sympathy for outsiders. Income is correlated with increased conservatism on economic attitudes but a left-wing effect on the moral traditionalism variable, as well as with a reduction in interest in municipal politics. Affiliation with a Christian religious denomination has a right-wing effect on economic opinion and a positive effect on support for traditional values, and it is correlated with stronger identification with one's community (when controlling for rural-urban place of residence), an increased interest in municipal politics and disagreement with the statement that it is harder for non-whites than whites to be successful. Being of Acadian heritage is correlated with identification with one's community (when controlling for region of residence), perceived political efficacy and left-wing economic attitudes. Although generally insignificant with respect to the attitudinal values studied here, home ownership and employment have a positive effect on interest in municipal politics, and religiosity is correlated with support for traditional values.

Also of note are the consistently significant effects of partisan affiliation. PC affiliation, for instance, is correlated with conservative economic views, support for a return to traditional values, identification with one's town, reduced sympathy for outsiders and, rather strangely, reduced interest in municipal politics. NDP affiliation, on the other hand, is correlated with left-wing economic views, disagreement with the notion that a return to traditional values would be beneficial and increased sympathy for outsiders. The OTHERPARTY variable is correlated with higher feelings of perceived political inefficacy.

Finally, the goodness-of-fit values suggest that in general these models explain only a small proportion of the overall variation in the dependent variables. In addition,

the change statistics contained in Table 17 suggest that the demographic variables – those entered in the first block – explain more of the variation than the spatial variables. Still, in several cases, significant spatial variation remains even after controlling for demographic and partisan factors. In short, although spatial variation exists – that is, place of residence has a statistically significant effect on several attitudinal indicators – its effect as a determinant of public opinion is modest compared to other factors.

Chapter 5: Discussion

The data presented in the previous chapter pose various theoretical and policy implications. In this chapter, I begin by considering how my results relate to previous research on rural-urban and regional differences in Canada and Nova Scotia. Specifically, I address how my study may inform a deeper understanding of the nature of spatial cleavages in Nova Scotia by clarifying more precisely how place of residence correlates with attitudes. I also discuss the common assumption that regional differences are substantively similar to rural-urban ones.

In the second section I turn my attention to the implications of my findings for governance and policy, particularly in the context of the recommendations of the Ivany Report. I assess the likely appeal of policies aimed at facilitating economic development in light of the distribution of attitudes described above. As well, I engage briefly with past election results to gauge whether the provincial party system is reorganizing along geographic lines, because polarization – especially if accompanied by greater ideological coherence with respect to partisan affiliation – could limit the probability of province-wide consensus on the policies best suited for achieving future prosperity.

Theoretical Implications

At a minimum, the results of my analysis confirm Gelman and colleagues' maxim that "[g]eography matters politically" (2007: 365). Indeed, the spatial variation observed in the preceding results cannot be attributed solely to compositional factors. Place of residence is correlated with significant effects on several items even after controlling for

demographic characteristics and partisan affiliation. In addition, although not always evident, the spatial cleavage between rural-urban and regional categories appears to be consistent with respect to its association with political attitudes. In mathematical terms, the positive or negative directionality of the significant parameter estimates are generally in line with my hypotheses. With the exception of the localism indicators (identification with one's community and interest in municipal politics), some (but not all) non-urban and non-HRM categories are correlated with economic conservatism, support for moral traditionalism, preference for government prioritization of rural issues and lower sympathy for outsiders.

In some ways, then, my findings confirm earlier research on the rural-urban gap. For example, they align with Wasko and O'Neill's (2007) conclusions regarding the greater social conservatism of rural and urban Canadians compared to urban Canadians. As well, the difference identified by my analysis between small urban and urban residents on economic attitudes matches some of McGrane and Berdahl's (2012) findings, in particular with respect to the lower rates of support for market liberalism policies among those who live in urban areas. The lack of evidence for significant rural-urban cleavages with respect to environmentalism is consistent with Huddart-Kennedy et al. (2009) and McFarlane and Boxall (2003), who report that gaps in environmental attitudes may be diminishing across spatial categories.

Yet in other ways my results challenge earlier studies. Unlike Cutler and Jenkins (2000), who identify sharp rural-urban cleavages over attitudes towards feminists and homosexuals in the 1992 Canadian Referendum Study and the 1993 CES, my analysis of the CPEP data indicates no significant spatial variation on these attitudes between urban

and non-urban Nova Scotians. This reflects broader changes in societal attitudes towards feminism and homosexuality, which have corresponded with growing acceptance of, for example, same-sex marriage. As well, in some respects my data are at odds with evidence that rural residence may be associated with political cynicism (Wasko and O'Neill, 2007) and, in some provinces, low perceived political efficacy (Henderson, 2004).[16] On the SATDEM variable, which measures satisfaction with the functioning of democracy, there is no evidence of spatial variation in the CPEP data set. On the political efficacy variable (POLEFF), preliminary signs of rural-urban and regional differences are explained by controlling for education, age, affiliation with a small party and, to a lesser extent, ethnic heritage. Importantly, however, the variable measuring whether respondents feel government should prioritize urban or rural issues (GOVPRI) is correlated with a strong positive effect, meaning non-urban residents are more likely than urban residents to support greater government attention to rural affairs.

The results also raise questions regarding the degree to which sub-provincial regional differences are truly equivalent to rural-urban ones.[17] The regression models identify several cases where one or more rural-urban variables are correlated with significant attitudinal effects whereas regional ones are not (and vice versa). This means that on certain issues, rural-urban divisions are more important – or, more accurately, determinative – than regional ones. On questions of economic policy (Table 12), for instance, residents of Kentville are more closely aligned to residents of, say, CBRM, than

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[16] To be fair, Henderson uncovers evidence for low perceived efficacy only in 'have' provinces, which does not include Nova Scotia.

[17] To reiterate, by sub-provincial region I mean the seven regions used by Elections NS to organize provincial electoral districts, which I have collapsed into three categories: Cape Breton, HRM and Mainland.

to people living elsewhere in the Annapolis Valley. The degree of rurality is more decisive in this case than region of residence.

On the other hand, frequently, the degree of rurality is less important than non-urban residence in regard to attitudes. On support for traditional values and government prioritization or rural or urban issues, all three non-urban categories exhibit similar effects, indicating that residence in any category – small urban, suburban or rural – will produce similar attitudinal outcomes compared to urban residence, all else being equal. The urban-rural continuum does appear to be significant with respect to economic attitudes and sympathy for outsiders, as well as with identification with one's community, but there is no evidence of a linear progression as one moves from urban to rural. There is no indication, in other words, that conservatism increases as density decreases. These data reinforce accounts of Nova Scotian politics that focus on a binary distinction between the dominant role of Halifax versus the rest of the province (Carbert, forthcoming: 5).

Given these results, what are the implications of my study for our understanding of rural and urban cleavages, particularly in Nova Scotia? On some key issues, the distribution of attitudes in Nova Scotia matches those found elsewhere in Canada and the United States, with non-urban residents exhibiting a greater degree of conservatism than their urban counterparts. Yet the gap is not a vast one, and much of it is accounted for by other factors. And in some areas there is no gap at all; on attitudes towards feminists and homosexuals and the environment, for example, where one lives has no significance, all else being equal. In sum, then, while systematic urban-rural and regional differences are evident on important issues, on the whole the difference between these categories is

perhaps less dramatic than is often assumed. To borrow from Cutler and Jenkins, a cleavage "does exist but it is neither as wide nor as deep as is often suggested" (2000: 17).

Governance and Policy Implications

The Ivany Report is a practical document, aimed at facilitating the development of "advice to government, business and community leaders on new directions to realize economic growth across economic sectors in all regions of the province" (2014: 2). The results here present implications for this mandate. If policy makers intend to follow the Ivany Commission's advice and encourage "significant changes in attitudes and outlooks across the province" (2014: 57), then they ought to understand how attitudes and outlooks are presently structured and distributed.

The attitudinal cleavages described above do not appear to represent an insurmountable gap. Several of my dependent variables exhibit no spatial effects. Where spatial effects are observed, they are often the result of compositional differences (that is, stemming from age, income, education and other demographic and socioeconomic differences) as much as geographic, or contextual ones. Policy makers should therefore not expect opposition to the Ivany recommendations to manifest primarily along spatial lines. This is not to say that concentrated pockets of opposition would not emerge; however, in general, the results indicate that non-geographic characteristics are as important as place of residence in determining attitudes on the issues addressed by the Ivany Commission.

In this respect, a particularly interesting result is the absence of spatial differences in environmental attitudes. The telephone survey conducted on behalf of the Ivany Commission reveals significant variation between sub-provincial regions on this topic, especially on questions related to natural resource extraction. In summarizing the findings, the Ivany Report states that Cape Breton respondents are more likely than others to attribute importance to the use of natural resources in generating economic growth (2014: 225-226). In addition,

> those in Cape Breton are more likely than others to agree job creation will result from further development of natural resources and less likely to support the development of natural resources like shale gas even if environmental restrictions are met. Meanwhile, mainland residents are more likely to agree the economic benefits of natural resources should go to local communities compared with others in the province. Interestingly, rural residents are slightly less likely to agree that resource development is more important to rural areas than urban areas (2014: 226).

The report notes further that during the commission's public consultation sessions, urban participants at times displayed insensitivity towards the importance of resource extraction industries for rural economies. As the report emphasizes, "some people in Halifax may perhaps find it easy and even pleasant to imagine a Nova Scotia without pulp and paper and lumber mills, mines and quarries, fish plants and aquaculture operations" (2014: 10). Yet these industries play a vital role in the provincial economy, especially as export commodities, and their renewal represents for the Ivany Commission an important source of potential economic growth.

Similar patterns are absent from my results. None of my indicators of environmentalism, including the question asking respondents whether environmental protection is more important than creating jobs, exhibited spatial variation. The same is

true for the question that asked respondents to weigh the importance of protecting the environment versus facilitating economic growth, which I used as a component in my index of economic attitudes (see Table 4). Although not reported above, an ANOVA test of this question reveals no difference in means between my three regional categories (Cape Breton, HRM and Mainland). My analysis, in short, fails to replicate the findings of the Ivany study on this issue.

The reason for the discrepancy is unclear. However, one potential factor is methodological. The questions on the Ivany study deal explicitly with environmental protection in the context of resource extraction, whereas the CPEP survey deals with environmentalism in a more general way, contrasting it against broader concepts such as job creation and economic growth. By asking about industries specific to rural areas or to certain regions of the province, it could be that Ivany respondents framed the environmental protection-economic growth binary in terms of an urban-rural or HRM-rest-of -province distinction. CPEP respondents, in comparison, may have considered this binary from more of an abstract perspective, with less of an emphasis on the potential implications of their preference for local industry.

On their implications for policy, my results are therefore more positive than those of the Ivany study. There do not appear to be deep divisions between sub-provincial regions or along the rural-urban continuum with respect to balancing environmental protection and economic growth. Geographic cleavages, however, may emerge on policies related to specific resource industries, although further research on this question seems warranted given the absence of data specific to this topic in the CPEP data set.

More generally, moving forward a potential barrier to the Ivany proposals is the potential for attitudes to coalesce along partisan lines. If rural-urban or regional differences grow increasingly significant, then new political parties may emerge or existing ones may cultivate spatial cleavages for partisan advantage (Cutler and Jenkins 2000: 19). The leading examples of this in Canada are the Bloc Québécois and the Reform party, which were formed to advance regional interests in Ottawa. A similar process may occur if partisan supporters self-sort over time, leading to distinct and ideologically consistent geographic clusters. The existence of the latter phenomenon has received considerable scholarly attention in the United States (see Abrams and Fiorina 2012; Cho et al. 2013; Bishop 2008). In Canada, its effects have been studied primarily in the context of suburbanization (see Walks 2005).

Whatever its cause, the organization of politics along spatial lines – reflecting either rural-urban or regional cleavages – can have serious ramifications for governance. Canada has grappled with the consequences of a regionalized party system for decades. Similar cleavages have been, for the most part, absent from the provincial party systems where there are few examples of parties emerging to champion the interests of specific sub-provincial regions or of either rural or urban voters. Still, where polarization exists – consider, for example, the suburban-urban split in Toronto (Taylor 2011) – it can produce serious rifts, leaving those unrepresented in government feeling disempowered or resentful and therefore less amenable to compromise and reasonable debate. In *The Big Sort* (2008), Bishop argues that ongoing self-selection within the American electorate has produced

> balkanized communities whose inhabitants find other Americans to be culturally incomprehensible; a growing intolerance for political differences that has made national consensus impossible; and politics so polarized that Congress is stymied and elections are no longer just contests over policies, but bitter choices between ways of life (14).

The results of my analyses provide, if indirectly, some data regarding the potential alignment of regional and rural-urban cleavages with partisan affiliation in Nova Scotia. As noted above, in the regression models, the variables entered in the third block – NDP, PC and OTHERPARTY – generally produce consistent results, with NDP affiliation corresponding with left-wing attitudes and PC affiliation corresponding with right-wing attitudes. Recall that the reference category is LIB, which means that these results refer to the effect of NDP and PC affiliation relative to affiliation with the Liberal party.

The provincial party system therefore exhibits a certain degree of ideological coherence. On questions related to government's role in the economy, for example, an individual's party identification signals support for a distinct set of attitudes and opinions. This is expressed in the regression models as a two point rise in the ECONATT score (an index of a respondent's attitudes on economic policy) of Nova Scotians who identify with the PC party and a two point drop for those who identify with the NDP. The size and significance of these results are modest, but they nevertheless contradict the conventional view that Nova Scotian politics are primarily non-ideological. In fact, according to Stewart (1994: 73-88), who examines differences between Liberal and PC candidates, party activists and voters, Nova Scotian politics has been ideological since at least the 1970s.

Yet, importantly, in my results there is some spatial variation that remains unaccounted for by partisan effects. Therefore, place of residence is not entirely

synonymous with party identification. In the case of all three parties, voters who live outside of HRM are slightly to the right of voters who live within HRM.

This is likely encouraging news for proponents of the Ivany Commission's recommendations, because it means that rural-urban and regional cleavages, where they do exist, have not been exploited and thus aggravated by the province's partisan institutions. Consequently, the attitudinal changes recommended by the commission do not translate into a rebuke of any particular party's ideological agenda. Changing longstanding attitudes is a difficult task, but it is surely more difficult when the attitudes in question serve as the organizing principles of a major political party. This is the problem identified by Bishop (2008) and others in the United States, where ideology, partisanship and place of residence are said to be shifting into increasing alignment. Places are tied to certain attitudes on political issues, and in turn those attitudes are promoted by parties that reinforce and promote spatial cleavages. The spatialization of an ideologically-coherent party system is problematic because it reduces the likelihood of province-wide (or nation- or state-wide) consensus on, in this case, long-term economic development policies. When in power, parties advance policies that reflect the preferences of specific areas, rather than of specific groups distributed across the population.

The CPEP project set measures attitudes at only a single moment. It cannot be determined if the current relationship between spatial and partisan attitudes is unique to the 2013 election or in line with historical trends. Past election results provide some insight on this question. Figure 7 plots the proportion of HRM votes versus non-HRM votes received by the three main provincial parties since 1949. The proportion is

expressed as a ratio, where 100 represents an even split between urban (HRM) support and rural (non-HRM) support.[18] HRM is defined as the electoral districts contained within the HRM according to Elections Nova Scotia and the Nova Scotia Electoral Boundaries Commission. Values below 100 mean a party received more of its support from rural voters. A population growth trend line for HRM is also included for reference. This figure is drawn from a study by Walks (2005), who uses a similar figure to depict the gradual divergence of voting behaviour between urban and suburban Canadians.

On the left side of Figure 7, beginning in 1949, the three parties are clustered closely together near the horizontal axis. The initial rural orientation of all three parties is consistent with the heavily rural character of the province at that time: according to the 1951 census, the area now included in the HRM constituted only about 25% of the provincial population (Halifax Regional Municipality 2013). The rise in all three parties' reliance on urban voters reflects the differential growth rates between HRM and the rest of Nova Scotia in subsequent years.

Immediately apparent in Figure 7 is the dramatic shift after 1978 of the NDP to an urban-based party.[19] In the 1981 general election, the NDP lost its four seats in Cape Breton – the party's traditional stronghold – and gained one seat in Halifax. Carbert and Black attribute this shift to Alexa McDonough, who was elected party leader in 1980 and "made the NDP more broadly appealing to the growing population of public-sector workers and professionals in the metropolitan Hailfax area" (2013: 143-144). The ascension of the urban wing of the NDP triggered a deep rupture within the party, with

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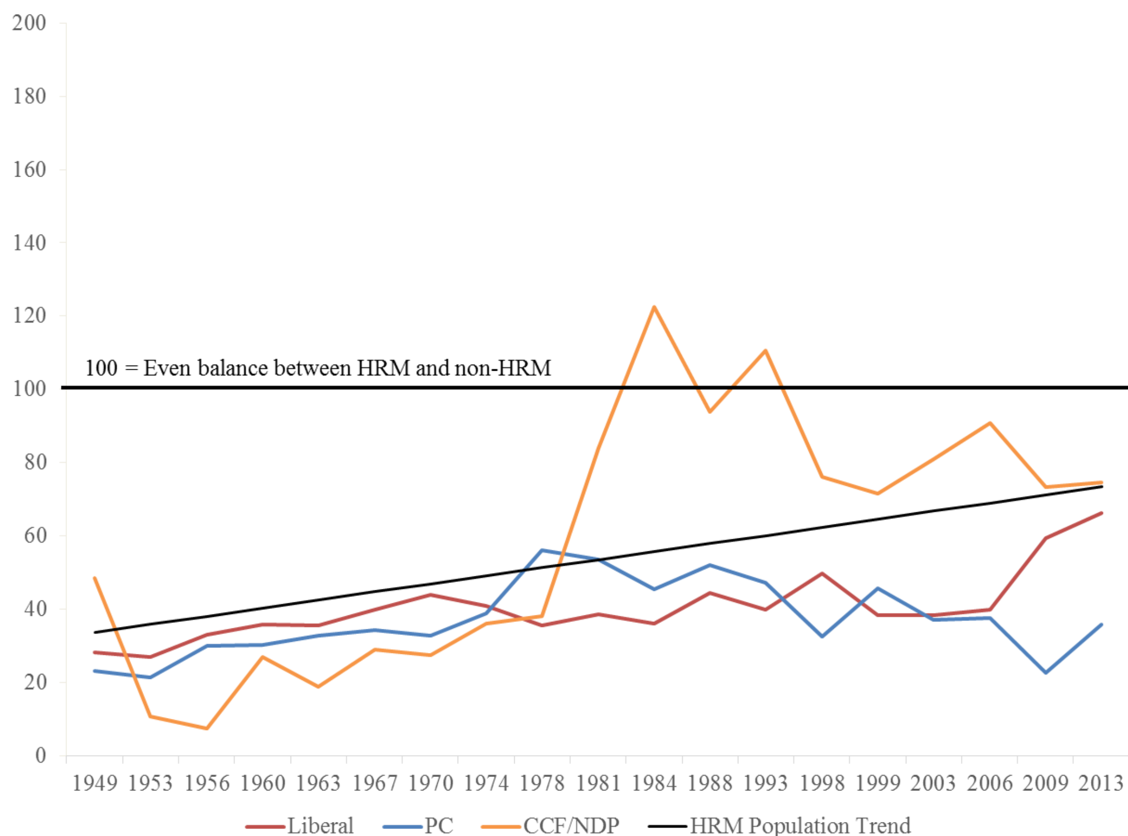
[18] The rural category, in effect, collapses my Mainland and Cape Breton categories. This may have a distortionary effect, given for example the NDP's long history of concentrated support in Cape Breton.
[19] Prior to this year, the high variability of the NDP line is a function of the relatively small proportion of votes cast for the party.

many feeling that Cape Breton had been repudiated "by the 'champagne socialists' of Halifax" (Clancy 2010: 4). Yet the party soon recovered. By 1998 the NDP's appeal had spread beyond the HRM and, by the time of the party's 2009 victory, it reflected an urban-rural split that matched the distribution of the provincial population.

Figure 7: HRM versus non-HRM Vote Share for Provincial Political Parties, 1949-2013[20]



Source: Canada (2011), Halifax Regional Municipality (2013), Nova Scotia (2011)

The PC ratio is more stable, indicating that the party remains reliant on rural voters, despite the ongoing urbanization of the province. In the 2013 election, the party's

[20] The HRM population trend line is approximate, and reflects data for nearest-available census years (e.g. the 1949 figure is based on data from the 1951 census).

support was only marginally less rural than it was in 1956 when 23% of its vote share came from voters in what is now the HRM. The Liberal party, in comparison, has grown more urban since 2006. In 2013, 40% of its support came from the HRM, separating it from the NDP by only about three percentage points.

Figure 7 indicates that the Nova Scotia party system may be undergoing realignment along spatial lines. The NDP and Liberal bases are increasingly concentrated in the HRM. This is electorally safe insofar as their distribution of support is keeping pace with the urbanization of the province as a whole. The PC party, meanwhile, continues to be strong in rural and primarily Mainland electoral districts. Assuming this pattern holds, future elections will be competitions between the NDP and the Liberals, with the outcome determined by whichever party is able to sway more of the increasingly important urban electorate. This cleavage – between the PC party on the one hand and the NDP and Liberal party on the other – will grow more acute once the urban population exceeds half of the provincial total, making it possible to form a government comprised solely of HRM MLAs.[21]

To be sure, electoral trends can change suddenly. As well, in Nova Scotia – as in the rest of Canada – changing party fortunes are often said to be a product of leadership rather than issues or ideology (Gidengil et al. 2012: 101-104). However, the point of this exercise has been to provide additional context to my results, and to interrogate in slightly greater detail the relationship between partisan effects and spatial effects on

[21] The willingness of electoral boundaries commissions to limit the size of rural electoral districts combined with a reluctance by governments to increase the total number of MLAs means HRM's seat allocation likely will not keep pace with its population. As well, given the historical significance of the urban-rural narrative in Nova Scotia, it is reasonable to assume that the any proposal to award the HRM the balance of seats would trigger significant debate.

attitudes. Figure 7 is helpful in this respect because it illuminates the relatively recent spatial divergence in patterns of political support. Until 1978 (and even until 1998 if one is willing to put aside the years before the NDP became truly competitive), there was essentially no difference between the main parties in terms of the geographic distribution of their voter bases.

Returning to the practical implications of my data for governance and policy, it seems that the variation observed in my analysis is occurring at a time of increasing spatial polarization in the provincial party system. Although the differences are presently modest, the possibility of further separation could have important consequences for the changes envisioned by the Ivany Report. Moreover, the consequences could be particularly problematic if, as suggested above, partisan affiliation reflects a coherent set of attitudes on issues related to economic development. In short, the vision of the Ivany Commission for Nova Scotia – that it become "a progressive and dynamic province that embraces change and renewal" (2012: 46) – would be attainable only in some parts of the province, with the remaining areas representing an increasingly unified oppositional bloc characterized by hesitancy towards outsiders and government intervention in the economy, a preference for governmental prioritization of rural issues and support for traditional policies on moral questions.

Chapter 6: Conclusion

Using GIS and statistical methods, this thesis has tested several assumptions about the distribution of public opinion in Nova Scotia. These assumptions are based on the findings of the Ivany Report and, to some extent, the broader academic literature, and speak to concerns about the economic and demographic challenges facing the province. The results of my analysis indicate that spatial variation exists on a number of key attitudes. Place of residence is correlated to varying degrees with attitudes on government's role in the economy, moral traditionalism and sympathy for outsiders, as well as with perceived political efficacy and identification with one's community. Yet, at the same time, there are numerous issues on which place of residence has little significance. Spatial cleavages are a factor in provincial politics, but they appear to be neither vast nor impossible to reconcile. The Ivany Report's depiction of the rural-urban gap as one between "different worlds" (2014: 10) is therefore an exaggeration that is largely unsupported by the data, although partisan polarization could at some point translate into deeper and more permanent spatial divisions.

In closing, I wish to briefly highlight areas of possible future research. As is perhaps inevitably the case, my analysis raises at least as many questions as it answers. These questions, in turn, illuminate a number of theoretical and methodological fronts on which further work might lead to interesting and useful developments in our understanding of Nova Scotian politics and, more generally, the spatial determinants of political attitudes.

In terms of methodology, there appears be room in the literature for the application of advanced geographic and statistical methods. As noted in Chapter 2, the

Canadian scholarship in this area relies on conventional quantitative methods, whereas American researchers are gravitating towards increasingly sophisticated approaches, including multilevel modelling and measures of spatial correlation calculated by GIS software. These methods represent an opportunity to build on the research presented here. For example, contextual data for each rural-urban and regional category, such as census statistics, could be added as an additional level in the regression models depicted above. Doing so would deepen our understanding of how macro-level trends, such as unemployment, immigration, income and education, affect micro-level attitudes. My results would be similarly complemented – or perhaps challenged – through a GIS-based ecological analysis, such as that implemented by Taylor (2011). By overlooking the effects of context, public opinion research risks offering only partial explanations of the various forces that shape attitudes and behaviours (O'Loughlin 2003: 42).

Second, from a theoretical perspective, further research is warranted into the causes of the observed spatial variation. My results suggest that some of the variation may be accounted for by controlling for demographic characteristics and partisan affiliation. Compositional factors, in other words, are to blame for some of the attitudinal differences. But place of residence continues to have an effect even after these variables are accounted for. What explains these effects? Is there a self-sorting mechanism at work in Nova Scotia or – to return to the discussion in Chapter 5 – is it a product of an increasingly spatial party system? Perhaps some other process is occurring. In any case, delving deeper into the causes of the geographic determinants of provincial public opinion would be a useful extension of the work presented here.

Finally, there may be value in exploring the implications of my results for the literature on Atlantic Canadian political culture. To reiterate, although this thesis is concerned with opinion rather than culture, the two are closely connected. My detection of significant, if relatively small, distinctions between regional and rural-urban categories at the sub-provincial level (that is, within Nova Scotia) invites a reconsideration of the standard – if frequently contested – assumption of cultural uniformity across the province. At issue here is whether sub-provincial units exhibit enduring cultural traits that produce substantively unique politics. To some extent the feasibility of this sort of research is challenged by the small size of the communities in question – culture may be too broad a concept for, say, the South Shore, whose electorate numbers less than 44,000 voters (Table 2). Still, there may be merit in a more rigorous examination of the degree to which sub-provincial attitudinal differences are the product of fundamental differences in value systems and political styles. If they are, then the spatial variations identified above may be more entrenched – and more difficult to overcome – than otherwise assumed.

At the very least, it is hoped that this thesis has highlighted the benefits of further research into the spatial determinants of political attitudes. Beyond serving as an interesting and potentially rewarding subject for scholars, the study of the intersection of geography and attitudes holds important practical value. Indeed, as Nova Scotia looks to the future, a comprehensive understanding of how place of residence shapes opinions and behaviour will be necessary if policy makers intend to facilitate the transformations envisioned in the Ivany Report. In short, if one's goal is to bring Nova Scotians together, one must first understand why they are apart.

Bibliography

Abrahamson, Mark and Valerie J. Carter. 1986. "Tolerance, Urbanism and Region." *American Sociological Review* 51: 287-294.

Abrams, Samuel J. and Morris P. Fiorina. 2012. "'The Big Sort' That Wasn't: A Skeptical Reexamination." *PS: Political Science & Politics* 45: 203-210.

Adamson, Agar. 1986. "Nova Scotia: Optimism in Spite of It All." In *Canada: The State of the Federation, 1986*, ed. Peter M. Leslie. Kingston: Institute of Intergovernmental Relations.

Agnew, John. 1996a. "Maps and models in political studies: a reply to comments." *Political Geography* 15: 165-167.

Agnew, John. 1996b. "Mapping politics: how context counts in electoral geography." *Political Geography* 15: 129-146.

Agnew, John A. 2002. "Introduction." In *American Space/American Place: Geographies of the Contemporary United States*, ed. John A. Agnew and Jonathan M. Smith. Edinburgh: Edinburgh University Press.

Amin, Ash and Stephen Graham. 1997. "The ordinary city." *Transactions of the Institute of British Geographers* 22: 411-429.

Anderson, Cameron D. and Elizabeth Goodyear-Grant. 2005. "Conceptions of Political Representation in Canada: An Explanation of Public Opinion." *Canadian Journal of Political Science* 38: 1029-1058.

Bartels, Larry M. "What's the Matter with *What's the Matter with Kansas?*." *Quarterly Journal of Political Science* 1: 201-226.

Baybeck, Brady and Scott D. McClurg. 2005. "What Do They Know and How Do They Know It? An Examination of Citizen Awareness of Context." *American Politics Research* 33: 492-520.

Beck, J. Murray. 1957. *The Government of Nova Scotia*. Don Mills: University of Toronto Press.

Beck, J. Murray. 1976. "Elections." In *The Provincial Political Systems: Comparative Essays*, ed. David J. Bellamy, Jon H. Pammett and Donald C. Rowat. Agincourt: Methuen Publications.

Beers, Howard W. 1953. "Rural-Urban Differences: Some Evidence from Public Opinion Polls." *Rural Sociology* 18: 1-11.

Bélanger, Paul and Munroe Eagles. 2006. "The Geography of Class and Religion in Canadian Elections Revisited." *Canadian Journal of Political Science* 39: 591-609.

Bishop, Bill. 2008. *The Big Sort: Why the Clustering of Like-Minded Americans is Tearing Us Apart*. New York: Houghton Mifflin.

Bittner, Amanda. 2007. "The Effects of Information and Social Cleavages: Explaining Issue Attitudes and Vote Choice in Canada." *Canadian Journal of Political Science* 40: 935-968.

Blake, Donald E. 1972. "The Measurement of Regionalism in Canadian Voting Patterns." *Canadian Journal of Political Science* 5: 55-81.

Brambor, Thomas, William Roberts Clark and Matt Golder. 2006. "Understanding interaction models: Improving empirical analysis." *Political Analysis* 14: 63-82.

Brebner, John Bartlet. 1937. *The Neutral Yankees of Nova Scotia: A Marginal Colony during the Revolutionary Years*. New York: Columbia University Press.

Brenner, Neil. 2000. "The Urban Question as a Scale Question: Reflections on Henri Lefebvre, Urban Theory and the Politics of Scale." *International Journal of Urban and Regional Research* 24: 361-378.

Brenner, Neil and Christian Schmid. 2014. "The 'Urban Age' in Question." *International Journal of Urban and Regional Research* 38: 731-755.

Bulkeley, Harriet. 2005. "Reconfiguring environmental governance: Towards a politics of scales and networks." *Political Geography* 24: 875-902.

Butler, Peter M. 2007. *Polling and Public Opinion: A Canadian Perspective*. Toronto: University of Toronto Press.

Cameron, David M. and Paul A.R. Hobson. 2009. "Nova Scotia." In *Foundations of Governance: Municipal Government in Canada's Provinces*, ed. Andrew Sancton and Robert Andrew Young. Toronto: University of Toronto Press.

Canada. Statistics Canada. 2011. *Population, urban and rural, by province and territory (Nova Scotia)*. http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62d-eng.htm (October 16, 2014).

Canada. Statistics Canada. 2012a. *Census metropolitan area (CMA) and census agglomeration (CA).* http://www12.statcan.gc.ca/census-recensement/2011/ref/dict/geo009-eng.cfm (September 8, 2014).

Canada. Statistics Canada. 2012b. *Census subdivision (CSD)*. http://www12.statcan.gc.ca/census-recensement/2011/ref/dict/geo012-eng.cfm (September 4, 2014).

Canada. Statistics Canada. 2012c. *From urban areas to population centres*. http://www.statcan.gc.ca/subjects-sujets/standard-norme/sgc-cgt/notice-avis/sgc-cgt-06-eng.htm (September 7, 2014).

Carbert, Louise. 2003. "Above the Fray: Rural Women Leaders on Regional Development and Electoral Democracy in Atlantic Canada." *Canadian Journal of Political Science* 36: 159-183.

Carbert, Louise. Forthcoming. "Nova Scotia." In *Big Worlds: Politics and elections in the Canadian provinces*, ed. Jared Wesley. Vancouver: UBC Press.

Carbert, Louise and Naomi Black. 2013. "Electoral Breakthrough: Women in Nova Scotia Politics." In *Stalled: The Representation of Women in Canadian Governments*, ed. Linda Trimble, Jane Arscott, Manon Tremblay. Vancouver: UBC Press.

Carty, R. Kenneth and Munroe Eagles. 2005. *Politics is Local: National Politics at the Grassroots*. Don Mills: Oxford University Press.

Castells, Manuel. 1977. *The Urban Question: A Marxist Approach*. London: Edward Arnold.

CBC News. 2002, May 30. "Harper plans to battle 'culture of defeatism' in Atlantic Canada." *CBC News*. http://www.cbc.ca/news/canada/harper-plans-to-battle-culture-of-defeatism-in-atlantic-canada-1.306785 (September 7, 2014).

Chalfant, H. Paul and Peter L. Heller. 1991. "Rural/Urban versus Regional Differences in Religiosity." *Review of Religious Research* 33: 76-86.

Cho, Wendy K. Tam and James G. Gimpel. 2012. "Geographic Information Systems and the Spatial Dimensions of American Politics." *Annual Review of Political Science* 15: 443-460.

Cho, Wendy K. Tam, James G. Gimpel and Joshua J. Dyck. 2006. "Residential Concentration, Political Socialization, and Voter Turnout." *The Journal of Politics* 68: 156-167.

Cho, Wendy K. Tam, James G. Gimpel and Iris S. Hui. 2013. "Voter Migration and the Geographic Sorting of the American Electorate." *Annals of the American Society of Geographers* 103: 856-870.

Cho, Wendy K. Tam and Thomas J. Rudolph. 2008. “Emanating Political Participation: Untangling the Spatial Structure Behind Participation.” *British Journal of Political Science* 38: 273-289.

Clancy, Peter. 2010. “Bluenose Socialism: The Nova Scotia NDP in Year One.” Paper presented at the Atlantic Political Provinces Political Science Association Annual Conference, Halifax, NS.

Cloke, Paul. 1997. “Country Backwater to Virtual Village? Rural Studies and ‘The Cultural Turn’.” *Journal of Rural Studies* 13: 367-375.

Cox, Kevin R. 1998. “Spaces of dependence, spaces of engagement and the politics of scale, or: looking for local politics.” *Political Geography* 17: 1-12.

Cox, Kevin R. and Murray Low. 2003. “Political geography in question.” *Political Geography* 22: 599-602.

Cuthbertson, Brian. 1994. *Johnny Bluenose at the Polls: Epic Nova Scotia Election Battles 1758-1848*. Halifax: Formac Publishing Company Limited.

Cutler, Fred. 2001a. “Local Economies, Local Policy Impacts, and Government Support in Canada.” *Canadian Journal of Political Science* 35: 347-382.

Cutler, Fred. 2001b. “The Simplest Shortcut of All: Sociodemographic Characteristics and Electoral Choice.” *Journal of Politics* 64: 466-490.

Cutler, Fred and Richard W. Jenkins. 2000. “Where One Lives and What One Thinks: Implications of Rural-Opinion Cleavages for Canadian Federalism.” Paper presented at the Transformation of Canadian Political Culture and the State of the Federation conference, Kingston, ON.

Darmofal, David. 2006. “The political geography of macro-level turnout in American political development.” *Political Geography* 25: 123-150.

Dewey, Richard. 1960. “The Rural-Urban Continuum: Real but Relatively Unimportant.” *American Journal of Sociology* 66: 60-66.

Dietz, Robert D. 2002. “The estimation of neighborhood effects in the social sciences: An interdisciplinary approach.” *Social Science Research* 31: 539-575.

Dillon, Michelle and Sarah Savage. 2006. “Values and Religion in Rural America: Attitudes Toward Abortion and Same-Sex Relations.” *The Carsey Institute at the Scholars’ Repository*. Paper 12.

Dyck, Rand. 1996. *Provincial Politics in Canada: Towards the Turn of the Century*. Scarborough: Prentice Hall Canada.

Elazar, Daniel J. 1999. "Political science, geography, and the spatial dimensions of politics." *Political Geography* 18: 875-886.

Ethington, Philip J. and Jason A. McDaniel. 2007. "Political Places and Institutional Spaces: The Intersection of Political Science and Political Geography." *Annual Review of Political Science* 10: 127-142.

Finbow, Robert. 2010. "Atlantic Canada in the Twenty-First Century: Prospects for Regional Integration." In *Essential Readings in Canadian Government and Politics*, ed. Peter H. Russell, François Rocher, Debra Thompson and Linda A. White. Toronto: Edmond Montgomery Publications.

Fine, Gary Alan and Corey D. Fields. 2008. "Culture and Microsociology: The Anthill and the Veldt." *The Annals of the American Academy of Political and Social Science* 619: 130-148.

Fletcher, Mark. 1994. "Clientelism and Political Culture in the Provincial Politics of Canada." In *Democracy, Clientelism, and Civil Society*, ed. Luis Roniger and Ayşe Güneş-Ayata. Boulder: Lynne Rienner Publishers.

Frank, David. 1977. "The Cape Breton coal industry and the rise and fall of the British Empire Steel Corporation." *Acadiensis* 7: 3-34.

Frank, Thomas. 2004. *What's the Matter with Kansas? How Conservatives Won the Heart of America*. New York: Henry Holt & Company.

Friedrich, Robert J. 1982. "In defense of multiplicative terms in multiple regression equations." *American Journal of Political Science* 26: 797-833.

Gainsborough, Juliet F. 2005. "Voters in Context: Cities, Suburbs, and Presidential Vote." *American Politics Research* 33: 435-461.

Gelman, Andrew, Boris Shor, Joseph Bafumi and David Park. 2007. "Rich State, Poor State, Red State, Blue State: What's the Matter with Connecticut?" *Quarterly Journal of Political Science* 2: 345-367.

Gidengil, Elisabeth, André Blais, Richard Nadeau and Neil Nevitte. 2001. "Making Sense of the Vote: The 2000 Canadian Election." Paper presented at the Biennial Meeting of the Association for Canadian Studies in the United States, San Antonio, TX.

Gidengil, Elisabeth, Neil Nevitte, André Blais, Joanna Everitt and Patrick Fournier. 2012. *Dominance & Decline: Making Sense of Recent Canadian Elections*. Toronto: University of Toronto Press.

Gimpel, James G. and Wendy K. Tam Cho. 2004. "The persistence of white ethnicity in New England politics." *Political Geography* 23: 987-1008.

Gimpel, James G. and Kimberly A. Karnes. 2006. "The Rural Side of the Urban-Rural Gap." *PS: Political Science & Politics* 39: 467-472.

Glenn, Norval D. and Jon. P. Alston. 1967. "Rural-Urban Differences in Reported Attitudes and Behavior." *Southwestern Social Science Quarterly* 47: 381-400.

Glenn, Norval D. and Lester Hill. 1977. "Rural-urban differences in attitudes and behavior in the United States." *The Annals of the American Academy of Political and Social Science* 429: 36-50.

Goodchild, Michael F., Luc Anselin, Richard P. Appelbaum, and Barbara Herr Harthorn. 2000. "Toward spatially integrated social science." *International Regional Science Review* 23: 139-159.

Grant, Jill L., Robyn Holme and Aaron Pettman. 2008. "Global Theory and Local Practice in Planning in Halifax: The Seaport Redevelopment." *Planning Practice & Research* 23: 517-532.

Grossman, Lawrence S. 1963. "'Safe' Seats: The Rural-Urban Pattern in Ontario." *The Canadian Journal of Economics and Political Science* 29: 367-371.

Haer, John L. 1952. "Conservatism-radicalism and the rural-urban continuum." *Rural Sociology* 17: 343-347.

Halifax Regional Municipality. 2013. *Final Report: Quantifying the Costs and Benefits to HRM, Residents and the Environment of Alternate Growth Scenarios*. http://www.halifax.ca/boardscom/documents/HRMGrowthScenariosFinalReportApril292013.pdf (September 16, 2014).

Hall, Peter A. and Rosemary C.R. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies* 44: 936-957.

Hathaway, Starke R., Elio D. Monachesi and Lawrence A. Young. 1959. "Rural-Urban Adolescent Personality." *Rural Sociology* 24: 331-346.

Hazel, Erskine. 1973. "The polls: corruption in government." *Public Opinion Quarterly* 37: 628-644.

Henderson, Ailsa. 2004. "Regional Political Cultures in Canada." *Canadian Journal of Political Science* 37: 595-615.

Herb, Guntram. 2008. "The Politics of Political Geography." In *The SAGE Handbook of Political Geography*, ed. Kevin R. Cox, Murray Low and Jennifer Robinson. London: SAGE Publications Ltd.

Hooks, Gregory and Linda Lobao. 2010. "Space and Politics." In *Handbook of Politics: State and Society in Global Perspective*, ed. Kevin T. Leicht and J. Craig Jenkins. New York: Springer.

Howell, Susan E. and Christine L. Day. 2000. "Complexities of the Gender Gap." *The Journal of Politics* 62: 858-874.

Huckfeldt, R. Robert. 1979. "Political participation and the neighborhood social context." *American Journal of Political Science* 23: 579-592.

Huckfeldt, R. Robert. 1980. "Variable responses to neighborhood social contexts: assimilation, conflicts and tipping points." *Political Behavior* 2: 231-257.

Huddart-Kennedy, Emily, Thomas M. Beckley, Bonita L. McFarlane and Solange Nadeau. 2009. "Rural-Urban Differences in Environmental Concern in Canada." *Rural Sociology* 74: 309-329.

Immergut, Ellen M. 1998. "The Theoretical Core of the New Institutionalism." *Politics & Society* 26: 5-34.

Johnson, James. 2003. "Conceptual Problems as Obstacles to Progress in Political Science: Four Decades of Political Culture Research." *Journal of Theoretical Politics* 15: 87-115.

Johnston, Grace M., Christopher J. Boyd and Margery A. MacIsaac. 2004. "Community-based cultural predictors of Pap smear screening in Nova Scotia." *Canadian Journal of Public Health* 95: 95-98.

Jones, Martin, Rhys Jones and Michael Woods. 2004. *An Introduction to Political Geography: Space, Place and Politics.* London: Routledge.

Jones, Robert E., Mark Fly and H. Ken Cordell. 1999. "How Green is My Valley? Tracking Rural and Urban Environmentalism in the Southern Appalachian Ecoregion." *Rural Sociology* 64: 482-499.

Jones, Robert E., Mark Fly, James Talley and H. Ken Cordell. 2003. "Green migration into rural America: the new frontier of environmentalism?" *Society & Natural Resources* 16: 221-238.

Knoke, David and Constance Henry. 1977. "Political Structure and Rural America." *The Annals of the American Academy of Political and Social Science* 429: 51-62.

Lees, Loretta. 2002. “Rematerializing geography: the ‘new’ urban geography.” *Progress in Human Geography* 26: 101-112.

Lefebvre, Henri. 2003. *The Urban Revolution*, translated by Robert Bononno. Minneapolis: University of Minnesota Press. (Original published 1970)

Lichter, Daniel T. and David L. Brown. 2011. “Rural America in an Urban Society: Changing Spatial and Social Boundaries.” *American Review of Sociology* 37: 565-592.

Lillywhite, John D. 1952. “Rural-urban differentials in divorce”. *Rural Sociology* 17: 348-355.

Low, Murray. 2003. “Political geography in question.” *Political Geography* 22: 625-631.

MacKinnon, Neil. 1988. *This Unfriendly Soil: The Loyalist Experience in Nova Scotia, 1783-1791*. Montreal: McGill-Queen’s University Press.

Masuda, Jeffrey R. and Theresa Garvin. 2008. “Whose Heartland? The Politics of place in a rural-urban interface.” *Journal of Rural Studies* 24: 112-123.

McDaniel, Jason A. 2010. “The Politics that Places Make: Contextual Effects and the Future of Political Behavior Research.” Paper presented at the Annual Meeting of the Western Political Science Association, San Francisco, CA.

McFarlane, Bonita L. and Peter C. Boxall. 2003. “The role of social psychological and social structural variables in environmental activism: an example of the forest sector.” *Journal of Environmental Psychology* 23: 79-87.

McGrane, David and Loleen Berdahl. 2012. “Conservative in what way? Suburban Political Attitudes in Five Canadian Provinces.” Paper presented at the Prairie Political Science Association Conference, Saskatoon, SK.

McKee, Seth C. 2008. “Rural voters and the polarization of American presidential elections.” *PS: Political Science & Politics* 41: 101-108.

McKee, Seth C. and Daron R. Shaw. 2003. “Suburban Voting in Presidential Elections.” *Presidential Studies Quarterly* 33: 125-144.

Merrifield, Andy. 2011. “The Right to the City and Beyond.” *City* 15: 473-481.

Millward, Hugh and Jamie Spinney. 2011. “Time use, travel behavior, and the rural-urban continuum: results from the Halifax STAR project.” *Journal of Transport Geography* 19: 51-58.

Molotch, Harvey. 1976. "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology* 82: 309-332.

Mulder, Marlene and Harvey Krahn. 2005. "Individual- and Community-level Determinants of Support for Immigration and Cultural Diversity in Canada." *Canadian Review of Sociology* 42: 421-444.

Nagele, Peter. 2003. "Misuse of standard error of the mean (SEM) when reporting variability of a sample. A critical evaluation of four anaesthesia journals." *British Journal of Anaesthesia* 90: 514-516.

Napier, Ted L. 1973. *Rural-Urban Differences: Myth or Reality?* Wooster: Ohio Agricultural Research and Development Center.

Nelsen, Hart, Raytha Yokeley and Thomas Madron. 1971. "Rural-urban differences in religiosity." *Rural Sociology* 36: 389-396.

Nova Scotia. Elections Nova Scotia. 2011. *Nova Scotia Provincial Elections* 1867-2011. http://electionsnovascotia.ca/sites/default/files/Elections%20from%201867-2011.pdf (September 15, 2014).

Nova Scotia. Electoral Boundaries Commission. 2012. *Toward fair and effective representation*. Halifax: Electoral Boundaries Commission.

Nova Scotia. The Nova Scotia Commission on Building Our New Economy. 2014. *Now or Never: An Urgent Call to Action for Nova Scotians* [Ivany Report]. http://onens.ca/wp-content/uploads/Now-or-Never-Nova-Scotia-Final-Report-with-Research-Engagement-Documentation.pdf (June 9, 2014).

O'Loughlin, John. 2000. "Responses: Geography as space and geography as place: The divide between political science and political geography continues." *Geopolitics* 5: 126-137.

O'Loughlin, John. 2003. "Spatial Analysis in Political Geography." In *A Companion to Political Geography*, ed. John Agnew, Katharyne Mitchell and Gerard Toal. Maiden: Blackwell Publishers.

O'Neill, Brenda and Lynda Erickson. 2003. "Evaluating Traditionalism in the Atlantic Provinces: Voting, Public Opinion and the Electoral Project." *Atlantis* 27: 1-17.

Pahl, Raymond Edward. 1966. "The Rural-Urban Continuum." *Sociologia Ruralis* 6: 299-329.

Pfefferman, Danny. 1993. "The Role of Sampling Weights When Modeling Survey Data." *International Statistical Review* 61: 317-337.

Pratt, Andy C. 1996. "Discourses of Rurality: Loose Talk or Social Struggle?" *Journal of Rural Studies* 12: 69-78.

Pugh, Jonathan. 2009. "Viewpoint: What are the consequences of the 'spatial turn' for how we understand politics today? A proposed research agenda." *Progress in Human Geography* 33: 579-586.

Reeves, Andrew and James G. Gimpel. 2012. "Ecologies of Unease: Geographic Context and National Economic Evaluations." *Political Behavior* 34: 507-534.

Reiss, Albert J. 1959. "Rural-Urban and Status Differences in Interpersonal Contacts." *American Journal of Sociology* 65: 182-195.

Roy, Jason, Andrea M.L. Perrella and Joshua Borden. Forthcoming. "Rural, Suburban and Urban Voters: Dissecting Residence Based Voter Cleavages in Provincial Elections." In *Battlegrounds: Electors, Elections, and Electioneering in the Canadian Provinces* ed. Jared J. Wesley. Vancouver: UBC Press.

Scott, Allen J. and Michael Storper. 2014. "The Nature of Cities: The Scope and Limits of Urban Theory." *International Journal of Urban and Regional Research*. Forthcoming.

Simeon, Richard and David J. Elkins. 1974. "Regional Political Cultures in Canada." *Canadian Journal of Political Science* 7: 397-437.

Smith, Jennifer. 2000. "Atlantic Canada at the Start of the New Millenium." In *Canadian Political Culture(s) in Transition*, ed. Hamish Telford and Harvey Lazar. Montreal: McGill-Queen's University Press.

Soja, Edward W. 1989. *The Reassertion of Space in Critical Social Theory*. London: Verso.

Solon, Gary, Steven J. Haider and Jeffrey Wooldridge. 2013. "What are we weighting for?" *NBER Working Paper Series*. Working Paper 18859. JEL No. C1.

Stewart, Ian. 1994. *Roasting Chestnuts: The Mythology of Maritime Political Culture*. Vancouver: UBC Press.

Stewart, Ian. 2002. "Vanishing Points: Three Paradoxes of Political Culture Research." In *Citizen Politics: Research and Theory in Canadian Political Behaviour*, ed. Joanna Everitt and Brenda O'Neill. Toronto: Oxford University Press.

Tarrant, Michael A. and H. Ken Cordell. 1997. "The effect of respondent characteristics on general environmental attitude-behavior correspondence." *Environment and Behavior* 29: 618-637.

Taylor, Zack. 2011. "Who Elected Rob Ford, and Why? An Ecological Analysis of the 2010 Toronto Election." Paper presented at the Canadian Political Science Association Conference, Waterloo, ON.

Thomas, Alexander R. "Urbanization Before Cities: Lessons for Social Theory from the Evolution of Cities." *Journal of World-Systems Research* 18: 211-235.

Thompson, Michael J. 2012. "Suburban Origins of the Tea Party: Spatial Dimensions of the new Conservative Personality." *Critical Sociology* 1-18.

Tindall, D.B., Scott Davies and Céline Mauboulès. 2003. "Activism and Conservation Behavior in an Environmental Movement: The Contradictory Effects of Gender." *Society and Natural Resources* 16: 909-932.

Tönnies, Ferdinand. 2002. *Community and Society*. Devon: Courier Dover Publications. (Original published 1887)

Turcotte, Martin. 2001a. "L'urbain est-il plus tolerant : le Canada et les États-Unis." *Canadian Journal of Political Science* 34: 819-844.

Turcotte, Martin. 2001b. "L'opposition rural/urbain a-t-elle fait son temps?" *Canadian Journal of Sociology* 26: 1-29.

Veugelers, Paul J., Alexandra M. Yip and David C. Elliott. 2003. "Geographic variation in health services use in Nova Scotia." *Chronic Diseases in Canada* 24: 116-123.

Walks, R. Alan. 2004. "Place of Residence, Party Preferences, and Political Attitudes in Canadian Cities and Suburbs." *Journal of Urban Affairs* 26: 269-295.

Walks, R. Alan. 2005. "The City-Suburban Cleavage in Canadian Federal Politics." *Canadian Journal of Political Science* 38: 383-414.

Walks, R. Alan. 2006. "The Causes of City-Suburban Political Polarization? A Canadian Case Study." *Annals of the Association of American Geographers* 96: 390-414.

Walks, R. Alan. 2007. "The boundaries of suburban discontent? Urban definitions and neighbourhood political effects." *The Canadian Geographer* 51: 160–185.

Wasko, Kevin and Brenda O'Neill. 2007. "The Urban/Suburban/Rural Cleavage in Canadian Political Opinion." Paper presented at the Canadian Political Science Association conference, Saskatoon, SK.

Weber, Max. 1978. *Economy and Society: An Outline of Interpretive Sociology*. Berkeley: University of California Press. (Original published 1922)

Wesley, Jared. 2011. *Code Politics: Campaigns and Cultures on the Canadian Prairies.* Vancouver: UBC Press.

Wilson, John. 1974. "The Canadian Political Cultures: Towards a Redefinition of the Nature of the Canadian Political System." *Canadian Journal of Political Science* 7: 438-483.

Wilson, Thomas C. 1985. "Urbanism and Tolerance: A Test of Some Hypotheses Drawn from Wirth and Stoffer." *American Sociological Review* 50: 117-123.

Winship, Christopher and Larry Radbill. 1994. "Sampling Weights and Regression Analysis." *Sociological Methods & Research* 23: 230-257.

Wirth, Louis. 1938. "Urbanism as a Way of Life." *American Journal of Sociology* 44: 1-24.

Wiseman, Nelson. 2007. *In Search of Canadian Political Culture.* Vancouver: UBC Press.

Wiseman, Nelson. 2008. "Provincial Political Cultures." In *Provinces: Canadian Provincial Politics*. Toronto: Higher Education University of Toronto Press.

Wrong, Dennis H. 1963. "Canadian Politics in the Sixties." *Political Science Quarterly* 78: 1-12.

Woods, Michael. 2006. "Redefining the 'Rural Question': The new 'politics of the rural' and social policy." *Social Policy & Administration* 40: 579-595.

Appendix 1: CPEP Sample Demographic and Socioeconomic Statistics

Table 18: CPEP Sample Demographic and Socioeconomic Statistics

Indicator	N	%[22]
Gender		
Female	406	51.1
Male	389	48.9
Age		
18 to 29	87	10.9
30 to 44	200	25.1
45 to 60	285	35.8
Over 60	224	28.1
Education		
Some elementary/secondary/high school	27	3.4
Completed secondary/high school	71	8.9
Some technical, community college	52	6.5
Completed technical, community college	174	21.8
Some university	85	10.7
Bachelor’s degree	219	27.5
Master’s degree	103	12.9
Professional degree or doctorate	66	8.3
Political affiliation		
Usually identifies with NS Liberal Party	228	29.1
… NS PC Party	119	15.2
… NS NDP	153	19.5
… NS Green Party	26	3.3
… other	51	6.5

[22] Percentages were calculated after omitting missing variables.

Indicator	N	%[22]
… none of these	207	26.4
Employment status		
Employed full time	340	42.8
Employed part time	81	10.2
Homemaker	25	3.1
Retired	205	25.8
Seasonal worker	20	2.5
Student	21	2.6
Unemployed	45	5.7
Other	57	7.2
Income[23]		
Less than $20,000	72	9.1
$20,000 to $30,000	55	7.0
$30,000 to $40,000	53	6.7
$40,000 to $50,000	80	10.1
$50,000 to $60,000	51	6.5
$60,000 to $70,000	63	8.0
$70,000 to $80,000	50	6.3
$80,000 to $90,000	66	8.4
$90,000 to $100,000	53	6.7
More than $100,000	151	19.9
Prefer not to say	96	12.2
Relationship status		
Divorced	54	6.8
Living with a partner	74	9.3
Married	480	60.5
Never married	139	17.5

[23] Refers to total household income before taxes from all sources.

Indicator	N	%[22]
Separated	26	3.3
Widowed	20	2.5
Housing		
Home owner	659	83.1
Renter	134	16.9
Religion		
Buddhist	5	0.6
Evangelical Christian	44	5.6
Jewish	4	0.5
No affiliation/Atheist	201	25.6
Protestant	217	27.6
Roman Catholic	198	25.2
Other	116	14.8
Religiosity		
Religion is very important	183	23.4
… somewhat important	250	32.0
… somewhat unimportant	153	19.6
… very unimportant	196	25.1
Ethnicity[24]		
Acadian	75	9.4
African Nova Scotian	8	1.0
British	183	23.0
Chinese	4	0.5
Dutch	31	3.9
English	411	51.6
French	77	9.7

[24] Respondents were able to select more than one ethnic group, and therefore the total frequency for this category exceeds the sample size.

Indicator	N	%[22]
German	76	9.5
Inuit, Metis, Aboriginal	32	4.0
Irish	163	20.5
Italian	5	0.6
Other	73	9.2
Polish	6	0.8
Québécois	8	1.0
Scottish	209	26.2
Ukrainian	11	1.4

Appendix 2: HRM and non-HRM Votes by Political Party, 1949-2013

Table 19: HRM and non-HRM Votes by Political Party, 1949-2013

Election	Liberal		PC		CCF/NDP	
	HRM	non-HRM	HRM	non-HRM	HRM	non-HRM
1949	37,830	133,331	25,068	108,066	11,126	22,910
1953	35,999	133,119	26,598	123,882	2,335	21,325
1956	39,759	119,897	37,278	123,718	687	9,245
1960	39,079	108,872	39,204	128,819	6,745	24,941
1963	35,477	99,396	47,362	143,766	2,234	11,842
1967	40,760	102,185	46,170	134,328	4,018	13,855
1970	53,534	121,364	44,134	133,852	5,466	19,793
1974	59,470	144,938	46,717	119,671	15,751	43,608
1978	45,155	126,875	73,281	130,219	17,720	46,259
1981	38,951	100,653	70,009	130,219	34,832	41,457
1984	34,318	94,992	65,481	143,817	36,283	29,593
1988	57,212	128,795	69,941	134,209	35,859	38,179
1993	67,240	168,492	48,929	103,454	45,554	41,189
1998	52,682	105,698	32,820	100,720	67,178	88,184
1999	35,781	93,014	53,119	116,263	54,002	75,472
2003	35,662	92,755	40,246	107,936	56,595	69,854
2006	27,050	67,822	43,884	116,235	66,700	73,428
2009	41,847	70,228	18,894	83,324	77,201	105,222
2013	75,835	114,277	28,862	80,590	47,676	63,946

Source: Nova Scotia (2011)