SO YOU THINK YOU SPEAK CANADIAN ENGLISH: A STUDY OF LANGUAGE REGARD AND LEXICAL VARIATION OF ENGLISH-SPEAKING CANADIANS

YVETTE FREAKE

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Abstract

To date there has been limited research into the language regard of Canadians towards the varieties of English spoken across this vast country. This thesis provides a comprehensive investigation of the language regard of English-speaking Canadians towards varieties of Canadian English, alongside a variationist study of 13 previously studied lexical variables and 10 new lexical variables. This research on perception complements previous work on production, to build a better understanding of sociolinguistic variation (see Kretzschmar, 2000 and Preston, 2018). The methodology provides insights into the use of an online map task with the current available tools, while addressing the strength and weaknesses of these tools. An online survey allowed for data to be gathered from all areas of Canada and for simultaneous collection and analysis of lexical and perceptual data. This study includes a content analysis using GIS technology; an analysis of rating tasks for regions on three characteristics: correctness, pleasantness, and similarity; an experimental rating task focusing on stereotypes of provinces; supplementary perceptual data; and a lexical variation component. Data from 192 completed lexical surveys were analyzed using total variation, net variation, and major isoglosses to help further develop the understanding of the sociolinguistic landscape of Canadian English. Findings suggest that Canadians from different regions harbour perceptions towards Canadian English based on their region of origin, with some areas (e.g., Newfoundland and Labrador, and Québec) appearing more salient to participants than others. The findings from the analysis of the lexical data echo previous findings (e.g., Boberg, 2010, 2016; Gallinger & Motskin, 2018) while also highlighting regional variation in some variables that have not previously been studied, suggesting further research is needed focusing on these variables. Overall, the results

demonstrate the advantages and disadvantages of an online study to survey a large number of participants across a large geographical area.

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Chapter 1: Introduction

1.1 Introduction

Along an academic journey that has taken me from the province of Alberta (AB) to Québec (QC), Saskatchewan (SK), Newfoundland and Labrador (NL), Ontario (ON), and finally back to AB, it became apparent that Canadians harboured attitudes and perceptions toward the English spoken in regions across the country. Many of my conversations with residents of the provinces I temporarily lived in focused on the pronunciation of vowels and the different words I used. These conversations and an introduction to the study of language regard and language variation led me to a more in-depth study and a doctoral dissertation on this topic. This thesis provides novel research on the language regard of English-speaking Canadians towards the English spoken across Canada, while also exploring lexical variation in Canadian English. This introduction serves to present some concepts of language regard and lexical variation in the context of Canadian English, to outline my research questions, and offer an overview of the structure of the thesis.

The field of language regard (Preston, 2010) examines the attitudes, perceptions, and ideologies of non-linguists towards language, and draws on many fields such as social psychology, dialectology, sociolinguistics, anthropological linguistics, and perceptual dialectology (Preston, 2018). Studies focusing on language regard have been conducted across the globe in order to shed light on the intrinsic system of regard in non-linguists. Language regard varies according to a number of factors just like more traditional grammatical or phonological variables in variationist sociolinguistics (see Evans et al., 2018). Further, by studying language regard and how it varies, linguists are provided with further insight into the five essential problems of linguistic variation and change outlined by Weinreich, Labov, and

Herzog (1968), as well as spatial variation of language (Cukor-Avila, 2018). I discuss these problems and how the study of language regard assists in building a broader theory of sociolinguistics further in Chapter 2.

Preston (2018) suggests that building a complete picture of language regard networks is complex and must include the gathering of information "on language variation data, experimental detail, metalinguistic commentary, and deep cultural knowledge" (p. 3). Further, in what Kretzschmar (2000) calls "postmodern dialectology", he calls for the study of perception of speakers compared to the production of speech to better understand language variation. The current study provides further insight into the perception and production of Canadian English and includes an array of data collected through a lexical variation study, rating tasks, sections for further unsolicited comments, and a map task.

Though lexical variation studies focusing on Canadian English are quite prevalent in the last century, there are virtually no national language regard studies that include participants from all regions of Canada. McKinnie & Dailey-O'Cain (2002) provide great insight into young Albertans' and Ontarians' regard to Canadian English; however their study stops short of including Canadians from other regions and from a broader age range. The current study seeks to fill this gap and provide further insight into the language regard of Canadians from many regions and different ages, and the lexical variation occurring across the country.

1.2 Research goals and questions

As described above, the aim of this dissertation is twofold: to complete the first national language regard study focusing on adult Canadians from all provinces and territories; and to gather data on lexical variables previously studied, as well as data on new lexical variables not previously studied. Fulfilling these goals will broaden scholars' insight into Canadian language

regard and Canadians' perceptions of the varieties of English across the country, alongside further information, and awareness into the production of lexical terms and the regional differences associated with these variables.

Several research questions guided the creation of the general survey and analysis of the collected data which are presented in this dissertation. First, the study aims to investigate whether Canadians harbour perceptions of, and attitudes towards, English spoken in different areas of Canada. If so, what features are salient to Canadians and are these features salient to all or only a subset of Canada? Further, do Canadians differ in their perceptions of which speakers in Canada speak the most correct and pleasant English, and are these findings comparable to what McKinnie & Dailey-O'Cain (2002) found for their Albertan and Ontarian participants? Thirdly, are there areas of the country that Canadians believe speak varieties of English more similar to their own than other areas? In connecting the field of language regard and lexical variation: are specific lexical items unique to particular regions of Canada and do Canadians associate their use with these regions? Lastly, following from the survey of lexical variation, have there been changes in the use of some lexical variables previously associated with Canada or Canadian regions?

1.3 Chapter Outline

Following this introduction, Chapter 2 outlines the origin and development of Canadian English, including several theories of the development of this variety of English. Major linguistic studies focusing on the lexical variation and language regard are also presented in Chapter 2. A discussion of the connection between lexical variation and language regard completes the literature review.

In Chapter 3, I discuss the lexical variables included in the current study and provide details on findings from previous studies, as well as a list of the variables that do not have previous findings to compare to.

In Chapter 4, I outline the methodology, including an in-depth discussion of the design of the online survey. Further discussion is provided on how the data was circulated, and how participants were grouped together. This chapter also reports the methods used to analyze the map tasks, rating tasks, stereotype tasks, and lexical variation questionnaire.

In Chapter 5, I present the language regard results and discussion alongside the lexical variation results and discussion. I provide a detailed analysis of the intersection points from the data and compare the current findings to previous studies.

Finally, Chapter 6 provides overall conclusions. I review the main findings of the analysis and comment on limitations to the study, as well as provide suggestions for future studies focusing on the language regard and lexical variation of Canadians.

Chapter 2: Literature Review

2.1 Introduction

Scholars have been studying language and variation since the early 20th century. Theories of variation and change within language have developed since, with significant developments in methods, including the concept of the sociolinguistic variable, beginning in the 1960s and 1970s with Labov's studies of Martha's Vineyard and the Lower East Side of New York City (1963 & 1972). In their seminal paper, Weinreich, Labov, and Herzog (1968) outlined five essential problems in linguistic variation and change which motivated the development of the methods used by early scholars in sociolinguistics:

- (1) The Constraints Problem: One must "determine the set of possible changes and possible conditions for change" (p. 183)
- (2) The Transition Problem: The attempt to determine the stages a change takes from the beginning to the end (p. 184).
- (3) The Embedding Problem: How are the changes under investigation embedded in the linguistic and social systems (p. 185)?
- (4) The Evaluation Problem: One must determine how the variables are evaluated by speakers (p. 186).
- (5) The Actuation Problem: Why did the change not occur sooner (p. 112)?

Answers to these problems have been sought through a plethora of sociolinguistic studies of language variation and change since 1968. These questions have guided the development of sociolinguistic theory and the attempt to understand language variation and change in a different light than neogrammarians who largely focused on stability in language. In the current study, the

focus of lexical variation in Canadian English and language regard of English-speaking Canadians provides insight into the embedding and evaluation problems listed above.

While studying lexical variation alongside language regard, it is apparent that some lexical variables, as well as phonological and syntactical variables, are salient to speakers, and sometimes these variables are used by listeners to identify where a speaker originates from. In addition, prejudices, attitudes, and ideologies they hold towards that speaker and their community come to light and can play an integral role in interactions between the speaker and listener. This is evident in many studies, such as Purnell, Idsardi, and Baugh (1999), which showed that dialect prejudice is possible through the utterance of the word 'hello' and can result in a person being refused as a tenant because of the dialect they speak. To shed light on these problems and to further linguistic theory, I have chosen to focus solely on lexical variables alongside a study of language regard. I also call for further study in phonological and syntactical variables within studies of language regard to help fill out the embedding and evaluation problems. Further, if identity and language variation are connected, then it follows that language regard must play a role in this connection as we all hold attitudes and ideologies towards everything, consciously, subconsciously, or unconsciously. Further discussion surrounding this and the fact that language regard varies, just as language itself does, is given in Sections 2.4 and 2.5 below.

First though, to set up the basis of the current study, it is important to understand the history of Canada and where English influences originated (Section 2.2). Following the historical outline, I provide an overview of major linguistic studies focusing on the lexicon of Canadian English in Section 2.3, followed by Section 2.4, an overview of language regard and the studies

that have been completed in Canada. Finally, Section 2.5 provides an explanation of how lexical variation and language regard intersect, with a summary provided in Section 2.6.

2.2 Canada and its English

The term Canadian English was first used in 1857 by the Reverend A. Constable Geikie (Avis, 1967). It is used broadly throughout this dissertation to describe several varieties of English spoken by over 26,000,000 English-speaking Canadians (Statistics Canada, 2022a). Other terms are used to refer to specific regional varieties of Canadian English such as: Mainland Canadian English, which is used for the varieties of English spoken across the country from British Columbia to the Maritime provinces, and excluding the English spoken in NL; or Newfoundland English, which is used to refer to the varieties of English spoken in NL.

It was not until after the 1950s that Canadian English became a prominent subject in linguistic research (Orkin, 1970). The lack of literature prior to the second half of the 20th century is evident in Avis's (1965) bibliography of writings that focus on Canadian English. This bibliography consists of 165 titles with more than half being published after the end of the Second World War. Further, it was not until the mid-20th century, when the Canadian Linguistic Association (CLA) was formed, that scholars began constructing a Canadian dictionary that followed similar principles as the Oxford English Dictionary (Walker, 2015).

A definition of Canadian English is difficult to formulate due to several reasons. Studies across North America have shown that Canadian and American English often share similarities when it comes to phonetic, grammatical, and lexical patterns (e.g., Labov, Ash & Boberg, 2008). Despite this continuity between Canada and America, regional variation is prevalent across the border and within Canadian provinces. Boberg (2005) suggests that there are six principal dialect regions within Canada. Even within these six regions there are smaller enclaves, such as the

Ottawa Valley in Ontario and Guysborough County in Nova Scotia, which differ from the larger surrounding area (Boberg, 2010). Despite enough similarities to group regions in Canada together as dialect regions, and the similarities American and Canadian English share, the history of Canadian English and settlement patterns are significantly different than those south of the border.

2.2.1 Historical Influences on Canadian English

Before European explorers arrived in North America and colonization began, the continent was home to a large population who presently are referred to as Indigenous Peoples. Studies focusing on Indigenous language families of North America, as well as geographical, anthropological, and archeological studies suggest that one or more migrations of humans originated from Asia, crossing to North America via a land bridge which crossed the Bering Strait (Josephy, Jaffe, & Wandschneider, 2015, p. 15). Over the past 70,000 years this land bridge has been present several times, which would have allowed migration to North America by nomadic peoples perhaps following herds of animals. This migration of peoples resulted in a population of humans who spread across the North American continent before Europeans arrived much later.

It is estimated that over 600 languages were spoken across North America by the original Indigenous populations prior to the arrival of Europeans (Josephy et al., 2015). Within Canada's borders, scholars suggest that over 300 languages were spoken by approximately 350,000 people when Europeans arrived in the 16th and 17th centuries (Walker, 2015). The present Indigenous population in Canada was last reported in the 2016 census at 1,673,785 (Statistics Canada, 2022b). Despite a recent increase in their population there has been a steady decline in the use of Indigenous languages. Statistics Canada reports 85,835 people speak an Indigenous language at

home, while 148,895 Canadians have an Indigenous language as their mother tongue (2022c). Further, the numbers of speakers of these languages are not evenly distributed across Indigenous languages. Algonquian languages are the most known Indigenous languages with 97,125 speakers learning an Algonquian language as their mother tongue (Statistics Canada, 2022c). Following this group, 33,790 residents of Canada stated an Inuktut language as their mother tongue in the 2021 census. The third largest group of Indigenous languages as a mother tongue in Canada are Athabaskan languages, with 12,885 speakers. The remaining Indigenous language family groups have fewer than 5,000 speakers each, who report one of these languages as their mother tongue. This is a far different picture from what North America would have looked like with the arrival of Europeans, with fewer than 100 Indigenous languages presently surviving compared to approximately 300 languages originally spoken in the territory presently known as Canada (Walker, 2015, p. 41).

According to Norse sagas and archeological discoveries on the East Coast, in particular L'anse-aux Meadows, NL, the earliest known Europeans to arrive to Canada were the Vikings who had departed from nearby Greenland around the 10th century (Boberg, 2010). The Norse settlement uncovered at L'anse-aux-Meadows provides evidence which suggests that Vikings predated other European discovery and exploration by the French, English, and Spanish of North America. However, the Viking settlement was not permanent and seems to have been abandoned shortly after the Viking's arrival due to postulated reasons such as hostility from the local Indigenous population, disease, and/or bad weather.

Europeans did not return to present-day Canada until the Venetian explorer, Zuan Cabotto (John Cabot) was sponsored by King Henry VII to cross the Atlantic Ocean in 1497 (Clarke, 2010). Upon discovering waters filled with fish surrounding the island of

Newfoundland, Western European powers began a migratory fishery around the island of Newfoundland and off the shores of Nova Scotia (NS), sending fishermen during the warmer months of the year. The Basque, French, Portuguese, Spanish, and English did not set up permanent settlements in NL and the East Coast of Canada until 1583 when England claimed NL for the English Crown (Clarke, 2010). Meanwhile, Jacques Cartier, a French explorer, was the first European to reach the St. Lawrence River in 1535 (Boberg, 2010). Exploring further inland on the St. Lawrence, Cartier came to the location of present-day Montréal and claimed the region for France (Boberg, 2010). Permanent settlement by the French on North America did not begin until the early 1600s. Meanwhile, Britain was also settling permanently on mainland North American soil in present-day Virginia and Massachusetts.

As the British expanded along the Eastern coast of North America, founding the 13 Colonies, the French claimed land in a surrounding arc from present-day Montréal, along the great lakes, and south to Louisiana. In 1605, Samuel de Champlain founded Acadia at present-day Annapolis Royal, NS (Boberg, 2010). Three years later he founded Québec (QC) in 1608. Meanwhile, the British established Jamestown, Virginia in 1607 and Boston, Massachusetts in 1620. Despite a large area originally settled by the French and the establishment of a French fur trade around the Great Lakes and St. Lawrence River, the presence of the British in North America began to surpass the French with the exploration of Hudson's Bay and the interior of North America. In 1670 King Charles II gave Rupert's Land, the land west and north of Lake Huron, to the Hudson's Bay Company to further develop the fur trade (Boberg, 2010).

Over several decades in the 1700s, the British and French, along with their Indigenous allies, were part of numerous wars and battles over North American land. Beginning in 1701 and lasting till 1714, the War of Spanish Succession had a few implications for North American

territories held by European countries. In 1713, France ceded its territories on the island of Newfoundland and the peninsula of NS to Britain as a result of the Treaty of Utrecht (Walker, 2015). NS (excluding Cape Breton), home to a French population, became a British province without an English population (Boberg, 2010). Instead, NS was home to the Acadians, a French population. Despite a large portion of their North American territories being handed over to the British, the French built a large fort at Louisbourg on Cape Breton. In response, Britain founded Halifax in 1749 with 2,500 English settlers and 1,500 German and Swiss immigrants. An additional group of settlers to Halifax who did particularly well, were approximately 1,000 New Englanders (Boberg, 2010). The British turned their attention to attracting North American pioneers who were experienced in settling the land.

Despite efforts to increase the English-speaking population in NS by founding Halifax in 1749 and recruiting Europeans initially from Britain, and then Germany and Switzerland, the population, initially, did not grow substantially (Boberg, 2010, p. 59). From 1755 – 1758, the British expelled the original Acadian population from the best land in NS to make room for new pioneers (Boberg, 2010). Not only did they have the best land to work, but they also refused to "sign oaths of loyalty to the British Crown in the ongoing battles with France" (Walker, 2015, p. 43). Following the Acadian expulsion, the British sent a proclamation for colonists from the 13 colonies to settle NS (Boberg, 2010). Meanwhile, further changes in colonizing powers over territories occurred during the Seven Years' War (1756 – 1763). The French were defeated by the British in a battle on the Plains of Abraham in 1759, ending with the Treaty of Paris which ceded French territories in present-day Canada to the British. This allowed the British to expand further into western and northern territories of North America and prevented further emigration from France (Boberg, 2010).

The American fight for independence from Britain brought about one of the largest waves of English-speaking migration to Canada. The Revolutionary War began in 1775 and ended in 1783 resulting in the formation of a new, independent country, the United States of America (USA). Several factors brought about unrest in the British colonies, such as taxes and settlement restrictions during the 1760s and 1770s leading up to the Revolutionary War (Boberg, 2010). During the war, loyalists to the British flag, known as United Empire Loyalists, fled hostile environments to Britain's territory north of the American colonies. Most of those fleeing were originally from the middle and New England colonies and could not afford passage back to Britain or had any reason to return to Britain (Boberg, 2010, p. 61). It is estimated that approximately 35,000 Loyalists first went to NS and New Brunswick (NB). This influx of English-speaking migrants established the first substantial English population in present-day NB. Further, an estimated 7,000 Loyalists originally went to QC, but later resettled in ON (Boberg, 2010, p. 63). As a result of a sharp influx of Loyalists arriving in NS between October and November 1783, the British created a new province, NB, due to a large population of approximately 15,000 Loyalists settling there (Walker, 2015, p. 45).

With the increase in population, it was possible for the British to expand westward and settle the land in present-day ON. Approximately 6,000 Loyalists from present-day QC, along with some Loyalists from NB and NS, were sent to settle land in present-day ON (Boberg, 2010). Settlers found promising agricultural prospects there, which aided in building the population and resulted in the split of present-day ON and QC into two separate provinces in 1791: Upper Canada and Lower Canada, respectively. A land rush resulted in approximately 20,000 more New Englanders moving into Lower Canada by 1817. New Englanders were not the

only group to move into Canada during the 18th century. Between 1790 and 1812 at least 10,500 Scots emigrated to NS and Prince Edward Island (PEI) (Boberg, 2010, p. 65).

Meanwhile, the land on the west coast of present-day Canada was slowly opening to European explorers and the expanding fur trade during the 18th century. Henry Kelsey explored land in present-day SK up to present-day Prince Rupert in 1690. Further west, Anthony Henday had explored present-day AB and the fur trade was increasing settlement by European migrants slowly to these two provinces (Boberg, 2010). The first permanent settlement in AB was set up by Peter Pond in 1778, while James Cook landed on the Pacific Coast of present-day British Columbia (BC) the same year, marking the first British landing on the Pacific Coast (Boberg, 2010). A battle for the west began between the Hudson's Bay Company and their competitor, the North West Company in the late 1700s, resulting in several forts and trading posts expanding across present-day Manitoba (MB), SK, and AB. Further exploration of the interior of present-day BC by George Washington secured the area for Britain in the 1790s (Boberg, 2010).

Further British and Irish immigration occurred throughout the 1800s, as the British government encouraged relocation to relieve stress on the towns and cities in Britain which were taking in people looking for work and homes because of the industrial revolution (Boberg, 2010). In addition to this encouragement, the establishment and expansion of industries in Canada also brought higher rates of immigration to Canada. NL experienced a dramatic increase in population from 19,000 to 75,000 from 1800-1830 because of British and Irish immigration to the province during a boom in the fishing and salt cod industry (Boberg, 2010, p. 65). Approximately 75% of the immigrants to NL during this time were Irish. The growing forestry industry in NB during the early 1800s brought about English immigration to the province. Further west in present-day MB, the "first significant agricultural colony" (Boberg, 2010, p. 66),

Red River, was established by approximately 300 Scottish and Irish immigrants in 1811. In present-day AB, permanent settlement began at Fort Chipewyan in 1803 and Edmonton in 1813.

Prior to the War of 1812, the European population of British North America was approximately 500,000 (Boberg, 2010). Besides British and Irish immigrants, present-day Canada also saw an influx of German, Low German, Gaelic, and French speakers (Walker, 2015). Despite many immigrants coming from overseas, Upper Canada's population consisted of 80% American colonists in 1812 (Boberg, 2010). After the USA attempted to annex British North America, a time which became known as the War of 1812, the high population of American settlers in Upper Canada became a concern as the British were unsure of their loyalty (Walker, 2015). Thus, immigration from the United States was discouraged and immigration from Britain, and later, other areas of Europe, became the answer to building up British North America against any further hostilities from the south (Boberg, 2010).

Boberg (2010) describes two great waves of immigration to British North America following the War of 1812: (1) From 1815 – 1860s, and (2) The end of 19th Century-mid-20th Century (p. 69). During the first wave, the Irish Potato Famine occurred from 1845 – 1849 which marked the peak of immigration to British North America. Despite a high estimate of approximately 820,000 immigrants arriving from the British Isles between 1815 – 1860, Boberg (2010) suggests the natural increase was probably more significant than immigration, during this time, for population growth in present-day Canada. This is clearly represented in the first Canadian census in 1871 in which 13% of citizens were British-born and 83% were Canadian-born (p. 72). As mentioned above, immigration from other European countries also occurred during the 1800s. Approximately 40,000 German speakers and 15,000 Scandinavian speakers arrived by 1862 (Walker, 2015). A Black community was also growing as enslaved Blacks came

to British North America with many of the loyalists, as well as formerly enslaved Blacks who fled via the Underground Railroad (Walker, 2015).

Interestingly, the British and Irish immigrants often established new communities rather than settling in existing communities as the Loyalists had done (Walker, 2015). Certain areas of British North America also attracted specific groups of immigrants. For example, many Irish immigrants settled in Halifax, NB, Eastern ON, and northwest of Toronto up to Lake Huron (Boberg, 2010). Many Scots settled in NS and PEI. Not only did immigrants from specific areas of origin group together as mentioned above, but religious groups also tended to settle together. Protestant immigrants generally moved to areas to establish farms, generally in present-day ON, while catholic immigrants tended to settle in urban areas, such as present-day QC (Boberg, 2010). Despite these waves of immigration to British North America from Europe, the West was still not nearly as established as Upper and Lower Canada, and the maritime provinces by the year of confederation.

In 1867, the British North American Act was passed following several conferences held in British North America regarding the confederation of ON, QC, NB, and NS (Walker, 2015, p. 52). This act united the four provinces to form the Dominion of Canada. Rupert's Land, west of the newly formed dominion, was still sparsely populated and undeveloped. South of the 49th parallel, the USA completed the first transcontinental railway in 1869, opening the West to the East. In response, Britain bought Rupert's Land from the Hudson's Bay Company in 1870 and gave it to Canada to settle. This expansive area became known as the North West Territories (Walker, 2015). In addition to this new territory, a sixth province was created – MB. BC, on the west coast, joined confederation in 1871 on the premise a transcontinental railway would connect the province to the rest of Canada (Boberg, 2010). This promise was fulfilled when the Canadian

Pacific Railway began to construct a railway from Winnipeg to Vancouver via Regina and Calgary in 1881, completing it in 1885 (Boberg, 2010). A northern route was completed by the early 20th century, opening the area to further European settlement.

In 1872, the Dominion Lands Act was passed, allowing any man over 21 to settle 160acres of free land with the requirement of living on the land for at least three years (Boberg, 2010; Walker, 2015). The opening of western settlement brought about a large increase in immigration. An increase in the demand for Canadian agricultural products also influenced the increase in immigration as did the lift on bans of American immigration (Walker, 2015). By 1901 immigration was booming with over 100,000 immigrants coming to Canada per year; just before World War I the yearly rate of immigration was 400,000 before dropping throughout the duration of the war (Boberg, 2010). Following World War I immigration resumed at high rates until 1931 and the beginning of the Great Depression. Nearly 3,000,000 people lived in the west by 1931, with 7.5% of the population of Canada being foreign born, excluding the USA and Britain (Boberg, 2010). However, during the 1930s there was a general decrease in immigration to the prairie provinces. Boberg (2010) describes four groups which made up the general population of the west alongside Indigenous peoples: "Internal Canadian migrants, mostly from Ontario; and immigrants from Britain, Europe, and the United States" (p. 88). To keep most of the population white and Anglo-Saxon, Canada began to pass restrictive immigration laws during the early 1900s with some of these laws lasting until late into the 20th Century (Walker, 2015). These laws generally targeted non-Northern Europeans and banned them from immigrating to Canada. For example, many Chinese workers were brought over to build the railroads in Canada. These workers were strongly discouraged to bring their families and in 1923 the Chinese Immigration Act was put in place, banning Chinese immigration altogether (Walker, 2015).

The influences which shaped Mainland Canadian English¹ into its present state have largely been contested, with several theories arising regarding the most influential sources. A prominent theory, suggested by Bloomfield (1948), is referred to as the Loyalist Origin Theory. This theory suggests that the immigration of Loyalists from the USA to NS, NB, PEI, and regions of Lower and Upper Canada because of the American Revolution, feelings of loyalty to the British crown, and cheap land prospects, played a critical role in establishing the varieties of English found across Canada today (Chambers, 2013a). Scholars have referred to the group of Loyalists who arrived in Canada, originating from the middle American States (e.g., Pennsylvania, New Jersey, New York), as "the founding population of inland Canada" (Chambers, 20013a, p. 15). As for differences between Loyalist dialects and their ancestral British English dialects, Walker (2015) suggests that dialect levelling would have occurred in America, creating dialects which differed from the dialects spoken in the British Isles. With the large populations of Loyalists immigrating to areas which had small populations of English speakers, it is thought that these Loyalist varieties had an impact on the original populations' varieties of English (Orkin, 1970). This idea would fall under what Mufwene (1996) calls the "Founder Principle" (p.84) which suggests that the population that arrives first in an area has a greater influence on many of the features of a linguistic variety used in the area, in this case English. The large influx of Loyalists, who were primarily English-speaking, would influence the development of the English varieties in the areas they settled. However, not all linguists agree that Canadian English is strongly influenced by the Loyalists.

¹

¹ Newfoundland and Labrador have a significantly different history than Mainland Canada and are generally excluded from the Loyalist Theory of Canadian English (Boberg, 2010).

Several scholars suggest that the large increase in immigration from the British Isles after the War of 1812 overwhelmed the influence of the Loyalists' English dialects on Canadian English (Walker, 2015, p. 58). This theory was first proposed by Scargill (1957) who suggested that the wave of these immigrants had a more significant impact on Canadian English than that of the Loyalists. This idea is portrayed further through the comparison of British English and Canadian English in which Scargill (1977) provides a plethora of examples to demonstrate the large influence of British immigrants' varieties of English on early Canadian English. Despite these suggestions, Scargill leaned towards a more balanced view regarding the origins and influences of Canadian English, like many scholars today.

In addition to the two divergent theories above, scholars, such as Charles Boberg (2010), have suggested that the origins of and influences on Canadian English may be more complex than originally thought. Boberg (2010) stresses that differences in settlement history and patterns had different effects on regions which can be seen in enclaves across the country (p. 26). As well, fluctuating immigration rates of people from various countries are also thought to have influenced Canadian English. Scholars who do not conform to the two theories outlined above often suggest there is no simple answer to the question of Canadian English origins and whether it had a sole influencer. A broader view is suggested when addressing the history of Canadian English.

Unlike the debates regarding the origins and influences of Mainland Canadian English, the origins and differences in English spoken in NL are a bit clearer. While many of the provinces were established in the late 1800s and early 1900s, NL had a significantly different settlement history than the mainland provinces. Often the English spoken by residents of NL is perceived as sounding more Irish than Canadian (Clarke, 2010, p.1). This difference in dialects is

largely a result of the significantly different settlement patterns from the early 1600s to the 1900s. Prior to the province being claimed for England, in the 1400s an early migratory fishery was occurring which included the Basques, French, Portuguese, and Spanish (Clarke, 2010). Originally, the only fishermen to attempt to settle permanently were the French. Despite the French presence, which was generally around the west and northwest coasts (until 1904), the British claimed the island and began permanent settlements along the east and southeast portion of the island (Clarke, 2010).

Unlike in mainland Canada, most of the immigrants that came to NL were from the southwest counties of England and the southeast counties of Ireland (Clarke, 2010, p. 6). This was partially the result of the migratory fishery being centered in southwest England. Despite a growing population along the coast, little of the centre of the island was explored by Europeans until 1822 when William Epps Cormack became the first European to cross the interior of the island. Up until this time, the interior of the island had only been known about by the Indigenous peoples native to the island: the Beothuk and the Mi'kmaq (Clarke, 2010). In 1832, NL was granted a colonial assembly and soon after, in 1854, it became a self-governing colony. The cod fishery continued to bring in immigrants from the British Isles, with most immigrants coming from Ireland (Boberg, 2010). Not only was NL's population increasing due to immigration during the late 1880s, but natural increase was a substantial factor in this increase. By 1884, 97% of the population was native born (Clarke, 2010, p. 9).

As NL's economy and industries continued to grow during the 1800s, a trans-island railway was constructed in 1898, allowing easier transportation of citizens and goods between the east and west coasts. In 1907, NL became a Dominion, only to join confederation forty-two years later in 1949. Unfortunately, the late 20th century was not as prosperous for NL as the 19th

century. The provincial government began a relocation program, moving residents from small communities and relocating them as the cod population began to decline (Clarke, 2010). In 1992, the cod moratorium restricted cod fishing and most residents who relied on fishing for an occupation were left jobless. This resulted in the urbanization of the population with many residents moving from small coastal communities to more urban areas, such as St. John's or Corner Brook. In addition, many Newfoundlanders found seasonal work in mainland provinces, such as the oil sands in AB, or have permanently moved to mainland Canada (Clarke, 2010).

Up until Confederation and arguably even later, NL was isolated from the rest of Canada, with most immigrants coming from the British Isles. This isolation and long historical tie to the British resulted in a distinct dialect of English that differs from that of Mainland Canada. There has been little Indigenous influence of the Beothuk and Mi'kmaq groups as the Indigenous peoples were killed or forced off the island by the arrival and colonization of Europeans. An Indigenous population continues to exist in Labrador, a section of the province that is attached to the mainland. The largest Indigenous groups in Labrador are the Inuit and Innu, alongside a Métis population (Newfoundland & Labrador Indigenous Tourism Association, n.d.) Thus, NL host many dialects of English, though recent linguistic studies find these dialects are starting to follow some mainland Canadian English trends (see Chambers, 1991; Clarke, 2010).

2.2.2 Contemporary Influences on Canadian English

Following World War II, immigration to Canada began to increase dramatically. Approximately 1.5 million immigrants arrived in Canada per decade from the end of the war to the 1970s (Boberg, 2010). Beginning in the 1960s several laws were put in place in Canada regarding the linguistic landscape of the country. During the '60s there was a push for the acknowledgement of Canada's bilingual and multicultural nature which was responded to in

1969 with the passing of the Official Languages Act (Walker, 2015). This made English and French the official languages of the federal government and officially made Canada a federally bilingual entity. Though all provinces and territories in Canada are institutionally bilingual, not all are constitutionally bilingual, with NB being the only constitutionally bilingual province and QC being the only constitutionally French province (Chambers, 2010).

The Immigration Act passed in 1982 lifted all bans on immigration put in place by earlier governments, opening Canada's boarders to individuals who had previously been restricted from entering the country (Walker, 2015). Following the 1980s, immigration rates from Europe and the USA began to decline while immigration from the Caribbean, Middle East, Central and South America, and Asia began to increase (Statistics Canada, 2016). Immigration from Asia was greatest, with many of these immigrants generally settling in Canadian cities rather than rural areas (Walker, 2015). The highest foreign-born population in Canada since confederation, no longer comes from the British Isles, but from China and India (Statistics Canada 2016). While the highest percentage of the foreign-born population in Canada was recorded in the 1921 census at 22.3%, the 2016 census reports that 21.9% of Canada's population is foreign-born (Statistics Canada 2016).

Despite the dramatic rise in immigration from areas that do not have English as a first language most scholars agree that it is too early to determine the linguistic impact this may have on Canada's English and its future. However, Chambers (2010) suggests that the high rate of English as a second language accents may influence Canadian English speakers in urban areas, eventually becoming a marker of urban Canadian English (p. 14). An example of this is given by Denis (2021) who studies the use of the lexical term, *bucktee*, in a variety of English called Multicultural Toronto English, spoken in the Greater Toronto Area by younger people. He

examines the origins of the term in the Somali language and how it spread throughout the community, eventually becoming a term used by many young Torontonians outside of the Somali and black community. Considering other slang terms used in this variety, Denis (2021) suggests this variety is influenced by Jamaican Patwa and Somali, suggesting what Chambers (2010) predicted is occurring within the largest city in Canada.

2.3 Major Linguistic Studies Focusing on Canadian English and its Lexicon

It was not until after the 1950s that Canadian English became a prominent subject in linguistic research (Orkin, 1970). Comments prior to World War II made by scholars regarding the English variety spoken in Canada often portrayed negative attitudes towards the variety and were often made within a study focusing on American English. These two varieties were frequently compared (Orkin, 1970). Once the CLA was formed, scholars began constructing a dictionary on Canadian English, and began publishing a journal bi-annually with scholarly work focusing on Canadian English, with many of the early studies focusing on dialectology and lexicography (Orkin, 1970).

Bloomberg (1948) called for more attention on the study of Canadian English and suggested that scholars often ignored or were ignorant of the differences in Canadian history compared to the other British colony's histories. Among the earlier studies, as discussed in the history of Canadian English above, many scholars focused on investigating whether Canadian English was more similar to British English or American English, rather than focusing on a scientific study of Canadian English itself. However, after the formation of the CLA, the association "immediately organized committees for linguistic geography lexicography" (Gregg, 1993, p. 29). Linguists across the country began to focus on establishing the identity of Canadian English, discovering dialect differences in ON, the Maritimes, and NL. Dictionaries focusing on

Canadian English became more popular as these systematic studies began, such as a *Dictionary* of *Canadianisms on Historical Principles* (Avis, Crate, Drysdale, Leechman, & Scargill, 1967).

The years following World War II saw an abundance of scholarly work focusing on regional Canadian English. Throughout the 50's and 60's, the phonological systems and regional dialects of Newfoundland English were studied by many scholars (e.g., Drysdale, 1959; Portor, 1966; Seary, Story, & Kirwin, 1968). Further study of the regional dialects of Newfoundland English resulted in Story, Kirwin and Widdowson's (1982) dialect dictionary, *Dictionary of Newfoundland English*. This was followed by Pratt's (1988) *Dictionary of Prince Edward Island English*.

Moving west, studies were completed in ON, with some focusing on regional dialects (e.g., the Ottawa Valley), as well as comparing Canadian English along the border to nearby dialects of American English (Avis, 1954, 1955, 1956). The latter example was also a topic of research in MB and SK (e.g., Allen, 1959). Scargill conducted numerous studies on AB English, such as his general survey of English pronunciation in the province (Gregg, 1993). Robert Gregg (1957a, 1957b, 1975) thoroughly investigated the language varieties of BC (in particular, Vancouver). Further studies investigating Canadian English are outlined in Avis (1965), Avis and Kinloch (1978), and Lougheed (1988).

In 1970, a large-scale study was proposed by the Canadian Council of Teachers of English and the CLA to compare the speech of parents and students across Canada (Scargill & Warkentyne, 1972). The survey explored 104 linguistic items, including 29 vocabulary questions. It was the first national survey of Canadian English, and its primary focus was to explore the regional variations of Canadian English, rather than focus on the similarities and differences of Canadian English to British and/or American English varieties (Warkentyne,

1971). Their findings, from a total of 14,228 respondents across the ten provinces, suggest that three distinct regional dialect areas exist: NL; Eastern Canada, including ON, but not NL; and Western Canada (Warkentyne, 1971). In addition to the regional differences, they found a generational gap between the parents and students. It became clear that the younger generation was not only using new expressions, but also preserving, and in some instances reviving, older forms (Scargill & Warkentyne, 1972).

In the 1990s, Jack Chambers introduced a new methodology to the study of Canadian English: dialect topography. This method was like dialect geography in that both methods "provide a macro-level perspective on linguistic variation" (Chambers, 1994, p. 35) while surveying speakers in a continuous geographic area. However, dialect topography's focus moved away from non-mobile, older, rural, predominately males (NORMs), towards gathering a representative sample from general society (p. 36). Further, Chambers stressed the fact that dialect topography was more sociolinguistic in nature, "provid[ing] comparative linguistic data from individuals in a particular geographic setting" (p. 35) which would ultimately provide useful information for a variety of professions, such as teachers, actors, and ESL instructors. Instead of having to use prior methods that involved a fieldworker or schoolmaster to interpret/read questions to illiterate participants (often NORMs), Chambers used volunteers to hand out questionnaires to areas where the volunteers worked (colleges and retirement homes) and included pre-paid business envelopes to return the questionnaires to reach a wider, more representative sample.

More national studies were completed in the early 2000s. Like Scargill and Warkentyne (1972), Boberg (2005, 2008, 2010) conducted a nation-wide lexical study that extended past the Canadian border to include some of the USA, using a written questionnaire distributed by

undergraduate students to friends and family. This became known as the North American Regional Vocabulary Survey (NARVS). Boberg's findings expand on Scargill and Warkentyne's (1972) in that the NARVS data suggests that Canada consists of six different lexical regions: The West, ON, Montréal, NB-NS, PEI, and NL. This was determined through quantitative and qualitative analysis using what Boberg introduces as "net variation" and "major isoglosses" (2005, p. 32-33). These methods are further discussed in Chapter 4, as they are used in the current study to analyze the data.

The NARVS data is further analyzed by Boberg (2010) using a calculation called "total variation" (p. 170). This calculation is also discussed in Chapter 4, but simply, is the sum of all the standard deviations of each variant of a variable. This calculation gives insight into the important differences in frequencies, as well as the differences in variation between variables. The larger the differences in the frequencies of several variants, the larger the total variation, which would suggest there may be regional differences, while those with smaller total variation percentages suggest that there is virtually no regional variation (p. 170). Of 44 variables, Boberg found ten had a total variation higher than 65%, with the highest being 110%. Boberg's study builds on Scargill and Warkentyne's (1972) national study and provides insight into changes that have occurred and are occurring, while highlighting areas for further research. In addition, his study examines variables that had not been considered before, providing new information for variables that scholars may want to consider in future studies.

Boberg (2016) continued his study of the Canadian lexicon using the local newspapers across Canadian communities to gather further data on speaker's lexical use. He collected data for 19 NARVS variables and found that the newspaper data converged closely with the NARVS data. Though the focus of this study is more towards the methodological use of newspapers and

mass-media, he found similar findings as NARVS. Further details about his findings for both NARVS and the newspaper study are available in Chapter 3.

Smaller scale studies have continued to investigate the features of Canadian English and have aided in creating a description of this English variety, that is often very similar to that of the broader Northern American variety (Chambers, 1994; Boberg, 2005). I have focused on the large-scale studies that have investigated Canadian English; however, there are plenty of smaller regional studies that have also been completed. These studies describe the changes and variation within Canadian English that are generally focused on in the field of sociolinguistics. As it has been over fifteen years since the results from NARVS were first published by Boberg in 2005, additional sociolinguistic investigation will provide further evidence towards sociolinguistic theory and highlight any changes and/or variation that may be occurring in 21st century Canadian English.

The above studies have not only exposed change in the Canadian English lexicon, but they have also revealed that the English spoken across the nation is not completely homogenous, at least at the lexical level. Whether Canadians hold perceptions, attitudes, or ideologies towards the English spoken across the many regions of Canada is less clear to scholars.

2.4 Language Regard and Canadian English

Unlike the abundance of sociolinguistic studies focusing on variation and change in Canadian English, studies focusing on language regard within the country are lacking. There have been several studies on local levels that research the language attitudes and ideologies of Canadian speakers, but only one national study to my knowledge has ever been completed (see McKinnie & Dailey-O'Cain, 2002).

Non-linguists' (or folk) attitudes, perceptions, and ideologies of language, coined by Preston (2010b) as *language regard*, has been studied worldwide (see Preston, 1999 and Long & Preston, 2002). Through these studies it has become apparent that language regard is not stable, but rather, varies similarly to linguistic variables (Preston, 2017). There is no single "true" attitude or perception that the scholar must tease out from folk, but an array of attitudes, perceptions, and ideologies that folk hold towards language which are produced, and possibly expressed, depending on many factors (Niedzielski & Preston, 1999). Thus, scholars have recently called for the exploration of language regard through numerous methods, stressing that it is not possible to control for every single factor that contributes to the expression of language regard in a single study (Garrett, 2010; Preston, 2017). Rather than finding a single method or set of methods which find the "true" attitude or perception of non-linguists, scholars must investigate language regard through different methods to explore the variability of language regard in speakers.

Many studies of language regard originally used the matched guise technique developed by Lambert, Hodgson, Gardner, and Fillenbaum (1960), a method which is still commonly used today. These scholars studied the language attitudes and perceptions of speakers towards English and French in QC. The foundational method they developed consists of recordings of one or more speakers which are presented to a group of listeners. In the case of multiple speakers, each recording is paired with another recording of the same speaker and may differ linguistically in some way. In Lambert et al.'s (1960) study, the passage the speakers read in the recordings consisted of a French philosophical text that was translated into English and read by the speakers in both English and French. Several control recordings were also included that do not have a matched recording. The listeners do not know they are hearing the same speaker(s) and are asked

to rate the speaker in each recording on several scales such as personality traits or degree of bilingualism and asked to indicate specific characteristics of each speaker, such as their possible occupation. An indirect approach to studying language regard, such as the matched guise test, allows the scholar insight into stereotypes and beliefs that a respondent may not share openly if asked directly. As the respondent does not generally know the scholar is investigating their attitudes and perceptions towards language, results differ from those studies that use a more direct approach (Garrett, 2010).

Another significant method used in a subbranch of language regard, perceptual dialectology, is the map task. Rather than an indirect approach, the map task leans towards a direct approach as respondents are asked to draw on a map where they believe speakers of a language speak differently (or similarly) compared to their own variety of language. Initially used by Japanese and Dutch dialectologists, map tasks were further developed by Preston (1989) in the USA. Preston has used map tasks to thoroughly explore the language regard of Americans in numerous states, including Hawai'i and Michigan. His findings show differences in attitudes and perceptions across the country. Findings have enlightened scholars as to possible linguistic variables undergoing change which have gone unnoticed by linguists.

Further development in technology has allowed for the analysis of the map task to become more sophisticated with geographic information systems (GIS). Rather than tracing by hand each map onto a composite map, this can be digitized along with characteristics of the speaker, the speaker's labels for a specific area, and much more. Montgomery and Stoeckle (2013) provide an in-depth explanation of how GIS is used in the analysis of map tasks and allows for comprehensive visualizations of the data to be created. GIS also allows for quicker

data processing and the ability to analyze more data in a simpler manner. How GIS is used to analyze data is discussed further in Chapter 4.

GIS and map tasks also allow for a content analysis to be completed on the labels provided for areas that are highlighted by participants. Content analyses (Bauer, 2000) which were originally developed for textual materials in social research, allow scholars to understand the social construct of participants and their "worldviews, values, attitudes, opinions, prejudices and stereotypes and compare these across communities" (p. 134). Evans (2011) completes a content analysis of the labels provided by respondents from the state of Washington to explore their perceptions towards the English spoken across the state. By completing a content analysis, she provides composite maps (heat maps) of participant's perceptions as a mixed method to analysing language regard. The composite maps of label categories allow for a visualization of the perceptions and to better see patterns that exist because of similar perceptions held by many participants. Further, she suggests that rare labels that are not used by many participants or do not have other related labels to comprise a single category indicate a lack of perception related to that label, such as the lack of "Native American" labels in her data (p. 403). She did not find this label often in the responses from participants, despite there being a large Indigenous population, suggesting the participants do not perceive an Indigenous influence on English spoken in Washington.

Findings from "draw-a-map" tasks have revealed variation in language regard of residents in small regions as well as larger regions and provide further information on specific areas of linguistic insecurity, a term often associated with Labov's (1972) departmental study of preconsonantal and final position /-r/ in New York City. Labov (1972) suggested that the group of speakers who used a higher rate of pronouncing /-r/ in emphatic speech were

"hypercorrecting" due to linguistic insecurity. This group of speakers, in their attempt to use the "standard" language, which is generally associated with higher-class speakers, overcorrected past the rates of those speakers due to their negative attitudes and perceptions towards their own way of speaking. In perceptual dialectology, scholars suggest that the groups of respondents who are asked to rate their home regions on characteristics, such as pleasantness and correctness, and rate their home areas as being more correct or pleasant than other areas are generally more linguistically secure (McKinnie and Dailey-O'Cain, 2002; Preston, 1989). Further evidence for linguistically secure areas is found in the lack of comments regarding regionalisms or nonstandard variants in areas that the respondent originates from on map tasks. Thus, respondents who comment on the regionalisms and nonstandard use of linguistic variables in their home region, as well as rate their home areas as less correct and/or pleasant than other areas are generally thought to be more linguistically insecure (Evans, 2013b). It is particularly interesting when respondents do not notice regionalisms or nonstandard forms used by speakers in the area that the respondent comes from, as present in Niedzielski's (1999) findings. Exploring whether speakers perceive differences in their speech compared to other speakers may also provide sociolinguists insight into the types of linguistic changes occurring in an area, as well as the factors contributing to and influencing those changes (e.g., Plichta, 2004).

Related to linguistic security is the idea of a standard language. The ideology of a "standard language" has been studied in several fields, such as linguistic anthropology (Silverstein, 1996) and perceptual dialectology (Preston, 1989). The notion of a standard language has been constructed by lexicographers and educators across the globe and is deeply engrained in many societies and even linguistic theory (Lippi-Green, 2011; Milroy, 2001). The standard language, according to lexicographers and educators, is generally thought to be the

language spoken by the educated, which is largely uniform in structure and is accepted by a large population of speakers in an area (Lippi-Green, 2011, p. 57). Thus, the exploration of responses to rating tasks of languages on scales for correctness and pleasantness provides scholars insight into what beliefs speakers may hold regarding a standard language in their society. Lippi-Green (2011) provides a thorough discussion on how the ideology of a standard language in society turns language into a commodity. This can be detrimental to those who do not speak a variety similar to the standard language in a society, such as the lost opportunity of being hired or denied rental accommodations (Baugh, 2003; Lippi-Green, 2011; Purnell, Idsardi, and Baugh, 1999). An important step in minimizing negative consequences for those who do not speak the "correct" variety of a language in a society is to determine whether the residents perceive the existence of a standard or correct language. Perceptual dialectology allows for insight into whether a standard language ideology may exist in a society, and if so, what the standard language might look like.

Perceptual dialectology studies conducted across the globe have shed light on where respondents believe speakers speak the most correct and/or pleasant variety of a language. However, within Canada there have only been a handful of studies examining Canadians' attitudes towards English spoken in Canada. Most of these studies have been regional, concentrating on residents' regard towards the English spoken around them or in their province. Many of these studies have been conducted in NL and have explored the language regard of Newfoundlanders towards varieties of Newfoundland English (Clarke, 1981, 1982, 2010; Hampson, 1982; O'Dwyer, 1982). It should also be noted that, although not focused specifically on the study of English, Lambert et al. (1960) developed significant methods in studying language regard, in particular the matched-guise test, in QC as discussed above.

Despite several regional studies on Canadians' language regard, few large-scale language regard studies have been completed in Canada. McKinnie and Dailey-O'Cain (2002), focus on the language regard of young Albertans and Ontarians towards English spoken in the provinces and territories of Canada. Their respondents completed a rating task which required them to rate the English of each province and territory on three characteristics: pleasantness, correctness, and similarity to their own English variety. Their findings suggest that Canadians are less critical when assessing fellow Canadians' English compared to results in studies that focus on Americans' and their language regard towards American varieties of English. The authors found that Albertans and Ontarians perceived their home provinces as being among the most 'pleasant' and 'correct', as well as the English of speakers in BC. McKinnie and Dailey-O'Cain suggest that Albertans and Ontarians have high levels of linguistic security indicated by the high rating each group gave to their home province. In addition, these two groups rated BC as being more 'correct' than the speakers in their own provinces. On the opposite end of the spectrum, QC was rated the lowest by both groups of respondents for all three rating tasks. McKinnie and Dailey-O'Cain also asked respondents to mark on a blank map of Canada where they thought dialect boundaries existed. Ten regions were highlighted by at least 10% of respondents (p. 290), further suggesting that Albertans and Ontarians perceive differences in English spoken across the country.

Though insightful, McKinnie and Dailey-O'Cain's study only includes young respondents from two provinces. Their study sets the foundation for further investigation of language regard including respondents from other provinces and territories, as well as different age groups. In addition, a content analysis of the labels provided by respondents on the map task may reveal Canadians' perceptions of dialect areas and the features that characterize them

(Evans, 2011; Preston, 2011). To fill this gap, the current study presents the findings from a national "draw-a-map" task extended to participants across Canada, alongside rating tasks for the three characteristics McKinnie and Dailey-O'Cain (2002) studied. Further, a content analysis was completed, and the results and analysis are presented in Chapter 5.

2.5 Connecting Lexical Variation and Language Regard in Canadian English

There are several points where lexical variation and language regard intersect. In particular, the study of dialectology closely links language regard and lexical variation studies. For example, the study of perceptual dialectology focuses on the differences (or similarities) that speakers are aware of in a defined region, which leads scholars to investigate whether any linguistic boundaries exist (Preston, 1989). Sometimes, language regard studies highlight variables that linguists, who are not accustomed to the local dialects, did not know existed (e.g., Plichta, 2004).

Within language regard studies it has become apparent that lexical features are salient to respondents (Clarke, 1984). Using a matched-guise test, Clarke investigated how influential linguistic features were on respondents' responses when asked to respond with what occupation they believed a speaker had, the speaker's regional background, and to rate the speaker on a seven-point scale of standardness. Her findings show that listener's ratings changed depending on what linguistic feature was targeted (e.g., lexical, phonological, grammatical), despite hearing the same speaker saying the same phrase and only adjusting specific linguistic features (e.g., using [t] in place of [θ]). Lexical nonstandard features were the second most stigmatized feature, following nonstandard phonological features. Further, lexical diversity, or "vocabulary richness" (Bradac & Wisegarver, 1984), has been found to correlate with perceptions and attitudes towards competence and status (Garrett, 2010). Bradac and Wisegarver (1984) found that respondents

rated speech samples with high lexical diversity higher for social status/high-status jobs than low lexical diversity.

In addition, findings from my master's research, which focused on perceptions of residents of the Greater Toronto Area, suggested that folk recognize differences in lexical features used by speakers, as shown in Figure 1.

2. Write down a label that you would use for that way of talking, or consider giving a name to the area you have marked. (E.g. Comment on use of a particular word or pronunciation, or comment on a special way of talking) shobba eakau Richmond hill Markan Vaughan Brampton Pickering Oshawa Hwy 2 canadar Hwy 401 Scarborough Eglinton Ave Hwy 401 excessive Etobicoke DVP Mississaug excessive Oakville Lake Ontario 11it's not that senous y

Figure 1. Respondent's Response to Map Task of the Greater Toronto Area

Note. This figure is an example of a map task from a perceptual study of the Greater Toronto Area. Reprinted from "Hillbillies, schmucks and gangsters: A perceptual dialectology study of the Greater Toronto Area," by Y. Freake, 2014, unpublished Master's Major Research Paper, p. 41. Reprinted with permission.

Whether respondents include examples of lexical items on the map task in the current study may provide scholars insight into whether participants are accurate and aware of regionalisms occurring in the country. For example, if participants highlight an area around the

province of SK on the map task and use the label 'bunny hug', a term often used in the prairie province for a hooded sweater with a large middle pocket, and the term 'bunny hug' is provided as the answer for the question in the lexical survey portion referencing a hooded sweater by the majority of SK participants, it would suggest that Canadians recognize this particular regionalism. Going a step further, the term 'bunny hug' may be a term that displays a particular identity desirable to some individuals. There may be lexical variables that seem more subtle yet play a role in the portrayal of a regional identity that will provide further insight into sociolinguistic theory. The map task may also highlight lexical items that linguists have not focused on prior to this study, giving insight into possible changes or variation, resulting in new regions or dialect boundaries within Canada. Further, the results of the rating tasks will also help develop a theory of what areas of Canada are more linguistically secure than others, and if this has changed.

2.6 Summary

There have been many studies focusing on Canadian English following World War II; however, there lack in-depth studies focused on the language regard of all Canadians towards the English varieties spoken across the country, and only a few national lexical studies focusing on Canadians' lexicon. Further, there is only one large-scale study focusing on the perceptions of Canadians which found differing attitudes existed between young Albertans and Ontarians (McKinnie & Daily-O'Cain, 2002). The current study aims to explore the attitudes and perceptions of more Canadians in different provinces to expand on McKinnie and Daily-O'Cain's work. It may also become apparent that attitudes have changed over the past twenty years since their study took place.

Though lexical variation has been studied more broadly in Canadian English, it has been over a decade since a national lexical survey has been completed. NARVS (Boberg 2010) provides detail into several lexical variables and sheds light on regional boundaries that exist, at least with regard to Canadians' lexicon. Another goal of the current study is to provide further insight into whether changes have started, continued, stopped, or even reversed in comparison to those that Boberg and other scholars (e.g., Scargill & Warkentyne, 1972) have witnessed in their data.

This study relies on the methodology used in several of the studies mentioned above, in particular, Boberg (2005, 2008, 2010), McKinnie and Daily-O'Cain (2002), and Preston (1989). Further details on the specific methodologies are provided in Chapter 4. An overview of the lexical variables explored in this study and previous findings from lexical surveys is given in the following Chapter 3, to setup the analysis and discussion in Chapter 5.

3.0 Lexical Variables

3.1 Introduction to the lexical variables and previous studies

Before addressing the methods used in the current study, it is important to contextualize and highlight the lexical variables that were included in the current study and give a brief overview of those variables that have previously been studied, including the general findings from those studies. This chapter lays the groundwork for the data analysis and discussion in Chapter 5 and explains why certain variables were explored in the current study.

Table 1 lists the lexical variables considered in the current study and previous studies of these variables. The category of the variable is given in capital letters followed by a description in lower case, and examples of some, but not all variants are provided below each variable in italics. A complete list of variants for each variable is provided in Appendix A. Some variables have not been investigated previously and are included based on my observation of variation in my time spent living in several provinces.

The studies listed in Table 1 use similar methods, a lexical questionnaire, as I do in the current study. However, each questionnaire was unique in its distribution and the participants included. Beginning with the earliest study, Scargill & Warkentyne (1972) report the results of their lexical survey of Canada which focused on a total of 104 linguistic items, split into four categories: pronunciation, grammatical usage, vocabulary, and spelling conventions. As this was prior to the common household having a personal computer, questionnaires were distributed through regional school directors to grade nine students and their parents. In their analysis, they only considered participants who were "native-born English-speaking Canadians" (p. 48). In total, they had 14,228 participants and concluded that a generational gap between the parents and students was present for several variables, and in some cases found the younger generation

reviving or preserving variables (e.g., pronouncing "yolk" as *yelk*). Based on their findings, they suggested three dialect areas: Newfoundland, Eastern Canada (excluding NL, but including Ontario), and Western Canada (Warkentyne, 1971).

 Table 1. The Lexical Variables Considered and Previous Studies

Variable	Previous Study		
VEHICLE – large cargo transport vehicle	None		
(semi, 18-wheeler, transport truck, etc.)	None		
UTENSIL – kitchen utensil used for flipping	None		
(flipper, spatula, etc.)	None		
SHOE – an athletic shoe	Boberg, 2005, 2010, 2016		
(runners, sneakers, tennis shoes, etc.)	Gallinger & Motskin, 2018		
PARKING – a parking structure	Boberg, 2005, 2010, 2016		
(parkade, parking garage, etc.)	Boberg, 2003, 2010, 2010		
HOUSE – rural leisure house	Boberg, 2005, 2010, 2016		
(cabin, cottage, summer house, etc.)	Boberg, 2003, 2010, 2010		
TV – television accessory	Boberg, 2005		
(clicker, remote, channel changer, etc.)	Booking, 2003		
SPORT – a sport combining baseball and soccer	Gallinger & Motskin, 2018		
(kickball, Chinese baseball, etc.)	Gaminger & Wotskin, 2010		
DECK – outdoor area attached to a home near an entrance	None		
(veranda, porch, deck, etc.)	Tione		
FOOD – sweet breakfast food	None		
(pancakes, hot cakes, etc.)	Tione		
BABY – accessory to soothe babies	None		
(soother, binky, etc.)	Trone		
NOW VEHICLE – a vehicle used in deep snow None			
(snowmobile, ski-doo, etc.)	Tione		
SNOW ACTIVITY – an item used in the snow often by			
children	None		
(toboggan, sled, slide, etc.)			
SHOPPING – a wagon used in supermarkets	Boberg, 2005		
(cart, trolley, carriage, etc.)	20018, 2000		
CLEANING – an item used to clean and protect clothing			
while eating	Scargill & Warkentyne, 1972		
(napkin, serviette, etc.)			
BEVERAGE – a carbonated sugary beverage	Boberg, 2005, 2010, 2016		
(pop, soda, drink, etc.)	Gallinger & Motskin, 2018		
DADDY LONG-LEGS – an insect with long legs	None		
(crane fly vs. spider)			
HAIR ACCESSORY – an accessory to tie back hair	None		
(hair tie, ponytail, elastic, etc.)	1,0110		

CLOTHING ACCESSORY— an accessory to keep your head				
warm	Gallinger & Motskin, 2018			
(toque, hat, beanie, etc.)				
	Boberg, 2005, 2010			
FURNITURE – a piece of furniture that seats 2 – 4 people	Chambers, 1990			
(sofa, chesterfield, couch, etc.)	Gallinger & Motskin, 2018			
	Scargill & Warkentyne, 1972			
CLOTHING – a hooded sweater	Boberg, 2005, 2016			
(hoody, sweater, bunny hug, etc.)	Gallinger & Motskin, 2018			
BAG – an bag worn on back with shoulder straps	Pohara 2005 2010 2016			
(backpack, rucksack, bookbag, etc.)	Boberg, 2005, 2010, 2016			
DRAWING – coloured pencils	Collingon & Motoltin 2018			
(pencil crayons, leads, coloured pencils, etc.)	Gallinger & Motskin, 2018			
DRIVING – a car driver's sound alert	None			
(honk, beep, toot, etc.)	none			

Boberg's (2005, 2010) study, NARVS, began as a fieldwork exercise for an introductory to sociolinguistics undergraduate course at McGill University. Students were asked to gather several questionnaires from friends and family and analyze the data of 30 linguistic variables as an assignment. After three years, Boberg expanded the original question from 30 to 47 questions and setup an email so interested participants could request a survey to participate. After promoting the study through media and receiving over three thousand responses, Boberg expanded the survey to 53 variables and began distributing through an online form. Boberg focuses analysis on 1,800 Canadians who were still living in the region they were born and grew up in and separates this group into 15 Canadian regions for analysis. He found regional variation present, and used a new method for calculating variation, net variation, and total variation as described in Section 2.3. He suggested six lexical regions: Western Canada, ON, Montréal, NB–NS, PEI, and NL.

Boberg (2016) continued to explore Canadian lexical variation using a questionnaire distributed through local newspapers. This approach was exploratory in nature to determine if a new method for collecting data was as efficient as traditional dialectology techniques. Boberg

found that the data converged with previous research, including NARVS, and allowed for many respondents to participate across the country. In total, he received 1,192 responses of which he reduced to 842 for analysis based on participants who still lived in areas they grew up in.

Analyzing 19 lexical variables, Boberg suggested that the homogeneity of lexical variation that is often associated with mainland Canada is not so homogenous. In fact, the data from this study indicate there may be regional variation between urban and rural settings, as well as between smaller regional areas across mainland Canada (e.g., Ottawa valley and QC's Eastern Townships).

Like Boberg's (2016) study above, Gallinger & Motskin (2018), co-founders and editors of the online blog, The 10 and 3, conducted an online survey with Boberg's help to gather data on lexical variation in Canada. Asking 35 questions focused on lexical and phonological variation, the authors presented colour-coded maps based on the dominant variant in a province. They received 9,500 responses from across Canada, which allowed them not only to explore differences between provinces, but also between urban and rural areas. Maps generated only show the participants still residing in the same province or territory where they grew up.

The following section discusses the lexical variables investigated in the current study that have been explored in previous studies.

3.2 Previous findings of lexical variables

This section reviews the findings from previous studies of 13 lexical variables that are included in the current study. When there are multiple studies of a particular variable, the studies' findings are reviewed chronologically to determine any potential diachronic change. Variables are presented in capitalized letters and variants are presented in italics to avoid confusion.

SHOE is a lexical variable that has been studied by Boberg (2005, 2010, 2016) and Gallinger & Motskin (2018). This variable is often described as "[a]thletic shoes worn as casual attire" (Boberg, 2005, p. 27) and has variants such as *running shoe*, *runners*, *sneakers*, *tennis shoes*, or *gym shoes*. Boberg (2005, 2010) found this variable to be among the top ten Canadian regional differentiators by major isoglosses, with ON and QC mostly using *running shoes*, the western provinces using *runners*, and the Atlantic provinces favouring *sneakers*. This finding did not seem to diverge in any of the provinces studied when Boberg revisited the SHOE variable in his 2016 study, with similar regional results as in the NARVS data. Finally, Gallinger & Motskin (2018) found the same variation across the three regional areas as Boberg (2005, 2010, 2016).

The PARKING variable refers to the name for the public structure that is often multi-leveled and is where one parks their car. Boberg (2005, 2010) reported similar findings to the SHOE variable in that this variable was a top ten differentiator by major isoglosses, splitting Canada into the two regions based on the usage of specific variants. Western Canada, including northwestern ON, but not the rest of ON, preferred *parkade*, while the rest of ON and east are dominated by the term *parking garage* or *garage* (2005, p. 43). In his 2016 study, Boberg suggests that the variant *parkade* may be increasing slightly in usage overall; however, the two regions discussed above still prominently use the variants from the findings in the NARVS study.

Boberg (2005, 2010) studied the HOUSE variable, which refers to "a small house in the countryside, often by a lake, where people go on summer weekends" (2005, p. 56). The results suggest this variable to be among the greatest distinguisher of one Canadian region from another. The variant, *cabin*, is used predominately in the western provinces and NL. ON, QC, and the

Maritimes favour the variant, *cottage*, with parts of northwestern ON and NB using *camp* (p. 42). In addition, Quebecers often use the variant *chalet*. There is no apparent change in this difference between regions in Boberg's 2016 study, and Gallinger & Motskin (2018) confirm these regional distinctions in their own study. One additional finding of Gallinger & Motskin's (2018) analysis is the use of *bungalow* on Cape Breton, NS, which Boberg does not touch on in any of his studies.

The NARVS study is the only study to focus on the variable TV in Canadian lexical variation studies (Boberg, 2005). This variable refers to the "device that changes channels on a TV" (p. 57). Boberg (2005) does not report his findings on this variable, so there is little to compare the current data to.

The SPORT variable refers to the game or sport played on a baseball diamond, but instead of pitching a baseball and hitting it with a bat, players roll a large rubber ball from the mound to home base where another player kicks it, and play continues similarly to baseball. The variants noted by Gallinger & Motskin (2018) are *kickball* in the western provinces and Yukon (YT), and *soccer baseball* in the remaining regions. No other studies have published results on this variable.

Boberg (2005) includes the SHOPPING variable, which refers to a wheeled cart used to put one's groceries in while at the supermarket but does not report any data or regional differences. The variants he notes in the NARVS data are *shopping basket*, *shopping buggy*, *shopping cart*, and *shopping trolley* (p. 55).

Scargill and Warkentyne (1972) included the variable CLEANING, which is the object used to clean one's hands or face when eating a meal, in their survey. They found a divide between Eastern and Western Canada (with ON being the boundary and following usage patterns

similar to the East) with regards to this variable. The western provinces seemed to favour *napkin* while the east favoured *serviette*. It's important to note that the scholars asked two questions regarding this variable to determine if there was a difference in variant usage based on the object's material (paper vs. cloth). They found that there were some adults who did make a distinction depending on the object's material, but that the number of adults who used the words interchangeably, regardless of the object's material, was also high. The image used in the current study showed this object made from paper.

Studies focusing on American English and lexical variation often explore the variable BEVERAGE, which is a sugary, carbonated beverage and has variants such as *pop*, *soda*, *cola*, *coke*, *drink*, *tonic*, *fizzy drink*, *cold drink*, and *sodapop* (Boberg, 2005, p. 55). It is a distinguishing feature between states in the USA and has also been studied in Canadian English. In the NARVS data, Boberg finds *pop* to be the dominant variable across Canada, except for MB, Eastern ON, Montréal, and NL (p. 44). In these regions, *soft drink* is the competing variant, though he notes the only region using this variant by the majority of speakers is in Montréal while the other areas are more split between the variants (p. 44). Boberg (2016) includes the BEVERAGE variable in the newspaper questionnaire but does not report any of the findings. Interestingly, Gallinger & Motskin (2018) suggest *pop* to be the favoured variant across Canada except for QC, where they report 63% of Anglophones using *soft drink* and another quarter of Québécois Anglophones using *soda*. This may be due to where the respondents were located in QC but may also suggest a shift throughout the province towards *soft drink*.

The CLOTHING ACCESSORY variable is the object one wears to keep their head warm, often in colder weather. Gallinger & Motskin (2018) report on this variable, finding two

variants: *toque* and *hat*. Most Canadians prefer *toque* while the majority of NL and Nunavut (NU) prefer *hat*. The other studies do not investigate this variable.

An exceedingly popular variable to study in Canadian English is the variable FURNITURE which refers to the piece of furniture that seats three people (Boberg, 2005, p. 55). Variants include *chesterfield*, *davenport*, *sofa*, and *couch*. In Scargill and Warkentyne's (1972) study, the variant *chesterfield* is used by the majority of respondents regardless of age or region. They note that the preferred British variant is *sofa* and the American variants preferred are *sofa* and davenport. Chambers (1990) further studies this variable in Canadian and American respondents in a large survey of Canadians living along the American border in ON. His findings show a difference in usage of variants based on age, with older participants preferring chesterfield, while the younger generation prefers couch. Similarly, Boberg (2010) finds that there is a notable change in the use of variants in both Canadian and American English over the years, with speakers from both countries moving towards higher usage of *couch* (pp. 191-192). Gallinger and Motskin's (2018) findings support this, as no area in Canada uses *chesterfield* as the dominant term; however, they do note NL and Cape Breton, NS have the highest rates of preference for *chesterfield* among Canadians, with the highest rate of speakers using this variant (25%) originating from the Avalon Peninsula in NL.

The variable CLOTHING, which refers to a hooded sweatshirt, is studied by Boberg (2005, 2010, 2016). The data is only reported in Boberg's newspaper study (2016) with the majority of respondents using the variant *hoodie*. An important note is that Boberg combines the prairie provinces but when exploring this variable within the individual prairie provinces, he finds that the variant *bunny hug* dominates in Saskatchewan. Gallinger and Motskin (2018) have similar findings with regards to the CLOTHING variable.

Boberg (2005) explores the BAG variable, which refers to the bag generally suspended by two straps that students carry books and supplies in. West of Montréal, Canadians prefer the term *backpack*, while most PEI respondents prefer *schoolbag*, and *bookbag* is preferred in NB and NL. In his 2016 study, Boberg suggests similar findings, with *backpack* being the leading variant, except for in the Atlantic region. He notes that Torontonians prefer to use the unique variant *knapsack* which is rarely found in other regions (2010, p. 176).

The last variable studied in previous studies, DRAWING, refers to the coloured pencils used to colour on paper with examples of variants being *pencil crayons*, *coloured pencils*, *colouring pencils*, and *leads*. Gallinger and Motskin (2018) explored this variable and found *pencil crayons* to be the leading variant in all provinces except for QC, NB, and NL. QC and NB preferred the usage of *coloured pencils*, while the majority of NL used *leads*.

3.3 Summary

The above discussion of previously studied lexical variables provides context for the analysis that follows in Chapter 5. It is important to note that the above summary only includes the studies that were largely focused on lexical variation in Canada and used similar methods to the current study. Findings for variables, such as FURNITURE suggest recent changes have occurred, while others remain relatively stable (e.g., SHOES and HOUSE). The current study builds on previous findings, as well as providing new data for variables that have not yet been studied in a lexical survey of Canadian English.

The next chapter outlines the methodology used to gather the data for this study. Some of the current methods were exploratory in nature to determine if data gathering could be simplified using new technologies. Following Chapter 4, the data are presented and discussed with reference to previous findings when available in Chapter 5.

4.0 The Methodology

4.1 Introduction

Generally, sociolinguistic research focused on lexical variation utilizes several different types of methods to gather data, including but not limited to, surveys (e.g., postal surveys, online surveys, etc.), interviews, or the use of a text corpus or corpora. There are advantages and disadvantages to these methods, some of which are discussed in Chapters 2 and 3. Techniques and methods continue to be developed in the field of language regard, with some scholars using an indirect approach (e.g., implicit association test, matched-guise test, etc.) while others use a more direct approach (e.g., map tasks, rating tasks, etc.) to determine the most effective method of collecting subconscious and conscious perceptions, attitudes, ideologies, beliefs, etc. As outlined in Chapter 2, there are challenges and strengths to indirect and direct approaches in studying the language regard of speakers. Many scholars in this field have called for a mixed approach as language regard is multifaceted and varies like the linguistic variables studied in variation studies.

In this study, I use an online survey because it allowed for the collection of lexical variation data alongside perceptual and attitudinal data. The survey details and methods used in creating and distributing the survey are provided in the following sections, with the analysis and discussion of data following in Chapter 5.

4.2 General Survey Design

The survey used for this project was created using the ArcGIS software, Survey123. This survey platform allowed for the map task to be completed in the same survey as the lexical questionnaire and other rating tasks, making it easier to complete than other options. A challenge to using a hardcopy survey was that it would have been sent by mail to a random sample of

participants and had them return by post which would have resulted in a much greater time commitment for the research to be completed. The construction and content of the online survey are presented below. For a copy of the complete survey, see Appendix B.

The survey consisted of five parts: 1) a questionnaire on demographics and language use; 2) a map task; 3) a rating task; 4) a statement task; and 5) a lexical questionnaire. Part one gathered information on participant's gender, age, ethnicity, birthplace, childhood hometown/city, current area of residence, whether participants had lived in other provinces/territories besides their native province/territory for more than one year, whether participants had visited other areas of Canada, birthplace of their parents, their familiarity with the location of provinces and territories, education, employment, and whether they had previously taken linguistic courses.

The focus of parts two, three, and four was on participant's language regard. Part two presented participants with a blank map of Canada with major cities, bodies of water, and bodies of land (e.g., Baffin Islands) provided for point of reference (see Figure B11 in Appendix B). No province or territory names were given on the blank map. Following previous scholars' work (e.g., Evans 2011, 2013a, 2013b; Preston, 1999) participants were asked to mark on the map where they thought people spoke English that sounded different from their own English (e.g., phonetically, syntactically, lexically, etc.). The term "different" was not expanded upon and allowed participants to determine what "different" meant to themselves. They were then asked to provide a label that described the English spoken in the areas they had marked. Survey123 allowed participants to use predetermined shapes (e.g., circles, rectangles, or squares) or to mark their regions freehand. In addition, the ability to change the colours of markups was available. A textbox tool allowed participants to choose an area on the map and write their comments and

labels. Once they saved the map task, they were given the chance to provide further comments in a larger textbox which was separate from the map.

The rating task followed the map task in part three of the survey. It had three subsections focusing on different attributes of English: 1) Correctness; 2) Pleasantness; and 3) Similarity. Each subsection asked participants to rate the English spoken in the 13 provinces and territories on how correct they thought the English was, how pleasant the English sounded, and how similar the English was to their own. The scales were presented on a 10-point Likert-type scale with one being the least correct/pleasant/similar, and ten representing the most correct/pleasant/similar. A textbox was available to participants at the end of the section to provide further comments (see Appendix B).

The fourth part of the survey presented participants with eight statements to which they had to indicate their degree of agreement on a 5-point Likert-type scale: 1) Strongly Disagree; 2) Disagree; 3) Neutral; 4) Agree; and 5) Strongly Agree. These statements were included to gauge stereotypes and ideologies held that may influence the participants' responses to the first section, the map task, and the second section, the rating tasks. At the end of the fourth section, a textbox for further comments was provided.

The final section of the survey focused on lexical variation. There was a total of 23 questions asking participants to provide the term(s) they use for the object(s), actions, and activities depicted in images. They were asked to give the first response that came to mind. There was no description provided for the images except for the last question, which was a verb rather than a noun (e.g., honk, beep, toot, etc.), as shown in Appendix B.

Once participants had completed all required sections of the survey, they submitted their answers and were provided the researcher's email and the website link to a project website to see further developments in the project.

4.2.1 Participants

To collect data from across the country I used a "snowball" method which involved friends, family, and colleagues passing the online survey link to members of their networks. Having lived in four provinces in the past decade and with family and friends in many other provinces I had the advantage of reaching participants nationally. Initially, I had planned to consider several social factors relevant to participants' responses: age, gender, ethnicity, education, socioeconomic status derived from income and occupation, and province of residence/origin. These factors have been shown to contribute to variation in language regard and lexical variation in prior studies, several of which are outlined in Chapter 2. The sample frame in Table 2 below is an example of how many respondents were originally sought out in three specific categories. The goal was to recruit 728 respondents from across the nation who were eighteen years or older and proficient in English.

Once the survey was live, I personally contacted friends and family across Canada, and asked them to share the survey link with their Canadian networks. In addition, I used social media, through posts and personal messages, to reach out to friends and family (e.g., Facebook, Twitter, and Instagram). Due to the difficulty of accessing the survey (e.g., having to download an app), there were 202 responses by May 2020. At that point I decided to close the survey and begin analysis due to the difficulty in further recruitment and time constraints.

Table 2. Sample Design of Respondents

PROVINCE	AGE							
	18-32		33-45		46-58		59+	
	M	F	M	F	M	F	M	F
ВС	7	7	7	7	7	7	7	7
AB	7	7	7	7	7	7	7	7
SK	7	7	7	7	7	7	7	7
MB	7	7	7	7	7	7	7	7
ON	7	7	7	7	7	7	7	7
QC	7	7	7	7	7	7	7	7
NB	7	7	7	7	7	7	7	7
NS	7	7	7	7	7	7	7	7
PEI	7	7	7	7	7	7	7	7
NL	7	7	7	7	7	7	7	7
YT	7	7	7	7	7	7	7	7
NT	7	7	7	7	7	7	7	7
NU	7	7	7	7	7	7	7	7
Total Respondents	728							

The participants recruited are examined further in Chapter 5; however, of the 202 responses, all provinces and territories had a native participant except for the Northwest Territories (NT) and NU. Due to the smaller than anticipated number of respondents, I decided to reduce the social factors considered and focus on the regional lexical variation and language regard of respondents based on their *default* province, which is explained in the following section.

4.2.2 Areas of Residence

An important difference in the current lexical study and those reviewed in Chapter 3 is that previous studies only included the data collected from participants who grew up *and remained* in the same province. However, because of the smaller number of participants in this survey, I also included those who currently resided in a different province or region than their province of birth in the current analysis. The participants' responses to the survey questions below were used to determine what I call their *default* province.

- Were you born in Canada? If yes, what province were you born in?
- What city or town did you grow up in? Please provide the city/town you spent the majority of time in (or near) before age 18.
- What city/town and province do you live in currently? Please provide the city/town and province you currently live in.
- Have you lived in another province or territory for more than 1 year? If yes, please specify which province(s)/territory(ies) and length of time.

Using the answers from respondents, I sorted them into *default* provinces by the number of years spent in their province of birth/province they grew up in and whether they had lived in another province for an extended period. For example, Participant 26 reported her province of birth and where she grew up as BC and Surrey, respectively. Her current province of residence was AB. She also included a note that she had lived in BC for 20 years after responding 'yes' to "Have you lived elsewhere?" Because she spent most of her younger years in BC, her default province was set as BC.

If the participant had moved to different provinces throughout their lives, which made it more difficult to determine a *default* province, the critical age of 13 years old was used. That is to say, the province participants lived in the majority of their lives up to the age of 13 years old was then their default province. If this was not available, the province the participant grew up in was used as the default as it is thought this is the province that they identify their youth with.

4.3 Map Task

Because there are no available step-by-step instructions for digitizing and creating heat maps from map task surveys, I present the high-level steps here for future scholars, and more in-

depth steps with screenshots in Appendix C.² For further discussion on the steps used to process map tasks, see Montgomery and Stoeckle (2013), but note their steps use an older version of ArcGIS that is slightly different from the current (2022) version of ArcGIS Pro.

It is important to carefully consider the base, blank map that will be used in the survey for participants to draw on and label. Note that many countries have georeferenced base maps that can be publicly accessed and used for this purpose.³ The first step is to digitize the maps into ArcGIS Pro, which may involve scanning paper maps or importing digital files into the software. Using the "Georeferencing" tool, "control points" can be added to the maps to align to a general map where all polygons and labels are combined. Generally, the use of borders and boundaries on the scanned base map is beneficial to align to coordinate systems in ArcGIS Pro. Montgomery and Stoeckle (2013) provide an example of georeferencing which is reproduced in Figure 2. One can see three control points on the hand drawn map on the left in Figure 2 below, which are aligned to the georeferenced map of the United Kingdom on the right.

For the current study, all the maps that participants had drawn polygons on and/or labeled were transferred into ArcGIS Pro; however, the map used in the survey was a publicly sourced image that was not georeferenced and when control points were added, it greatly skewed the resulting polygons and map. This resulted in the need to "trace" the polygons onto a georeferenced map of Canada using borders, landscapes (e.g., lakes), and boundaries to more accurately "trace" the polygons, similar to how map tasks were analyzed before GIS software (e.g., Preston 1989, 1999). Had I been able to georeference the blank base map more closely and

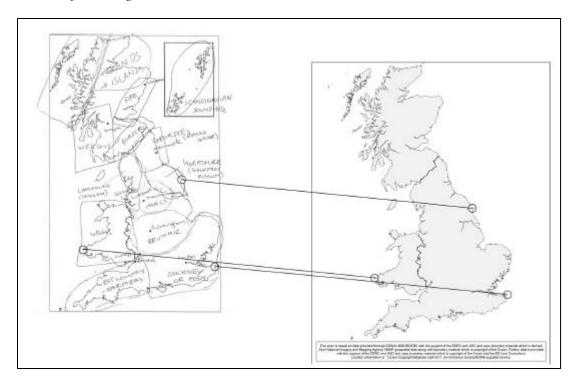
_

² Note: ArcGIS Pro is constantly being updated and these steps may alter in the future, but generally tools remain the same, though may be under a different name or menu.

³ Note: I discovered this after I had collected the data and is an important point to consider prior to collecting data as it would have made the analysis process much simpler.

accurately using the above techniques, I could have traced the polygons onto the map directly using the 'create polygon' tool in ArcGIS Pro.

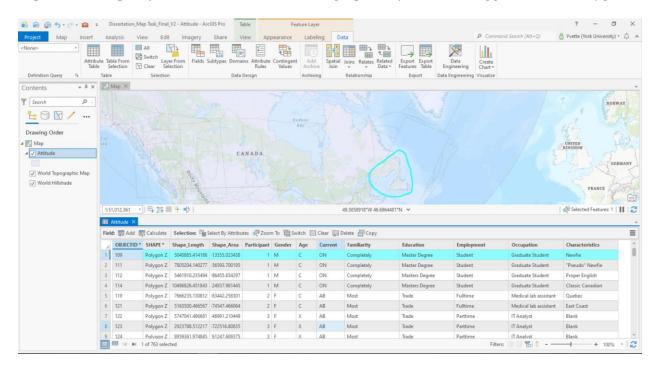
Figure 2. Georeferencing and Control Points



Note. From "Geographic information systems and perceptual dialectology: a method for processing draw-a-map data," by C. Montgomery and P. Stoeckle, 2013, *Journal of Linguistic Geography*, 1(1), p. 61. Copyright 2013 by Cambridge University Press.

Once a polygon was created, attributes were assigned to the polygon using fields in an attribute table as shown in Figure 3. This allowed the polygon to be directly associated with the participant's demographic information, as well as the label given to the specific polygon, directly in ArcGIS Pro. This also allowed for quick separation of groups of participants for further analysis (e.g., separating polygons by semantic category of labels for the content analysis).

Figure 3. Example of Attribute Table With Demographic Information Tagged to Each Polygon



Once all the polygons had been traced into the database, the geoprocessing tool, "union", was used and a new layer was created. After opening the attribute table of this new layer, I added three fields to the attribute table: longitude, latitude, and centroid. Setting the longitude column as the "X Coordinate of Centroid" and the latitude column as the "Y Coordinate of Centroid", it was possible to have the software determine the centroid when the longitude and latitude were combined through the "Calculate Field" tool. This populated the data in the new centroid column. The "Frequency" tool was then used to determine the frequency of the centroid, resulting in a separate table showing the newly calculated data. By right clicking the union layer and selecting "Join..." from the "Joins and Relates" function, it was then possible to join the frequency table to the union layer. Finally, the conversion tool, "Feature to Raster" was used, with the union layer set as the input feature and the frequency set as the field. This resulted in a new layer that showed a gradient symbolizing the frequency of overlap of polygons. This gradient (heat map) could be customized using the "symbology" option.

Thirty-one heat maps were generated according to: all participants' maps (one map), participants split into groups based on their *default* province (ten maps), and by labels categorized into semantic categories which were determined for the content analysis (20 maps).

4.3.1. Content Analysis

I used a content analysis to complete the analysis of the labels and polygons drawn on the map task (Bauer, 2000). A content analysis proved useful to highlight prominent themes and stereotypes in recurring labels. This allows insight into salient features which may have not been previously noticed by scholars investigating the language varieties in the area. I divided labels according to semantic categories following methods similar to Evans (2011) and Garrett, Williams, and Evans (2003, 2005). For example, the labels "Newfie" and "Newfoundland English" were put into a category NEWFOUNDLAND, and "Snowy, Survival, Inuit English" and "Native accent" were put into a category INDIGENOUS. Labels were put into a single category unless they consisted of two separate labels that would not fit into the same semantic category; for example the label, "Eastern Canadian Accents/'Newfies" was put into both the EASTERN and the NEWFOUNDLAND categories. An UNSURE/OTHER category was created for labels that did not have more than five instances of a label in the same semantic category or were uninterpretable due to an overlapping feature on the map or spelling conventions/typos. If a noun phrase was used, the meaning of the phrase was considered, and it was put into the category that best matched its meaning. For example, PRONUNCIATION is a category that labels, such as "Strong accent" or "Surfer accents, California inspired" fell into, but "Prairie accent" fell into the PRIARIE category with 18 other labels referring to the prairies. Finally, a second reviewer looked over the labels and categories to help reduce biases. For a full list of the 766 labels categorized, see Appendix D.

There was a total of 20 categories once the labels had been analyzed and categorized semantically. The categories and number of labels within each category are presented in Table 3. A composite map was created for each category, including a map with polygons that did not have a label (BLANK), and the results are presented in Chapter 5.

Table 3. Categories of Labels for the Content Analysis

CATEGORY	NUMBER OF LABELS
BLANK	258
NEWFOUNDLAND	76
FRENCH	68
MARITIME	58
PRONUNCIATION	38
UNSURE/OTHER	32
INDIGENOUS	30
EAST COAST/EASTERN	29
QUÉBEC	23
RURAL/COUNTRY	20
PRAIRIES	19
CANADIAN	17
ONTARIO	17
LEXICAL VARIATION	15
NORTHERN/TERRITORIES	14
WESTERN	14
OTHER LANGUAGE	11
URBAN/CITY	10
WEST COAST	9
SLANG	8

4.4 Rating Task

Participants were presented with three categories on which to rate each province and territory on the English spoken there: correctness, pleasantness, and similarity to the participant's own English. This direct-approach method of using a Likert-type scale is common in language regard studies and provides insight into metalinguistic data (e.g., Niedzielski and Preston 2000; McKinnie and Dailey-O'Cain, 2002). The ten-point scale used was similar to Niedzielski and Preston (2000), with one being the least correct/pleasant/similar and ten being the most correct/pleasant/similar. Means were then calculated for each group of participants by default province and any additional comments participants included are analyzed and discussed in Chapter 5.

4.5 Stereotype Statement Methods

In addition to rating other provinces and territories' English on the three characteristics outlined above, respondents were also asked to rate their agreement on a 5-point Likert-type scale for eight stereotype statements. This was included to gather data on beliefs and stereotypes that may be associated with specific regions of Canada and is a direct approach to stereotypes and language regard. The statements were created in collaboration with my supervisor, Dr. Michol Hoffman, and myself from our own knowledge of stereotypes we have heard from Canadians about other provinces. These statements were used as they covered all regions of Canada. The scale ranged from 'strongly disagree' to 'strongly agree' and the eight statements were:

- 1. People living in British Columbia are hippies.
- 2. People living in the Prairie Provinces (AB, SK, MB) are all farmers.
- 3. People living in Ontario think Ontario is the most important province.

- The Anglophones living in Québec are different from Anglophones in other parts of Canada.
- 5. People living in the Atlantic Provinces are friendly and homey.
- 6. People living in the Territories don't have much contact with the rest of the country.
- 7. People living in urban areas are smarter and more sophisticated than those living in rural areas.
- 8. People in different provinces/territories across Canada are more alike than different.

The means and standard deviations were calculated for each province and are presented in Chapter 5, with "strongly disagree" correlating to 1.0 and "strongly agree" correlating to 5.0. These statements were included to determine if there may be a correlation between stereotypes and the attitudes and perceptions presented in the rating tasks, as well as the labels in the content analysis. From my knowledge, these types of rating scales with stereotyped statements have not been used in language regard studies before and are exploratory in nature.

4.6 Lexical Variation Questionnaire Methods

The lexical variation questionnaire represented a large portion of the study. It presented participants with 23 questions, each asking them to name an image depicted. Twenty-two of the images represented nouns and one a verb. See Figure 4 for an example of the first question in the lexical variation portion of the survey. For a complete version of the questionnaire, see Appendix B.

Following Boberg (2005, 2010, 2016), I calculated the net variation, major isoglosses, and total variation for each variable. Participants' default provinces were used to determine if regional variation existed for each variable based on these calculations.

Figure 4. Example of Question 1 From the Lexical Variation Questionnaire



I calculated the net variation by determining the absolute difference in the frequency of a variant between two regions and adding the differences for each variant together. For example, Table 4 shows the frequencies for the variants of the SHOE variable.

Table 4. Frequencies for Each Variant of the SHOE Variable by Default Province

	BC	AB	SK	MB	ON	QC	MA	NL
Runners	63%	53%	54%	50%	5%	10%	0%	0%
Running	21%	26%	31%	25%	75%	60%	0%	13%
Sneakers	0%	11%	8%	17%	8%	30%	93%	73%
Other	16%	11%	8%	8%	11%	0%	7%	13%

The absolute difference was calculated for each boundary of provinces that border each other physically, as shown in Table 5 below. The net variation is the sum of the absolute difference for each variant according to each boundary, shown in the bottom row of Table 5.

Table 5. Absolute Differences Between Boundary Frequencies and Net Variation

	BC-AB	AB-SK	SK-MB	MB-ON	ON-QC	QC-MA	MA-NL	QC-NL
Runners	10%	1%	4%	45%	5%	10%	0%	10%
Running	4%	5%	6%	50%	15%	60%	13%	47%
Sneakers	11%	3%	9%	8%	22%	63%	20%	43%
Other	5%	3%	1%	3%	11%	7%	7%	13%
Net Variation	30%	12%	19%	107%	54%	140%	40%	113%

Boberg (2005) first introduced the idea of major isoglosses in the NARVS analysis. A major isogloss is said to occur whenever the absolute difference between a boundary is greater than 50%. In the above example of the SHOE variable, there are two major isoglosses because based on the boundaries in Table 5, two of the variants (*running* and *sneakers*) have an absolute difference that is greater than 50%.

In addition, the total variation was calculated by determining the standard deviation for each variant's frequency and then adding all those standard deviations together for a specific variable. This calculation is presented as a percentage as the frequencies are based on percentages (Boberg, 2010, p. 170). For example, the frequencies for the four variants of the SHOE variable, and the standard deviations of those variants are shown in Table 6.

Table 6. Frequencies, Standard Deviations, and Total Variation for SHOE Variable

	BC	AB	SK	MB	ON	QC	MA	NL	SD
									(%)
Runners	63%	53%	54%	50%	5%	10%	0%	0%	27.86
Running	21%	26%	31%	25%	75%	60%	0%	13%	24.64
Sneakers	0%	11%	8%	17%	8%	30%	93%	73%	34.46
Other	16%	11%	8%	8%	11%	0%	7%	13%	4.81
•							Ta	otal Variation	91.77

The standard deviation is presented in the furthest right column for each variant, and the total variation for the SHOE variable is presented in the bottom right. Note the total variation can be higher than 100% because it is the sum of multiple proportions. According to Boberg, "total variation comprises three dimensions of regional lexical variation: the number of variants of a variable; the number of important regional differences in the frequencies of those variants; and the relative size of the difference" (2010, p. 170). By calculating the total variation, it becomes apparent which variables display larger amounts of regional variation. If the total variation is high, it is the result of high standard deviations, suggesting regional variation is present among variants, while a total variation that is lower is the result of standard deviations that are lower,

suggesting little variation is present among variants. Thus, total variation allows for ranking of the variables on which show the highest regional variation to the lowest.

The three calculations above allow for a better understanding of regional variation. They also allow for close comparison to Boberg's (2005, 2010, 2016) studies as he uses at least one of these calculations in each study. The smaller quantity of data for each province, did not allow for further statistical analyses, but the results will nevertheless give insights into which variables show variation and which may be more consistent across regions. Further constraints on the survey are discussed below.

4.7 Research Constraints

I originally chose an online survey because it offered several benefits, such as reaching a wide range of respondents, collecting data quickly and efficiently, cost efficiency, and the ease of participation for respondents. However, the technology for the map task to be included in the online survey has yet to be perfected. This was a disadvantage as it discouraged participants from participating because of the difficulty and added length of time to complete the survey. However, it is important to note that Survey123 proved to have extremely useful survey tools that few other online survey platforms were able to provide. In particular, the ability to complete a map task by drawing free-form, polygons, and labels on an image of a map, was made possible through the question types available on the Survey123 platform. Nevertheless, ArcGIS has yet to perfect this tool and the user must download the app onto their device (e.g., computer, mobile device, etc.) and complete the survey on the app. This resulted in at least an extra five minutes to complete the survey and many people did not trust downloading an app if they were unfamiliar with ArcGIS.

Some may argue that another disadvantage with collecting data through an online survey is that the researcher cannot be present when the respondent is completing the survey to answer questions or clarify instructions. I mitigated this by providing respondents with my email address so they could send inquiries and questions if an issue arose. In addition, the messenger systems on social media made me more available to help participants. Chambers (1998) discusses the use of a postal questionnaire as a means of collecting dialectic data which may be similarly applied to the method of using an online survey. He argues that despite the lack of supervision when respondents are filling out the questionnaire there are some major advantages to using a remote data collecting method: a) it reduces the observer's paradox (Labov, 1972) which is a concept in sociolinguistics that stresses the need to collect data from language in use that is not biased due to being observed, but only being able to collect data by means of observing it; b) It is quicker than meeting face-to-face with respondents and allows for a larger number of responses through inexpensive means; and c) respondents do not feel pressured or are influenced by the presence of a fieldworker.

Another disadvantage to note is the ability of some respondents who may be unfamiliar with technology to access and complete the survey. This may result in fewer responses from some groups, such as older generations. To minimize this disadvantage as much as possible I provided thorough instructions throughout the survey and on the survey website, and always tried to be quick to respond if questions arose or a participant needed me to walk them through downloading the app onto their device. Often, older participants who were unfamiliar with the process were connected to a younger participant who had taken part in the survey, and in many instances the younger participant assisted with the completion of the survey by the older participant. Further, it has been brought to my attention that a team at the University of

Washington is currently working on an online platform that will allow for simpler data gathering and analysis with regards to map tasks. I believe a version of a survey that allows participants to complete the map task in a browser will help substantially with the difficulties expressed above and open new windows of opportunity for wide-scale studies.

Finally, the use of Boberg's (2005, 2010, 2016) three calculations were based on a minimum sample of 25 respondents in each province category to avoid insignificant findings to appear significant. As is further discussed in Chapter 5, many of the default provinces did not have 25 respondents. I am mindful of the distribution of data and avoid claiming anything in the analysis and discussion as significant unless otherwise discussed (e.g., t-tests for differences between groups). With further development of the methods, as described above, there will be ample opportunity to gather larger groups of data from each region of Canada to perform statistical analysis.

The next chapter provides the data from all parts of the survey with discussion on the findings throughout.

5.0 Analysis and Discussion

5.1 Introduction

This chapter presents the data and findings from the survey, as well as the analysis and discussion of the findings. It begins with a description of the participants and any exclusions.

Next, I present the results in the order in which they appear in the survey: data from the map tasks, followed by data from the rating task and statement tasks, and finally, the lexical variation results. Conclusions and connections between the different parts of the survey are provided in the final section.

5.2 Participants

Due to the difficulty and added complication of downloading an app to access the survey, the original target of 728 participants was not met. Further, because of time constraints, I decided to begin analysis of the collected data after receiving 202 responses after the survey had been live from November 2018 to May 2020. These responses came from a wide range of participants from across the country as displayed in Table 7, which shows the distribution of total participants and their province of birth, sorted by age and gender.

There were 18 participants who were born outside of Canada, as shown in Table 7. If a participant moved to Canada before the age of 13, they were included in the analysis as the critical period for language acquisition is generally thought to be adolescence⁴. This resulted in five of the participants who were born outside of Canada being excluded from the analysis. Further, one participant did not complete all demographic questions and was also excluded from the analysis.

⁴ The critical-period hypothesis is often debated, and ongoing studies suggest the age factor may not be as significant on second language acquisition as originally thought. However, this dissertation follows previous sociolinguistic studies as to the criteria for excluding speakers from outside of the study region.

Table 7. *Total Distribution of Participants Who Took the Survey*

	Age										
Province of Birth		18-32			33-45		46-	-58	59)+	Total
	M	F	0	M	F	0	M	F	M	F	
BC	2	7	2	0	5	1	1	2	2	1	23
AB	7	20	0	5	0	0	1	7	1	2	43
SK	1	3	0	0	3	0	1	1	0	2	11
MB	4	5	0	0	2	0	0	0	0	0	11
ON	12	21	1	6	11	0	1	2	1	2	57
QC	2	7	1	0	1	0	0	1	1	1	14
NB	0	1	0	0	3	0	0	0	0	0	4
NS	0	2	0	0	0	0	0	0	0	0	2
PEI	0	1	0	0	0	0	0	2	0	0	3
NL	7	2	0	1	0	0	1	1	0	2	14
YT	0	1	0	0	0	0	0	0	0	0	1
NT	0	0	0	1	0	0	0	0	0	0	1
NU	0	0	0	0	0	0	0	0	0	0	0
Outside of Canada	1	6	0	2	3	0	0	2	0	4	18
Total	36	76	4	15	28	1	5	18	5	14	202

Finally, four participants were excluded due to the lack of data for genders other than female or male⁵. These four participants identified as non-binary, trans, or preferred not to answer. This left a total of 192 participants analyzed for the lexical variation, stereotype statements, and rating tasks. The resulting distributions of participants after they were grouped into their default province are presented in Table 8.

For the content analysis and map task analysis 12 additional participants were excluded because they did not include any polygons on their maps and/or their maps were indecipherable. This left 180 participants for the map task analysis and content analysis. The resulting distribution of participants for these analyses is presented in Table 9.

Due to the small number of participants from NB, NS, and PEI, I decided to combine these three provinces into one group, referred to as Maritimes or MA, for all analyses except for

⁵ Note: The one participant who did not fill in all the questions did not answer the question regarding their gender and is one of the four under the O column for the 18-32 age group in Table 7.

the general heat maps for each province in Section 5.3. This resulted in a total of eight categories for participants' origin for all the quantitative analyses.

Table 8. Total Distribution of Participants for Lexical Variation, Ranking Task, and Stereotype Statement Analyses

	Age										
Default Province	18-32		33	33-45		-58	59	+	Total		
	M	F	M	F	M	F	M	F			
BC	3	6	0	6	1	2	1	0	19		
AB	8	19	5	1	2	8	2	2	47		
SK	0	5	1	4	0	1	0	2	13		
MB	4	7	0	1	0	0	0	0	12		
ON	13	22	7	9	1	4	2	3	61		
QC	0	7	0	1	0	0	0	2	10		
NB	0	2	0	3	0	0	0	2	7		
NS	1	2	0	1	0	0	0	1	5		
PEI	0	1	0	0	0	2	0	0	3		
NL	7	3	1	0	1	1	0	2	15		
Total	36	74	14	26	5	18	5	14	192		

 Table 9. Distribution of Participants Analyzed for Map Task and Content Analysis

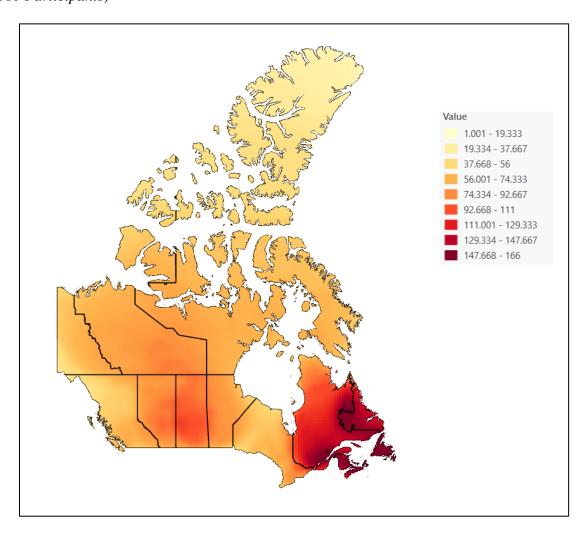
	Age										
Default Province	18-32		33	33-45		-58	59 +		Total		
	M	F	M	F	M	F	M	F			
ВС	3	6	0	6	1	1	1	0	18		
AB	6	18	5	1	2	7	2	2	43		
SK	0	5	1	4	0	1	0	2	13		
MB	4	6	0	1	0	0	0	0	11		
ON	12	22	7	9	1	4	2	3	60		
QC	0	7	0	1	0	0	0	1	9		
NB	0	2	0	2	0	0	0	1	5		
NS	1	2	0	0	0	0	0	1	4		
PEI	0	1	0	0	0	2	0	0	3		
NL	7	2	1	0	1	1	0	2	14		
Total	33	71	14	24	5	16	5	12	180		

5.3 Map Task

After all the maps were digitized and polygons were inputted into ArcGIS Pro, I created heat maps for each of the provinces based on the frequency of overlapping polygons. Participants

did not have a limit to how many polygons they could draw on the map. In total, 763 polygons were drawn on the maps of 180 participants and Figure 5 shows a heat map of all the combined polygons. The gradient is based on the frequency of overlapping polygons where pale yellow indicates the lower frequency (e.g., 1 - 19 polygons) and dark red indicates areas with a high frequency of polygons overlapping (147 – 166 polygons). Areas that are white, or do not contain colour indicate areas that were not included in any participant's polygons.

Figure 5. Heatmap Based on Frequency of Overlapping Polygons Drawn by all Participants (n = 180 Participants)

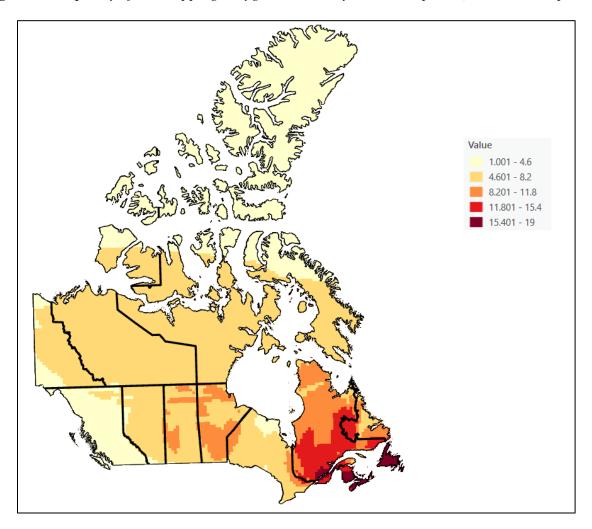


It is not surprising to see that the east coast is much redder than any other part of the country, as the east is home to many dialects that stand out to Canadians as sounding different

(e.g., NL and QC). Further, linguistic studies focusing on English have also determined these areas are linguistically diverse compared to other regions of Canada (Boberg, 2005, 2010, 2016; Labov, Ash & Boberg, 2008). Interestingly, there is a slight hue of red in the prairies, specifically SK, which will be further explored below in the heat maps based on participants' default province to show which groups of participants noticed differences in the prairies.

Figure 6 shows the compilation of maps marked up by participants whose default province was BC. The marked areas are the result of asking participants to mark areas on the map where they thought English sounded different from their own.

Figure 6. Frequency of Overlapping Polygons Drawn by BC Participants (n = 18 Participants)



It is important to remember that participants could draw multiple polygons that overlap to some degree on their own maps, resulting in a higher frequency of overlap than participants. Instead of focusing on the specific number of overlapping polygons, it is more helpful to focus on the gradient and areas that stand out to more participants. In Figure 6, NL, the maritime provinces, and QC stand out as having different sounding English than BC participant's own English. Further, there appears to be some agreement on differences in SK and MB, as noted by the orange shades in these provinces. The polygons drawn by BC participants reflect similarities to Figure 5, suggesting that their polygons contribute to the hue of red in the prairie provinces in Figure 5, perhaps reflecting a different awareness or variation than in central and eastern regions.

Figure 7 resembles Figure 6 in that NL and QC are once again perceived as having different sounding English than those of AB participants. Interestingly, the maritime provinces have less overlap among AB participants than BC participants. This may be due to the instability of drawing polygons using a mouse or a small screen (e.g., a phone screen), or participants from AB may be more familiar (or less) with NL and QC English, compared to the maritime provinces. It may also be that AB has greater exposure to NL English because of the influx of Newfoundlanders who travelled to AB for work in the oil and gas industry over the past couple decades. Further, some AB participants find SK as having more different sounding English than MB, which is in contrast to the responses from BC participants. The frequency in both maps surrounding the two prairie provinces is relatively small though and may be something to investigate in future studies.

The findings from Figure 7 are similar to those of the map task data presented by McKinnie and Dailey-O'Cain (2002). Though they do not include heat maps, they do highlight that many AB and ON respondents perceived a boundary at NL and QC. Though we do not see

whether there is a boundary between these provinces in Figure 7 (the content analysis and lexical variation results explore this further below), these two areas are distinct to the AB participants in the current study.

Figure 7. Frequency of Overlapping Polygons Drawn by AB Participants (n = 43 Participants)

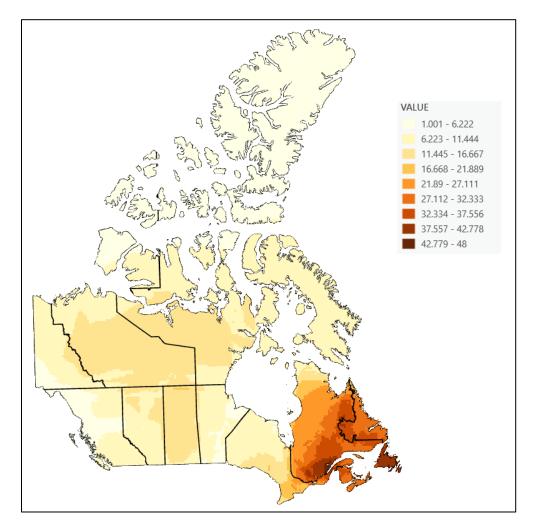
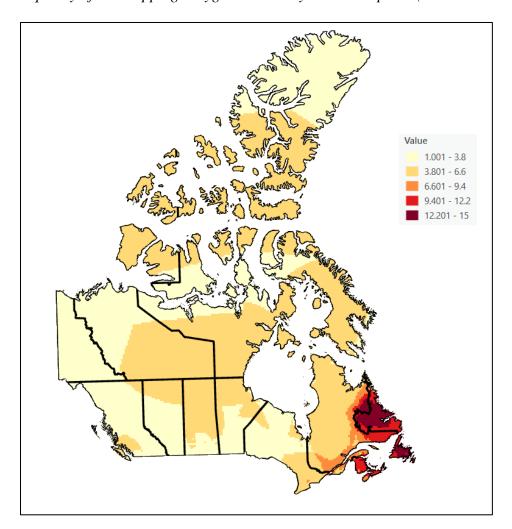


Figure 8 shows the frequency of overlapping polygons drawn by SK participants, which shows a very similar heat map as the two above. There is a great deal of agreement among polygons drawn over NL and the maritime provinces. Further, SK participants may be more aware of differences within NL as different regions of the province are highlighted more frequently than others (e.g., central Labrador versus southeastern Labrador). Follow-up interviews could help determine whether this was on purpose or not. One major difference

between AB and BC participants compared to SK participants is the smaller areas of overlapping polygons in QC. The SK participants highlight a much smaller area along the St. Lawrence River, compared to the larger areas in southern and western QC highlighted by BC and AB participants (See Figures 6 and 7 vs. Figure 8).

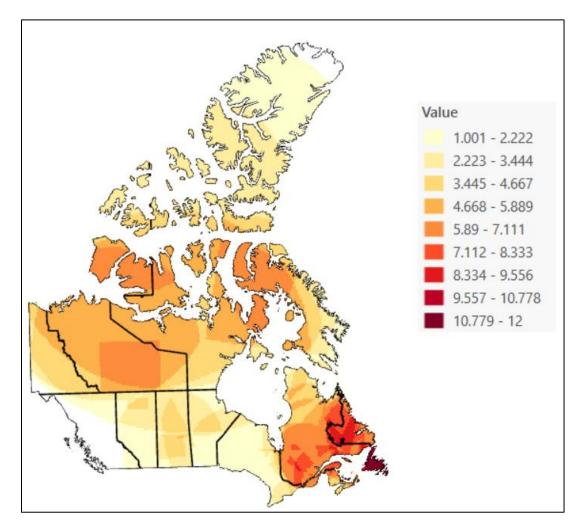
Figure 8. Frequency of Overlapping Polygons drawn by SK Participants (n = 13 Participants)



Those participants whose default province was MB show similarities to those of their prairie neighbours, indicating NL and QC with high frequency (see Figure 9). However, they largely do not indicate differences between their way of speaking and that in BC. Interestingly, SK is noticed by some MB participants as slightly different when it comes to the English spoken

there. The territories, particularly NT, stand out to Manitobans, like the other prairie provinces discussed above.

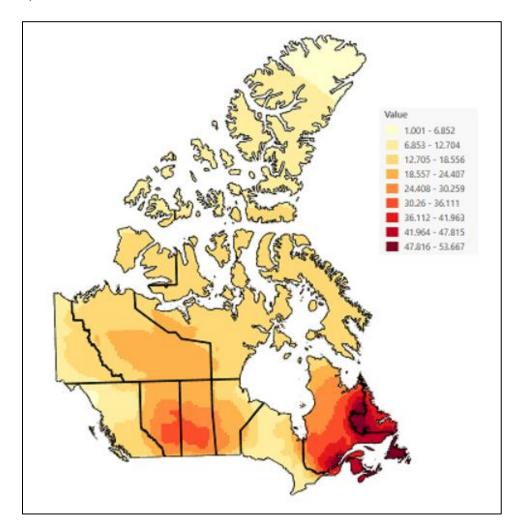
Figure 9. Frequency of Overlapping Polygons Drawn by MB Participants (N=11 Participants)



As we move eastward, it becomes apparent that different perceptions are held by participants whose default province is ON, as seen in Figure 10. Similar to the provinces west of ON, a large number of ON participants indicate that NL, the Maritimes, and QC speak different sounding English. In addition, a greater number of ON participants highlight parts of AB and SK. This may be more prevalent due to the greater number of participants from ON and is further explored in the content analysis. As mentioned above, McKinnie and Dailey-O'Cain's (2002) data also indicate that ON participants notice a difference in QC and NL English. I explore this

further in the content analysis and lexical variation analysis below to determine if ON participants perceive a dialect boundary between these two provinces in the current study.

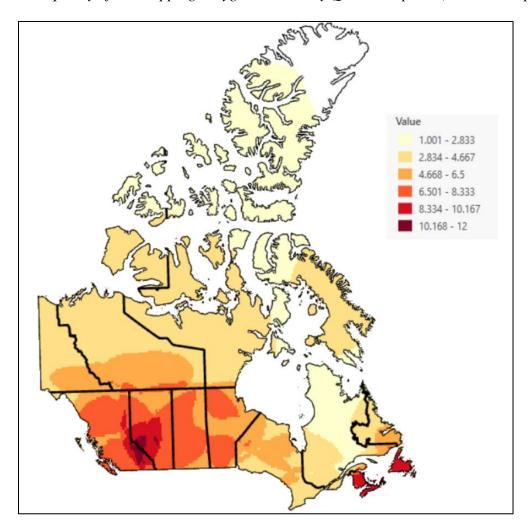
Figure 10. Frequency of Overlapping Polygons Drawn by ON Participants. $(n = 60 \, Participants)$



Residents from QC find many areas of Canada to speak different sounding English as depicted in Figure 11. In particular, the Rocky Mountain region between BC and AB is highlighted with the highest frequency, and NB, NS, and NL also stand out. Due to the high population of Francophones in QC it is not surprising to find that there is a strong perception that English sounds different in mostly Anglophone provinces. Interestingly, NB with its greater Francophone population is highlighted more frequently than the neighbouring province of ON

which has a greater number of Anglophones. Perhaps the QC participants are actually highlighting NB because of differences in their French rather than their English, something follow-up interviews could confirm in future studies. This distinction between QC speakers and their neighbours is discussed further in the content analysis below.

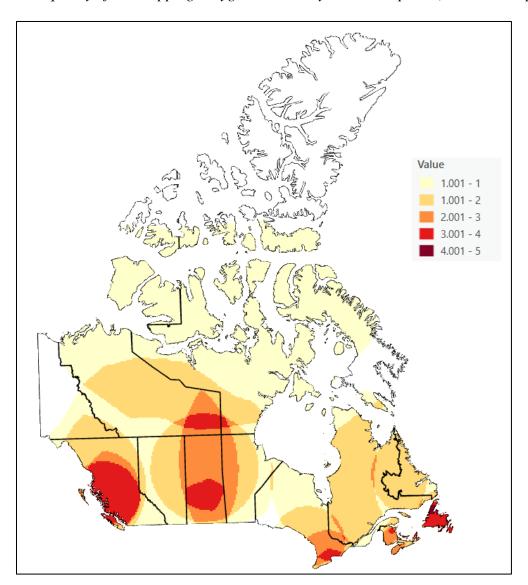
Figure 11. Frequency of Overlapping Polygons Drawn by QC Participants (N=9 Participants)



NB participants are similar to QC participants in that they notice different provinces compared to those participants west of QC (see Figure 12). It is important to note that there were only five participants whose default province was NB, compared to some of the other provinces with larger numbers of participants, such as AB and ON, and further data collected from the maritime provinces and QC would be beneficial. Parts of SK, NT, BC, and NL are circled with

greater frequency by NB participants. However, the highest frequency is small, with only five polygons overlapping on the Northern Peninsula in NL. Interestingly, NB participants do not highlight QC as having a high degree of difference in their English, something that is not reciprocal.

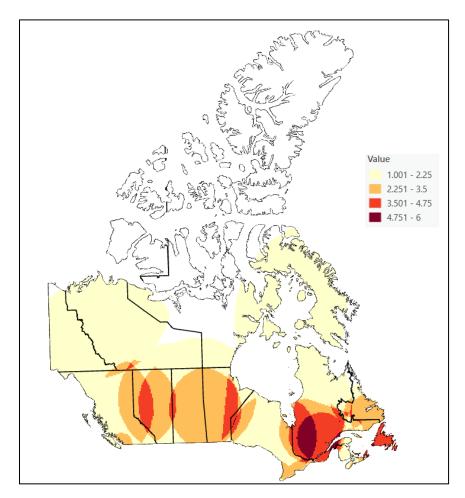
Figure 12. Frequency of Overlapping Polygons Drawn by NB Participants (n = 5 Participants)



Participants whose default province was NS did not agree with their neighbours in NB with regards to their judgements of different sounding English, though the number of NS participants is even smaller than that of NB participants at four participants. QC, small parts of

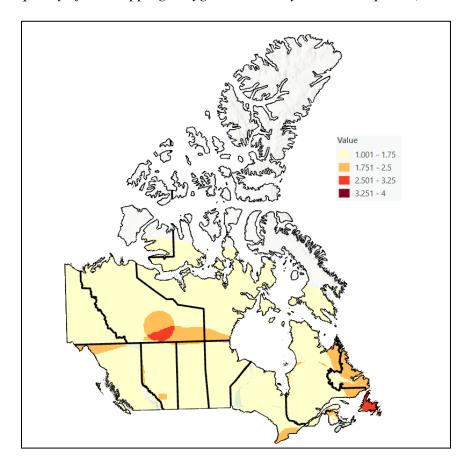
MB, SK, AB, and NL seem to be noticeable by NS participants; however, the highest frequency of overlap is within QC, as shown in Figure 13.

Figure 13. Frequency of Overlapping Polygons Drawn by NS Participants (n = 4 Participants)



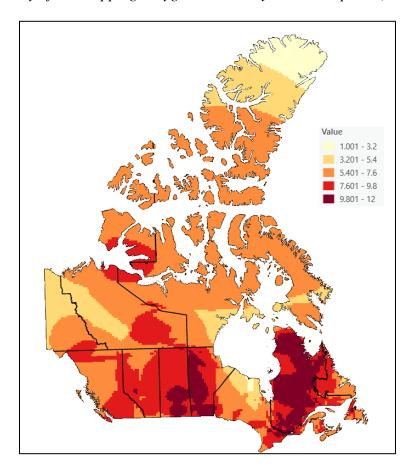
The few participants of PEI have relatively few overlapping polygons, with the exception of NL and a small part of the NT. This is not surprising due to the limited number of PEI participants. Figure 14 is an example of overlapping polygons on one participant's map (Avalon Peninsula, NL). It is difficult to draw conclusions from such a small sample size of three (PEI), five (NB), and four (NS) participants. Further analysis and discussion are provided below in the content analysis where the maritime provinces are combined to create a larger sample group.

Figure 14. Frequency of Overlapping Polygons Drawn by PEI Participants (n = 3 Participants)



Unlike many of the other provinces NL participants, drew many areas with overlapping polygons as shown in Figure 15. These polygons were much more detailed and smaller, resulting in more specific areas having a higher frequency of overlap. For example, parts of QC, MB, and SK have a high frequency of overlap when asked where English sounds different compared to NL English. Smaller areas in NB, NL, and larger areas in NT, NU, BC, AB, ON, and QC are also noticeable in bright red. Every part of Canada is highlighted by at least one polygon by a participant from NL, suggesting they may be more aware of differences across Canada than any other group of participants. Follow-up interviews would be beneficial to determine if Newfoundlanders are more aware of linguistic differences due to the high frequency of variation within their own province or perhaps their exposure to other provinces.

Figure 15. Frequency of Overlapping Polygons Drawn by NL Participants (n = 14 Participants)



The above heat maps only show the overlapping frequency of polygons by each provincial group of participants. Comments on the labels provided for these polygons are presented below in the content analysis. Comparing the individual provincial results offers further insight into the general heat map in Figure 5, with the eastern provinces (ON and east) seeming to notice some differences among the prairie provinces, while most participants nationally specify NL as sounding different than their own English (including some NL participants). Follow-up interviews would be beneficial in determining what exactly makes these areas salient to the participants, but the analysis of labels provided for areas also gives insight into the saliency of these areas.

5.4 Content Analysis

Following the creation of the heat maps for each province, I analyzed labels for each area and divided them into semantic categories. Table 10 consists of the resulting 20 semantic categories which are organized from the greatest number of labels to the least.

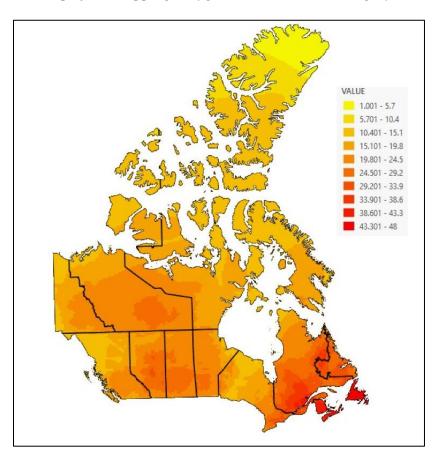
Table 10. Semantic Category and Frequency of Labeled Polygons With Number of Participants
Providing Labels for Each Category

Category	Num	Total Number of							
	BC	AB	SK	MB	ON	QC	MA	NL	Labels
BLANK	6	20	5	5	25	10	8	7	258
NEWFOUNDLAND	8	18	5	4	25	2	7	4	76
FRENCH	8	20	4	5	22	0	1	4	68
MARITIME	5	14	4	1	16	3	3	3	58
PRONUNCIATION	3	4	3	1	12	1	2	1	38
UNSURE/OTHER	3	7	3	1	7	0	1	3	32
INDIGENOUS	3	7	1	4	10	0	1	3	30
EAST COAST/EASTERN	4	7	1	1	10	1	2	1	29
QUÉBEC	3	4	1	0	9	1	2	1	23
RURAL/COUNTRY	1	5	1	0	6	1	0	1	20
PRAIRIES	2	4	0	0	8	0	4	1	19
CANADIAN	3	3	1	2	5	0	0	3	17
ONTARIO	1	4	1	1	6	0	1	2	17
LEXICAL VARIATION	3	2	1	0	5	0	1	0	15
NOTHERN/TERRITORIES	1	4	1	2	3	1	0	1	14
WESTERN	0	2	3	0	6	0	3	0	14
OTHER LANGUAGE	1	1	1	2	2	0	1	1	11
URBAN/CITY	0	3	1	2	3	0	0	0	10
WEST COAST	0	0	0	0	3	1	3	2	9
SLANG	0	3	0	2	3	0	0	0	8

Three labels were given that were counted twice as they consisted of two semantic categories (e.g., "Eastern Canadian Accents/'Newfies' was categorized in EASTERN and NEWFOUNDLAND). This increased the total number of labels in the content analysis from 763 to 766.

The first category, BLANK, consisted of polygons that were indicated but not labelled. Of the 766 labels, 258 (34%) were in this category. In total, 88 participants drew polygons without labeling them. Though it may seem odd to include these polygons in a content analysis, it is important to recognize that it seems participants thought these areas sounded different than their own English but could not think of, or did not want to, label that English. Figure 16 is a heat map of the overlapping polygons that did not have any label associated with a polygon.

Figure 16. Heat Map of Overlapping Polygons in the BLANK Category (n = 258 Labels)



There is a high degree of overlap in NL, the maritime provinces, and QC, as well as some degree of agreement in the prairies and territories. It is interesting to note that although there were 258 polygons drawn with no labels, many of them did not overlap, with the highest frequency of overlap being 48 polygons. This map is similar to the general heat map for all participant's polygons in Figure 5, with the east coast and QC being indicated frequently by participants.

The next largest category of named labels was NEWFOUNDLAND (76/766 or 10%) with 73 participants from across all regions contributing to the heat map in Figure 17. Examples of labels in this category include:

Newfie

NLF

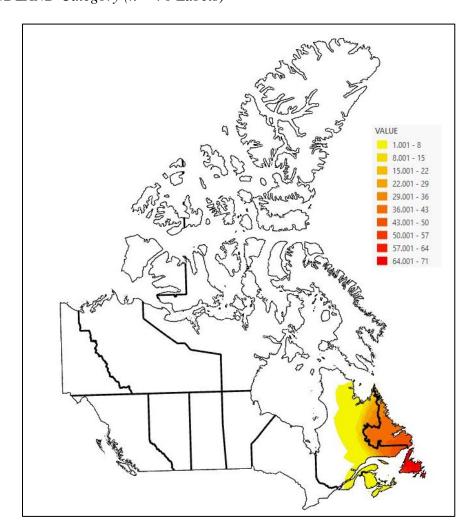
Newfoundland English

Newfoundland and Labrador

Newfoundland "Irish"

It is apparent from the heat map in Figure 17 that respondents know where NL is and almost completely agree that the island of NL falls into this category of labels. Interestingly, Labrador is not highlighted as frequently as the island itself. Whether some respondents are unaware of any differences in the English spoken in Labrador compared to speakers living on the island of Newfoundland is not apparent in this study. However, respondents are aware of the NL dialect that has been largely studied by linguists (e.g., Clarke, 1981, 1997, 2010; Paddock, 1982; Power, 2014). Some are also in tune with the Irish influence on many dialects within the province of NL, while others notice an "accent" or that they talk "faster".

Figure 17. Composite Map of Frequency of Overlapping Polygons With Labels in NEWFOUNDLAND Category $(n = 76 \ Labels)$



Here it is important to note the stereotypes surrounding Newfoundlanders and NL English and the amount and kind of attention the residents and dialect(s) have received in Canadian history. Clarke (2010) outlines some of the history surrounding the negative stereotypes towards Newfoundlanders, with negative attitudes and stereotypes surrounding the resident's way of speaking as early as the 1800s (p. 133). Amulree (1933), a public servant and Labour politician wrote in the Newfoundland Royal Commission report that Newfoundlanders were "improvident and happy-go-lucky", and "exhibit a child-like simplicity when confronted with matters outside their own immediate horizon" (p. 210). Clarke (2010) also describes the

term 'newfie' "as the equivalent of an ethnic slur by many residents of the province" (p. 133). Of the 76 labels in this category, 31 are either a version of 'newfie' or contain the term in the label. NL and the portrayal of the residents of the province are also prevalent in Canadian media, with NL musicians and actors being quite successful when harnessing the negative stereotypes in their music or humour (p. 135).

Further studies (e.g., Edwards and Jacobsen, 1987; McKinnie and Dailey-O'Cain, 2002; Pringle, 1985) have found results of salient features, such as TH-stopping, unique terms and phrases such as *b'y* for *boy* and *l'uh* for *look*, and a difference in vowel sounds, which are noticed by Canadians from other provinces. McKinnie and Dailey-O'Cain (2002) also found negative attitudes towards NL English held by AB and ON participants on the scales of 'correctness' and 'pleasantness' (discussed further below when I address the rating tasks). Thus, the data found in the content analysis suggests these features are still salient, and that despite its disparaging value, the term 'newfie' is still alive and well in Canadians' minds when thinking of Newfoundlanders.

Unsurprisingly, one of the categories with the highest number of labels is the FRENCH category (68/766 or 9%). Due to Canada's official bilingual status, I had hypothesized that French speakers and language difference would appear in the language regard data collected in the current study. Examples of labels in this category include:

French accented English

French

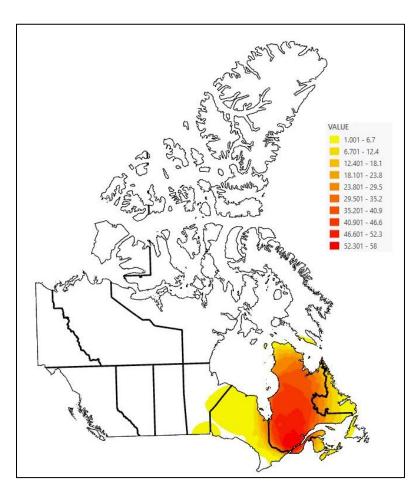
French Canadian

Quebec French accent and lots of French-English word exchange

Maritime French

Sixty-three participants from all regions, except for QC, highlighted at least one area and used a label in this category. As shown by the scale of frequencies in Figure 18, nearly all 64 participants agreed with the area of QC sounding different than their own English. A small number of the labels referred to maritime French or Acadian French, which were generally given to areas in the Maritimes. This is shown in the yellow and orange colours in NB and NS. Besides this category, the BLANK category, and the QUÉBEC category, QC does not show a high frequency of overlap for any other categories in the content analysis. As shown in Figure 10 above, no QC participants used a FRENCH label, while most of the participants that did came from AB or ON.

Figure 18. Composite Map of Frequency of Overlapping Labels in the FRENCH Category (n = 68 labels)



As discussed in Chapter 2, QC's majority population is French-speaking, and the province is very protective of the use of the French language to retain cultural and historical significance. The Maritimes also have a population of French speakers, in particular, the Acadians in NB as outlined in Chapter 2. It seems this group is less salient to English speakers compared to Quebecers. QC is often in the national news regarding language laws and contentious issues surrounding the preservation of the French language in the province (e.g., Bill 96 and the Charter of the French Language). Throughout the later 20th century, national focus was drawn to a separatist movement in QC which sought to separate the province from the rest of Canada. Support for this movement eventually declined in the early 2000s after a narrowly failed referendum vote (Boberg, 2010). QC has often been in the news across the country and negative attitudes towards QC were present in McKinnie and Dailey-O'Cain's (2002) findings in the three rating tasks they presented to Albertans and Ontarians. These negative perceptions will be further examined in the rating and stereotype tasks in Sections 5.5 and 5.6, but no labels indicated overtly negative comments towards the province in the content analysis.

Forty-nine participants with default regions across Canada highlighted and used labels that fell into the MARITIME category (58/766 or 8%). Figure 19 shows the frequency of overlap in a composite map of polygons with labels falling in this category. Examples of MARITIME labels include:

Maritimes

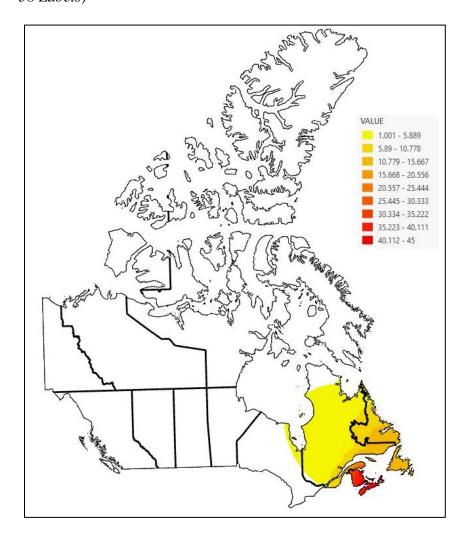
Cape Breton

PEI drawl

Maritimes as a whole – strage old "UK"/appalachian accent

Acadian accent

Figure 19. Composite Map of Degree of Frequency of Overlapping Labels in the MARITIME Category (n = 58 Labels)



Again, there is a high degree of agreement between the participants, with forty-five polygons overlapping over NB, NS, and PEI. NL and QC are partially included in some polygons, but for the most part respondents are quite specific and accurate in identifying the maritime provinces. Many labels were either "Maritime" or "Maritimes" with no further comments available regarding what features are salient to participants. The labels referring to Acadian, without mention of French, were included in this category due to the Acadian presence in NB and these comments could refer to the English spoken by the Acadians rather than their French. The "maritime accent" is also a common label for this area, suggesting participants

recognize a phonetic difference in maritime speakers, though specific examples of particular differences are unavailable. This may suggest they are aware of some of the phonetic shifts and differences noticed by linguists in the maritime provinces as outlined by Labov, Ash, and Boberg (2006) and Boberg (2010).

The fifth category with the highest number of labels was the PRONUNCIATION category, in which participants mentioned specific features (38/766 or 5%). Twenty-seven participants from default regions across Canada provided labels that fell into this category, with labels including:

Can't say 'sh'

Nasal

Twangy English

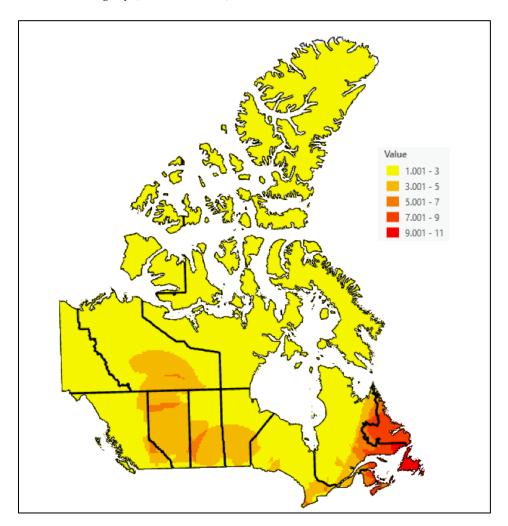
Hoser accents Longer A sounds, says "eh bud" a lot

Softer vowels kind of

Unlike the other categories discussed above (except for the BLANK category), there is less agreement on where pronunciation differs across Canada for labels in this category, with the highest number of overlapping polygons being 11 over NL. As we saw in the NEWFOUNDLAND category, this area is very salient to Canadians, and the map in Figure 20 provides further insight into what makes NL salient. To some participants, it appears that Newfoundlanders use a different pronunciation in some aspect than the participant. Some of the labels were more specific in this highlighted area, such as: "Can't say 'sh'", "by' for boy", "nasal", "Long A sound like wa~ter(tilda over a)", "Their separate words sound like one", and "twangy english". As discussed above, NL has been one of the most studied areas in Canadian

linguistics with many regional dialects prevalent, so it is not surprising that some participants highlighted this area.

Figure 20. Composite Map of Degree of Frequency of Overlapping Labels in the PRONUNCIATION Category (n = 38 Labels)



Further, there seems to be some consensus regarding phonetic differences in the prairie provinces, though not by a large number of participants. Some of the labels given to the prairies included: "Hoser accents Longer A sounds, says "eh bud" a lot", "Mild accent", "Strong accent", and "Prairies – Canadian Raising – very "country". These labels suggest that some of the phonetic differences that Boberg (2010) outlines in his phonetic analysis of Canada may be

salient to Canadian speakers. The prairies were also distinct linguistic region in the Phonetics of Canadian English study (Labov, Ash, and Boberg, 2008).

The UNSURE/OTHER category had 32 labels (4%) given by 25 participants, with overlapping polygons prevalent in Figure 21. Labels in this category included:

Proper English

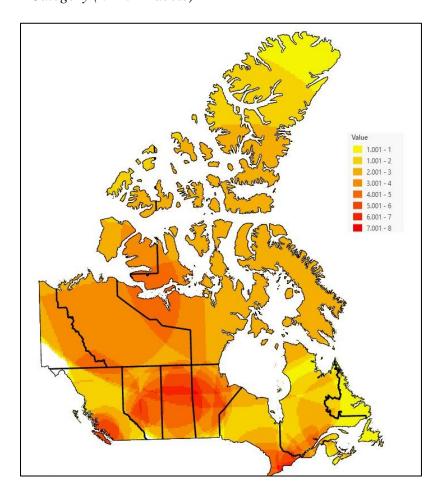
Hippie

Oil baron

No idea

Flat/Snooty

Figure 21. Composite Map of Degree of Frequency of Overlapping Labels in the UNSURE/OTHER Category $(n = 32 \ Labels)$



Some of the labels included in this category can be found in other content analyses of different areas (e.g., Evans, 2011), but due to the lack of multiple labels falling into the same semantic category they were grouped in the UNSURE/OTHER category. Figure 21 shows some agreement across the country, with the prairies, southwestern BC, and southern ON being highlighted frequently. This may suggest that there is something unique to these areas according to participants, but they are not quite sure or do not agree on what makes these areas salient. It is also important to note that many of the labels in this category do not necessarily relate to linguistic properties, but social properties, and possibly social stereotypes, associated with the area, such as "oil baron" and "hippie".

Figure 22 shows the frequency of overlap of the INDIGENOUS category (30/766 or 4%). Twenty-nine participants highlighted and labeled an area that fell into this category, with many agreeing on the regions in the territories as sounding different in this aspect. Some of the labels include

Native accent

Inuit influenced

Accent influenced by first nations languages

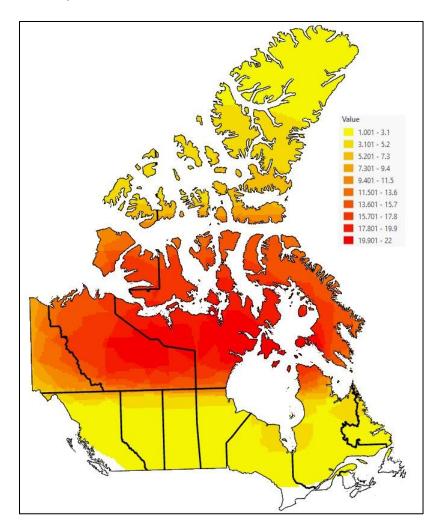
Rhythmic like Cree

Far north, sort of an indigenous sounding accent

It was expected that the northern areas of Canada would be associated with Indigenous languages because of the greater Indigenous population there. Despite the decline of Indigenous languages, many of the labels referred to Indigenous language influence, such as "Indigenous language influence" and, "Influenced by Inuit languages?". As preservation efforts continue to revitalize Indigenous languages, it will be interesting to determine if these perceptions start to

become more prevalent among Canadians when asked where English sounds different across the nation. Perhaps new regions will be highlighted in future studies with higher frequency where the speakers of Indigenous languages increase.

Figure 22. Composite Map of Degree of Frequency of Overlapping Labels in the INDIGENOUS Category (n = 30 Labels)



Boberg's (2010) discussion on the northern territories being more isolated than regions among the provinces with higher Indigenous populations, such as on provincial reserves, suggests that the Indigenous language influence may be more prevalent in the territories due to isolation from other areas. He suggests that the Indigenous populations close to urban areas tend to lose the Indigenous influence in their English more quickly than those in rural areas (e.g., the territories).

Further study into this may provide insight into how Indigenous influences survive or dissipate in English and whether this is dependent on regional influences and/or isolation.

The EAST COAST category has 29 labels (4%) provided by 27 participants and are displayed in a heat map in Figure 23. This category is composed of label such as:

East Coast

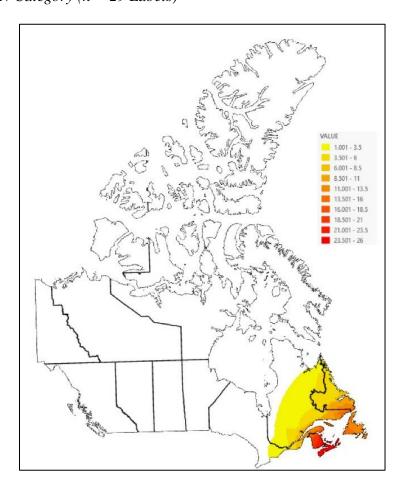
Atlantic (my own English)

East Coast accent

East Coast dialect

East

Figure 23. Composite Map of Degree of Frequency of Overlapping Labels in the EAST COAST/EASTERN Category (n = 29 Labels)



Like the QUÉBEC category below, the majority of the labels in this category simply said, "East coast", "East", or "Eastern", though six labels referred to a dialect or accent. There is a high degree of agreement between participants in this category, with 26 polygons overlapping over NB, NS, and PEI. NL also has a relatively high degree of overlap in this category and seems to be included in some participant's perceptions as "East Coast/Eastern". The PRONUNCIATION category, discussed above, gives some insight into what may be unique about these provinces, with participants agreeing that NB, NS, and PEI sound different phonetically. However, it is difficult to conclude whether those who simply labeled these areas as "East Coast" or "East" are referring to linguistic differences in these speaker's English or if there are social attitudes and ideologies towards the population living in these provinces.

Further, the EAST COAST category may seem to overlap with the MARITIME category. When looking at the participants who provided labels for each of these categories, they are all different participants except for two. For example, the participants who provided a label that fell under the EAST COAST category, did not provide a label that fell under the MARITIME category (there were two participants who did provide labels in both categories). Though the decision to split these categories was made by the researcher, it may be that these should be combined. However, it would be important to understand if participants recognize a difference between labels that were categorized as EAST COAST and those that were categorized as MARITIME which may validate the split between these categories. Follow-up interviews with participants would give further insight into what they meant by "East" or "East Coast", as well as "maritime."

The QUÉBEC category had 21 participants that drew 23 labels which fell into this category (23/766 or 3%). Labels included:

Quebec

The Quebecois accent reminds me of Canada so much, lovely

Quebecois

Anglo-quebecker English (Eastern Townships)

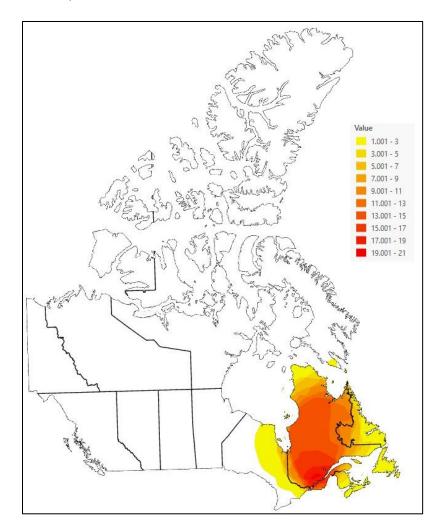
Qc and Montreal English

As one would anticipate, participants are very aware of where QC is and there is complete agreement among these participants, with the highest number of overlapping polygons at 21. The high frequency of overlap is also quite specific in that the southern parts of the province along the St. Lawrence River, where Montréal and Québec City lie, are highlighted, and labelled most often as shown in Figure 24.

Like the NEWFOUNDLAND labels, the QUÉBEC category does not contain specific examples of what makes the area unique. All 23 labels refer to the province or smaller region within the province (e.g., QC and Montréal English). The most frequent label in this category, provided 13 times, is simply, "Quebec". Looking at the composite map of the PRONUNCIATION category does not reveal much regarding phonetic differences between QC and the rest of Canada. Participants may be referring to a difference that is not in fact linguistic, but social, or may be referring to the lack of English-speakers. As discussed above in the FRENCH category, participants are quite aware of the official language of QC and often circled and labeled the province with FRENCH labels. When reviewing the specific participants that provided labels that were categorized in the FRENCH and QUÉBEC category, no participant provides a label for each category. That is to say, all the participants that provided labels that fell into the FRENCH category were different participants than those who provided a label(s) for the QUÉBEC category. There were also no participants from QC that provided a FRENCH label,

while one provided a QUÉBEC label. The labels for these categories were given by participants across Canada. Again, follow-up interviews could help determine what the participants who provided QUÉBEC labels meant by these labels.

Figure 24. Composite Map of Degree of Frequency of Overlapping Labels in the QUÉBEC Category (n = 23 Labels)



Twenty labels (3%) fell into the RURAL/COUNTRY category and were provided by 15 participants. Labels that fell into this category include:

Isolated, Relaxed, Fishing, and Wind-bitten English

"Redneck" sounding and different expressions

Slow drawl

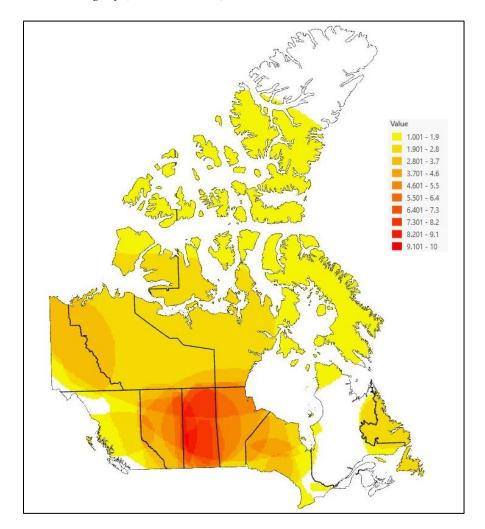
Farm English

Rural

Unlike the categories discussed that refer to specific geographic areas, the labels that created this category were more detailed and unique, with little consensus over a specific word, such as "rural". As shown in Figure 25, there is some agreement among participants around the perception of SK being RURAL/COUNTRY sounding. Other parts of Canada are also highlighted, which suggests pockets of RURAL/COUNTRY exist across the nation, though with fewer overlapping polygons than in the prairies. Some of the labels suggested specific areas falling into this category, such as "Northern Ontario (Ottawa valley) Small Town English" and "rural" accent like the stereotypical Ontario accent in black below". Participants provided few specifics as to what phonetic or grammatical features make the COUNTRY/RURAL areas sound different. The most detailed label regarding a specific linguistic entity is given by participant 22, "Redneck sounding and different expressions".

The PRONUNCIATION category may provide further insight into what makes the prairies particularly salient. It is apparent that some participants perceive an "accent" in the prairie provinces. Perhaps this accent is the same, salient feature, that some participants associate with COUNTRY/RURAL. Nylvek (1992) studied the pronunciations of ten words that vary within Canadian English and found a rural/urban divide among Saskatchewan speakers for five of the words. Further, Boberg (2010) split participants into smaller regions that aligned with urban centres in instances where he had large numbers of participants (e.g., Toronto, Montréal, Vancouver, etc.). He found several lexical variables that differed in urban centres compared to rural areas, such as *pail/bucket* and *supper/dinner*. Interestingly, several participants used labels that referred to "prairies" rather than RURAL/COUNTRY, as discussed below.

Figure 25. Composite Map of Degree of Frequency of Overlapping Labels in the RURAL/COUNTRY Category $(n = 20 \ Labels)$



The PRAIRIES category was composed of 19 labels (2.5%) provided by 19 participants and included labels such as:

Prairies

Prairie English

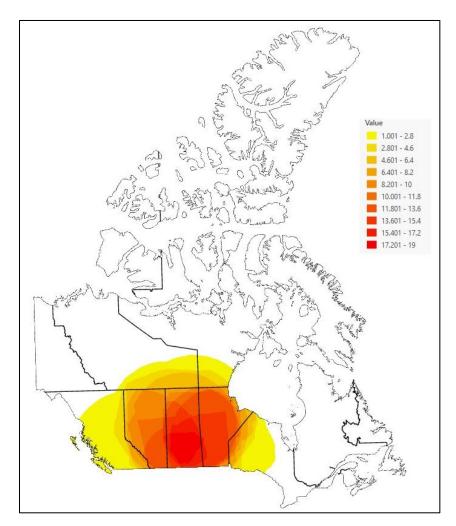
Flat Prairies

Prairie twang

Prairies accent Influenced by Eastern Europeans

The PRAIRIE category has 100% agreement between the 19 participants that central and southern SK fall into this category as shown in Figure 26. Participants also agree to a large extent that AB and MB have a PRAIRIE aspect, while BC, NT, NU, and ON are less agreed upon.

Figure 26. Composite Map of Degree of Frequency of Overlapping Labels in the PRAIRIE Category (n = 19 Labels)



Similar to some of the other categories referring to regions, the labels in this category largely refer to "prairie" without explanation of what that means to participants. Within this category though, it is important to note that some notice an "accent" or "twang", with one participant suggesting the accent is influenced by Eastern Europeans. This participant seems to be aware of the historical demographics of the prairies as described in Chapter 2. The

PRONUNCIATION category sheds little light on what some participants may find salient in this area, with little agreement among participants who provided labels in the PRONUNCIATION category. Once again, follow-up interviews may provide further insight into what "prairie" means to participants. Further discussion about the intersection between PRAIRIES, WESTERN, and WEST COAST are provided further below when addressing the results for the WEST COAST category.

The CANADIAN category is made up of 17 labels (2%) provided by 17 participants with the heat map provided in Figure 27. Examples of CANADIAN labels include:

Classic Canadian

Tend to have a more "Canadian accent"

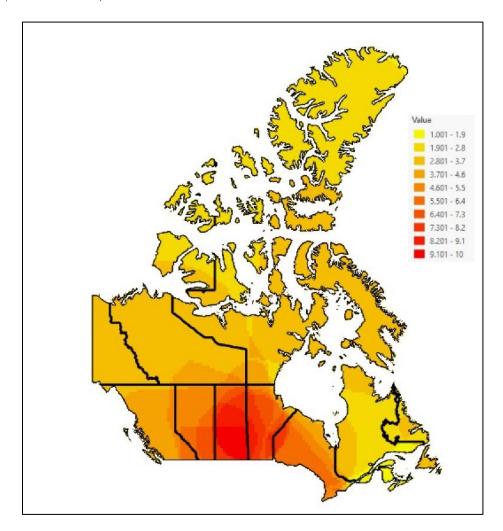
Stereotypical Canadian

Really Canadian

Warm, friendly, stereotypical Canadian accents, Irish-ish

The majority of participants that provided a polygon with a CANADIAN label highlighted an area in SK and MB, indicated by the bright red in Figure 27. From the labels provided, it appears that participants assume a common understanding of what "stereotypical Canadian" or "Classic Canadian" sounds like without giving specific examples as to what makes that area's English sound "Canadian". Participant 105 gives the example, "Classic Canadian stereotype "Eh", but no other participants in this category give any detailed examples. As discussed above for the PRIAIRE and PRONUNCIATION categories, it is not apparent as to whether there are specific phonetic variables that are salient to Canadians; however, it seems PRAIRIE and CANADIAN may intersect, with both composite maps showing the prairie provinces as sounding different compared to these participant's English.

Figure 27. Composite Map of Degree of Frequency of Overlapping Labels in the CANADIAN Category (n = 17 Labels)



Labels, such as the ones given above referring to a stereotyped-Canadian English or "Classic Canadian" may be referring to several features that have been well documented in linguistic literature, such as Canadian raising or the unique lexicon of Canadians (e.g., "duotang", "eh", or "toque"). Perhaps participants are referring to other linguistic items that linguists have yet to study; thus, follow-up interviews would again assist with determining the features, if any, the participants are thinking constitute "stereotypical Canadian" and "Classic Canadian."

Sixteen participants provided 17 labels (2%) that were categorized into the ONTARIO category, with the heat map in Figure 28 showing high frequency of overlap of polygons. Labels include:

Ontarian

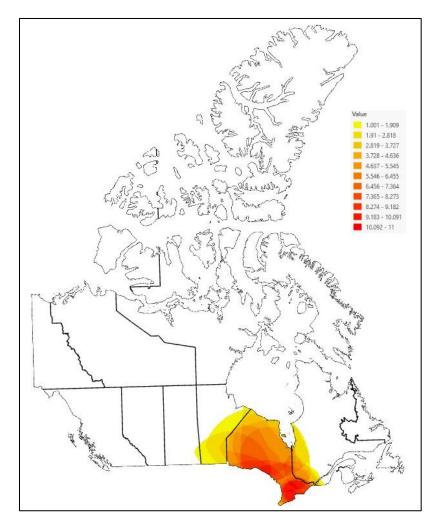
Southern, ON

Ottawa valley accent

Ontario – Subtle Canadian accent Especially noticeable are differences in the /o/sounds.

Ontario accent British influences

Figure 28. Composite Map of Degree of Frequency of Overlapping Labels in the ONTARIO Category (n = 17 Labels)



As one would anticipate, the highest frequency of overlapping polygons that fall into this category is over ON, with the brightest red appearing along the southern border of ON. Labels in this category are used for more urban areas in ON, as much of the population of ON is situated along the southern border with the USA. However, when the labels are examined individually, there are several that refer to specific areas in the province, such as: "Thunderbay", "Northern Ontario English", "Sothern, ON", "Eastern Ontario English", "Northern Ontario accent", and "Ottawa valley accent". A regional study to be completed with a map task of the province may serve to further explore what specific regions are salient to listeners. Interestingly, not all participants that provided these types of specific regional labels were from ON, so it seems that some Canadians may be aware of regional variation within the large province, despite not being from there. In addition to the regional map task study, I suggest including follow-up interviews with the participants to determine if they recognize particular features that are salient to them. This would allow for comparison to previous regional variation studies completed in Ontario (e.g., Pringle & Padolsky, 1983) and may provide further insight to variables yet to be studied.

Twelve participants provided 15 labels (2%) that were categorized into the LEXICAL VARIATION category, with the distribution of overlapping polygons displayed in Figure 29. Labels included:

Detroit-influenced English with vocabulary like Fahrenheit

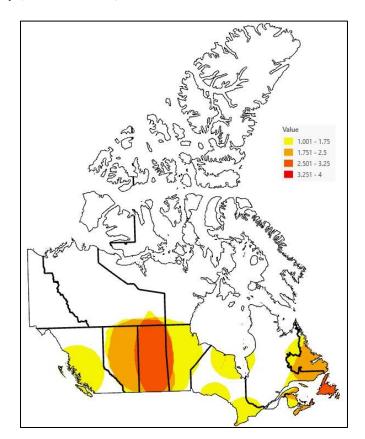
"I's the b'y"

Maritime variation in word usage

Eh

Bunny hug

Figure 29. Composite Map of Degree of Frequency of Overlapping Labels in the LEXICAL $VARIATION\ Category\ (n=15\ Labels)$



The composite map in Figure 29 shows low frequency of overlapping polygons in this category, suggesting several lexical choices are salient to different participants in different areas. This makes sense as speakers are probably less cognisant of their lexical choices unless there is a known stereotype surrounding a term that is talked about by others. The labels provided in this category may give insight into lexical variables that linguists may find useful to study to determine if regional boundaries exist for that variable or variables. For example, the term "Bunny hug" being used in the map task is discussed further in the analysis of lexical variation in Section 5.7.

The NORTHERN/TERRITORIES category consisted of 14 labels (2%) provided by 13 participants. Examples of labels in this category include:

Territories

North

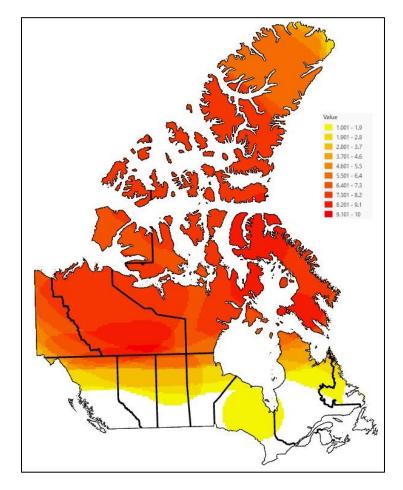
The North

Remote northern areas

Northern Accent

The composite map in Figure 30 provides insight into the high degree of agreement between participants that provided labels in this category.

Figure 30. Composite Map of Degree of Frequency of Overlapping Labels in the NORTHERN/TERRITORIES Category (n = 14 Labels)



Similar to the other regional categories (e.g., NEWFOUNDLAND, QUÉBEC, PRAIRIES, etc.) participants agree that the northern areas of Canada, including the territories and northern areas

of BC, AB, SK, MB, ON, QC, and NL are regionally accurate to the labels provided in this category. Further exploration into what makes the northern regions of Canada salient to speakers would be beneficial as the labels in this category, as well as other categories dealing with linguistic properties (e.g., PRONUNCIATION and LEXICAL VARIATION), did not provide many specific examples for this area. Further, the labels in the NORTHERN/TERRITORIES category generally refer to the region or area, rather than the English spoken there (e.g., "North", "Territories", "Nunavut", etc.).

The WESTERN category consists of 14 labels (2%) provided by 14 participants. Examples of WESTERN labels include:

Western accent

Western Canada

Saskie

Alberta

Western Canadian Accent/Stereotypical Canadian Lingo

As discussed in the other regional categories, labels in the WESTERN category largely focused on the provinces or larger region (e.g., "Western Canada") rather than particular linguistic items. "Accent" is referred to in four of the 14 labels, such as participant 187 using the label "Albertan accent." When a label referred to a province west of ON with no further description, these labels were grouped into the WESTERN category as there were not enough labels referring to each province to create a provincial category like ONTARIO or QUÉBEC. For example, three participants referred to SK (e.g., "SK" or "Saskie"), while two refer to AB (e.g., "Alberta"). The composite map in Figure 31 shows agreement between participants that AB and parts of SK and

BC are considered the most "western". This differs slightly from the RURAL/COUNTRY and PRAIRE categories, in that BC is included within this category.

Figure 31. Composite Map of Degree of Frequency of Overlapping Labels in the WESTERN Category (n = 14 Labels)

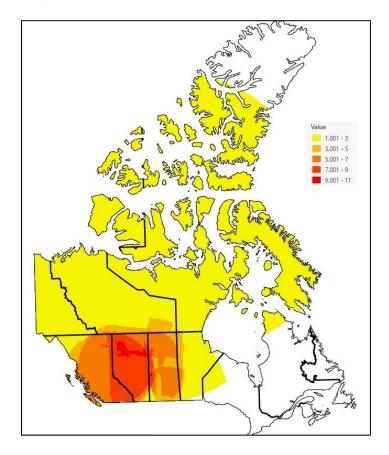


Figure 32 displays the composite map of 11 labels (1%) provided by nine participants in the OTHER LANGUAGES category. Labels include:

Scottish influence

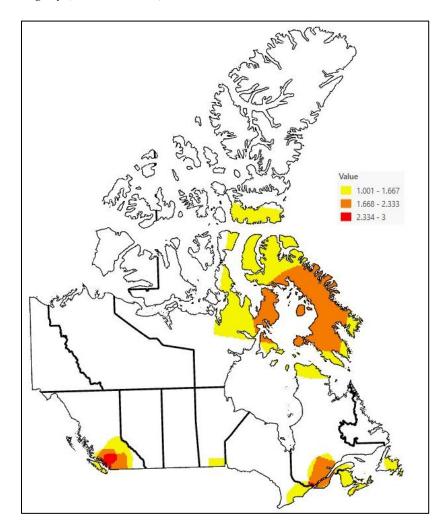
Asian English

Odd Mennonite low German accents

English not first language

Different languages

Figure 32. Composite map of degree of frequency of overlapping labels in the OTHER LANGUAGES category (n = 11 labels)



Due to the low overlapping frequency of polygons with labels fitting into this category, there does not appear to be broad consensus across participants. The highest frequency of overlap occurs in southwestern BC and QC, but the number is low at three overlapping polygons.

Regions that speak multiple or other languages do not appear to be salient to most Canadians in this study, though participants do seem to note Southwestern BC, where Vancouver lies, but not Southeastern ON where Toronto is. Further study may provide further insight into whether Vancouver is perceived as having speakers of other languages compared to Toronto by Canadian English speakers.

Nine participants provided ten labels (1%) that fell into the URBAN/CITY category, with the heat map showing high frequency of overlap in Figure 33. Examples of labels in this category including:

Torontonians

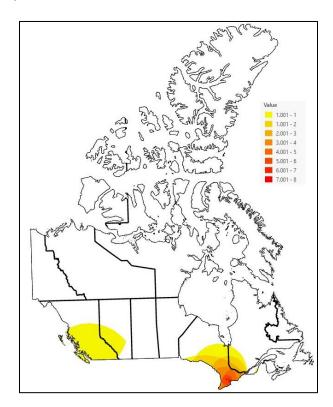
Multicultural, Multi-accented, Highly-educated, Urban English

Mountain/Vancouver English

New York ish

Montreal

Figure 33. Composite Map of Degree of Frequency of Overlapping Labels in the URBAN/CITY Category (n = 10 Labels)



As shown in Figure 33, there is agreement between almost all nine participants in that southern ON falls into this category of labels. This is not surprising as the highest population of Canada lives in this area. Examples of what specific linguistic features may stand out is not

apparent from the labels, with most referring to the city of Toronto. Though there was a large amount of agreement among the nine participants, the overall saliency of English sounding URBAN/CITY is little among the larger survey population.

Nine participants provided nine labels (1%) that were put into the WEST COAST category with the composite map shown in Figure 34. Examples of labels include:

West Coast

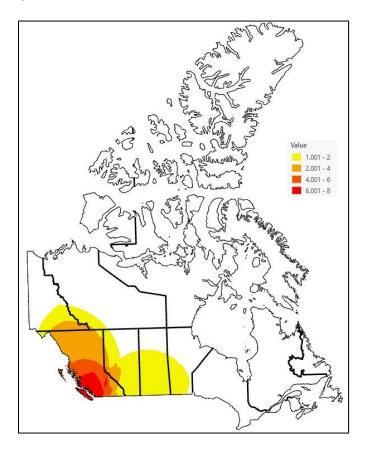
BC

West coast english

West coast accent – British influenced by Prairies accent?

West coast accent

Figure 34. Composite Map of Degree of Frequency of Overlapping Labels in the WEST COAST Category (n = 9 Labels)



As shown in Figure 34, eight of the participants agreed on the same area, with southwestern BC being highlighted and given labels falling into this category most often. The particular feature(s) that make this area salient are not apparent from any of the above categories and with few participants providing labels in this category, further exploration is needed to further comment on anything linguistically unique to speakers.

The three categories, PRAIRIES, WESTERN, and WEST COAST may be thought of as similar; however, when looking at the composite maps above different areas are highlighted (cf. Figures 26, 31, and 34). For example, the area most often highlighted for the PRAIRIE category tends to centre around SK, while WESTERN centres around AB and finally, WEST COAST centres around BC. Further, when looking at participants that provided labels for these categories, there tends to be a bit of overlap in individual responses. That is to say that one participant provides a label that is categorized as PRAIRIE and a different label that is categorized as WEST COAST. There was a total of 10 participants who provided two different labels that were categorized into one of these three categories.

Eight participants provided eight labels (1%) falling into the SLANG category, with examples being:

Unique dialect and slang

Unique slang

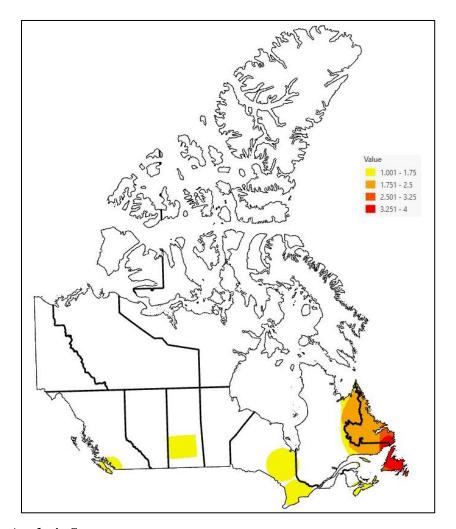
Slang

irish twang and own lingo

Different slang

There is not a high frequency of overlap in this category, as shown in Figure 35. This suggests that slang is associated with particular regions by participants from different regions (e.g., AB, ON, MB). No examples of what slang refers to are given in the labels.

Figure 35. Composite Map of Degree of Frequency of Overlapping Labels in the SLANG Category (n = 8 Labels)



5.4.1 Content Analysis Summary

The keyword analysis and sorting of labels into semantic categories resulted in a total of 766 labels in 20 categories. The labels within each category often referred to the geographic, linguistic, or social aspects of the region. Many categories had a high frequency of overlap, indicating agreement among participants who provided labels in those categories. This was often

the case with categories referring to specific regions (e.g., NEWFOUNDLAND, NORTHERN/TERRITORIES, QUÉBEC, and MARITIMES). There were a few categories which did not have high degrees of agreement among participants (e.g., SLANG, OTHER LANGUAGES, and LEXICAL VARIATION) but this may have been due to the fact they had fewer labels overall.

The composite maps allow for visualization of the data and where agreement occurs at greater degrees among participants when grouped either as provinces (e.g., Section 5.3) or grouped by semantic categories of labels (e.g., Section 5.4 showing the composite maps for each category). Further suggestions for future studies are provided above and in Chapter 6.

5.5 Rating Tasks

The answers given by participants for the rating tasks are presented below according to default province. The first attribute participants rated provinces and territories' English on, was correctness, followed by pleasantness, and finally similarity. The study of these three characteristics follows from previous work on language attitudes that gives insight into linguistic security and participants' attitudes towards ways of speaking in various regions to accompany findings from map tasks (e.g., McKinnie and Dailey-O'Cain, 2002; Niedzielski and Preston, 1999). Means and standard deviations (marked as SD in tables) were calculated for each default province group. Mean ratings for each province and territory were colour-coded by 0.5 measurements and presented on a basic map of Canada to show the regions that were rated similarly, and which differed.

5.5.1 Correctness

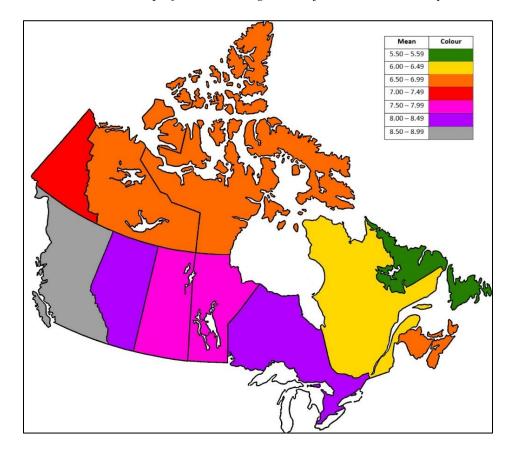
BC participants' mean ratings for each province and territory across Canada for 'correctness' are presented in Table 11. They gave BC the highest score for correctness with a

mean of 8.70, with the lowest standard deviation for this category and group at 1.49. ON and AB are given the next highest ratings, respectively, with the other prairie provinces, SK and MB, receiving means in the high 7.00's. The only territory to receive a mean higher than 7.00 was YT, while the other two territories were rated lower and more similarly to the maritime provinces and QC, which is clearly depicted in Figure 36. Lastly, NL is given the lowest rating for 'correctness', but has the highest standard deviation, suggesting not all BC participants agree with each other.

Table 11. Mean and Standard Deviations of Ratings by BC Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.70	8.00	7.70	7.75	8.10	6.25	6.75	6.85	6.95	5.90	7.30	6.85	6.50
SD	1.49	1.56	1.69	1.68	1.55	2.34	2.20	2.18	2.09	2.45	2.13	2.21	2.16

Figure 36. Colour-Coded Map of Mean Rating Scores for 'Correctness' by BC Participants



From the calculated averages, it seems that BC is linguistically secure, as defined by Preston (1989) and McKinnie and Dailey-O'Cain (2002) who describe respondents from linguistically secure regions as providing high ratings for correctness to their own province, while using a large portion of the rating spectrum to rate the other regions. The heat map presented in Figure 6 above, in Section 5.3, suggests BC participants are aware of differences in the east, in particular, QC and the Atlantic provinces. These differences may relate to 'correctness' or 'pleasantness', which is discussed further below in Section 5.5.2. The lowest 'correctness' rating for NL supports the negative stereotypes of that province discussed above. Whether other provinces agree with this negative stereotyping of NL is discussed below.

To the east, AB participants agreed with their neighbours and gave BC the highest rating for correctness with an average score of 8.44, while the mean for their own province was slightly lower at 8.26 as shown in Table 12. Provinces to the east of AB are rated relatively similar, with means ranging from 7.79 to 7.89 for SK, MB, and ON. Interestingly, ON is given a slightly higher rating for correctness than SK and MB. QC is given lower ratings (5.45), alongside NL (5.43), while the maritime provinces and territories all have ratings between 6.00 and 7.00.

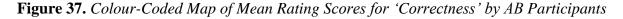
Table 12. Mean and Standard Deviations of Ratings by AB Participants on Correctness of English

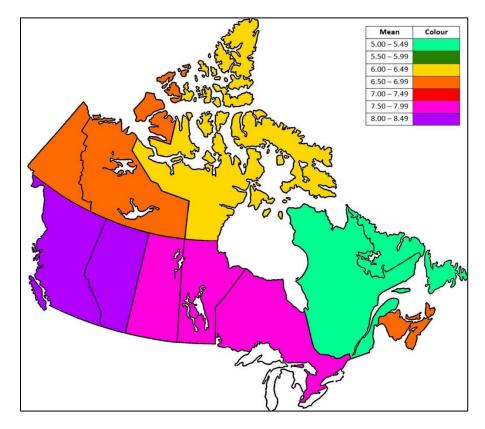
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.44	8.26	7.79	7.81	7.89	5.45	6.53	6.53	6.68	5.43	6.98	6.70	6.30
SD	1.28	1.42	1.50	1.44	1.37	2.17	1.78	1.68	1.83	2.24	1.66	1.76	1.84

Though AB was not the highest rating for these participants in correctness, the mean is still relatively close to that of BC which suggests AB participants may also be linguistically secure.

The findings in Table 12 and Figure 37 are very similar to the findings of perceptions of correctness of McKinnie and Dailey-O'Cain (2002) in their perceptual study of young Albertans

and Ontarians. This may suggest that perceptions have not changed over the past decade and a half.





Further, the heat map presented above in Figure 7 suggests that QC and NL stand out to AB participants as sounding different. Like BC participants, a segment of this difference in English may be related to 'correctness'. The low ratings for QC in particular may also be related to anti-QC attitudes that AB participants hold, as Albertans often hold negative attitudes towards QC. As an Albertan who was raised in the province, it does not surprise me that QC is given some of the lowest ratings among AB participants due to the daily commentary surrounding QC. It is important to note that the negative attitudes towards QC do not extend to NL in the same way, as AB does not hold anti-NL sentiments, at least not in the same way they do with QC.

SK participants follow a similar trend to BC participants, rating BC and ON speakers as being the most correct (8.69 and 8.77, respectively), with AB (8.54), SK (8.38), and MB (8.31) trailing close behind as shown in Table 13. Further, they give quite higher ratings to QC speakers compared to AB and BC participants, with an average of 7.00. Overall, the means are higher for all provinces, resulting in a less colourful map in Figure 38.

Figure 38. Colour-Coded Map of Mean Rating Scores for 'Correctness' by SK Participants

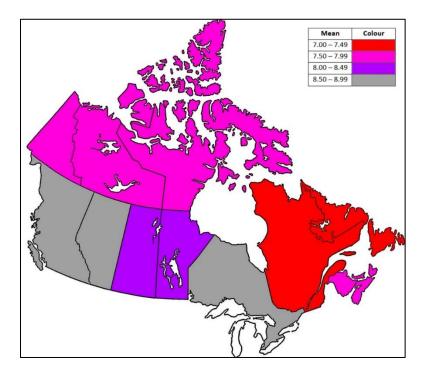


Table 13. Mean and Standard Deviations of Ratings by SK Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.69	8.54	8.38	8.31	8.77	7.00	7.54	7.85	7.77	7.00	7.62	7.62	7.54
SD	1.18	1.45	1.56	1.55	1.17	2.00	1.71	1.52	1.74	1.83	2.10	2.10	2.11

QC and NL are given ratings very similar to the rest of Eastern Canada and the territories by SK participants. Referring to Figure 8 above, it is clear that SK participants perceive a difference in the way Newfoundlanders speak English, which is also reflected in their average rating for NL (7.54) on 'correctness'.

Participants from MB gave the highest ratings of 'correctness' to BC (8.17) and AB (8.00), with ON (7.75) close behind. Ratings for their own province seem to indicate they may be less linguistically secure than their neighbours to the west, a similar finding in the SK data. Their ratings are more aligned with those given by AB and BC participants for the French-speaking province of QC, with the lowest mean rating for correctness, 5.67, given to this province by MB participants. The maritime provinces receive ratings just below ON, while NL is given the second lowest rating, 6.42, among all the regions. The territories do not fare much better than NL, with mean ratings between 6.50 and 7.00, depicted in orange in Figure 39.

Table 14. Mean and Standard Deviations of Ratings by MB Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.17	8.00	7.58	7.50	7.75	5.67	7.25	7.00	7.33	6.42	6.83	6.92	6.92
SD	1.70	1.71	2.02	1.68	1.82	1.50	1.82	1.86	1.97	2.02	1.70	1.83	1.83

Figure 39. Colour-Coded Map of Mean Rating Scores for 'Correctness' by MB Participants

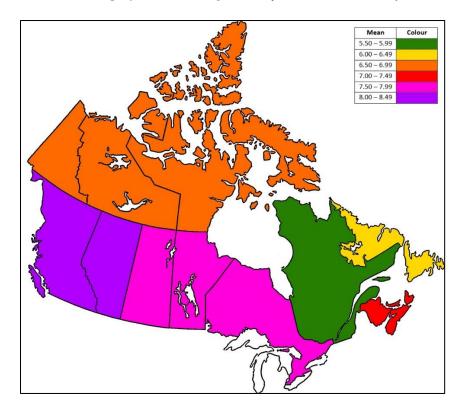


Figure 9 above reflects similarities in the average ratings of MB participants and the number of overlapping polygons suggest perceived differences in the way English is spoken in those regions. NL has the highest frequency of overlapping polygons for this group, and the ratings provided for 'correctness' may contribute to the perception of difference to MB participants. QC and the territories also have relatively higher frequency of overlapping polygons for areas that sound different and the ratings in Table 14 may also contribute to perceptions of difference to MB speakers. This also begs the question: what features in the English spoken in QC and territories do MB participants find 'incorrect'?

Interestingly, ON participants had a higher mean rating for speakers in BC (8.57) for the 'correctness' category than themselves as shown in Table 15 and Figure 40 below. This finding is reflected in McKinnie and Dailey-O'Cain's (2002) ON data as well for the 'correctness' category. ON and AB receive high mean ratings at 8.46 and 8.15, respectively. QC is given another low mean rating (5.79), similar to responses from AB participants. ON participants were not as harsh in their mean ratings for NL as AB participants, giving it a mean rating of 6.52. SK (7.82) and MB (7.97) are given relatively high ratings as well, with the maritime provinces and territories receiving similar mean ratings as each other.

Table 15. Mean and Standard Deviations of Ratings by ON Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.57	8.15	7.82	7.97	8.46	5.79	7.26	7.52	7.41	6.52	7.34	7.20	6.95
SD	1.23	1.30	1.57	1.49	1.31	2.17	1.94	1.67	1.69	2.03	1.80	1.68	1.83

ON participants had high degrees of overlapping polygons in NL, the Maritimes, and partially in the prairie provinces, as depicted in Figure 10 above. The average ratings given to

these provinces also reflect where the heat map is reddest, suggesting 'correctness' may also play a role in what makes the English in these provinces sound different to ON speakers.

Figure 40. Colour-Coded Map of Mean Rating Scores for 'Correctness' by ON Participants

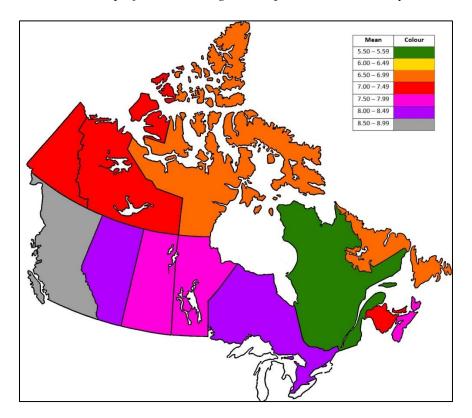


Table 16 and Figure 41 below, display the mean ratings by QC participants and show high ratings for all provinces except for their own. This lower mean rating of 6.50 suggests that they are less secure linguistically, while they provide the highest mean ratings to BC (8.90) and ON (8.80). Even NL (8.50) is given a higher rating than any of the other default provinces discussed above. It is interesting that NB is given a lower rating on average than the other Atlantic provinces, at 8.00. This may suggest that QC participants are more aware of the French spoken in NB and believe it affects the 'correctness' of the English spoken in the province. Follow up interviews with the QC participants may suggest reasons behind the lower mean rating for NB compared to the other Atlantic provinces. Similarly, NU (8.20) is given a lower score than the other territories.

Table 16. Mean and Standard Deviations of Ratings by QC Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.90	8.60	8.60	8.60	8.80	6.50	8.00	8.60	8.60	8.50	8.60	8.60	8.20
SD	1.20	1.51	1.51	1.51	1.23	2.37	1.70	1.51	1.51	1.51	1.51	1.51	1.55

Figure 41. Colour-Coded Map of Mean Rating Scores for 'Correctness' by QC Participants

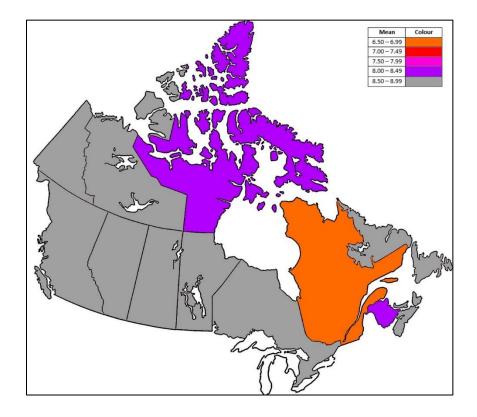


Figure 11 above shows an interesting picture of areas that sound different to QC speakers, with the BC-AB border being highlighted frequently, and the Atlantic provinces also having higher degrees of overlapping polygons than other areas. Perhaps, 'correctness' or maybe more standard use of English in these provinces, compared to QC speakers, is what stands out as salient to QC participants.

The MA participants from the three maritime provinces had the lowest average ratings across all provinces and territories, as shown in Table 17 and Figure 42. They are also the first group of participants to give ON (7.80) the highest average ratings of correctness, with NS (7.40)

following close behind. AB (7.27) and MB (7.27) are given similar ratings, resulting in the same mean rating and BC (7.13), SK (7.07), and PEI (7.07) are the next highest rated provinces. Of the three maritime provinces, NB (6.87) is given the lowest average rating, with the territories and NL (6.00) following close behind. Finally, QC (5.40) is given the lowest average rating by MA participants, similar to the AB, MB, and ON participants' ratings discussed above for this region and category. Though the number of MA participants was small, it would be beneficial to conduct follow-up interviews to determine why their ratings for 'correctness' were so much lower compared to participants from other provinces. The fact their ratings are lower than any other group of participants may be due to linguistic security. MA participants use a small range of the scale and do not give their provinces the highest rating. This may indicate a lower sense of linguistic security as one would expect a linguistically secure area to use a large range of the scale and give their own province the highest ratings.

Figure 42. Colour-Coded Map of Mean Rating Scores for 'Correctness' by MA Participants

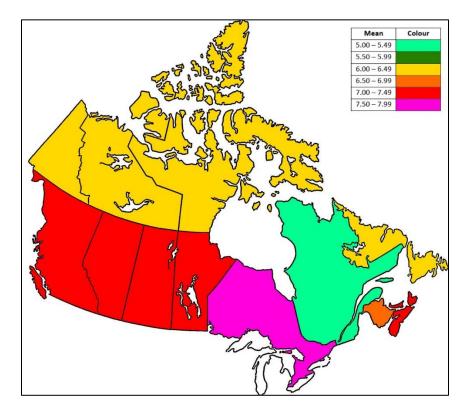


Table 17. Mean and Standard Deviations of Ratings by MA Participants on Correctness of English

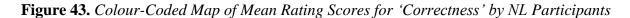
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	7.13	7.27	7.07	7.27	7.80	5.40	6.87	7.40	7.07	6.00	6.33	6.27	6.07
SD	1.51	1.39	1.53	1.28	1.26	1.12	0.99	1.18	1.44	1.81	1.40	1.44	1.16

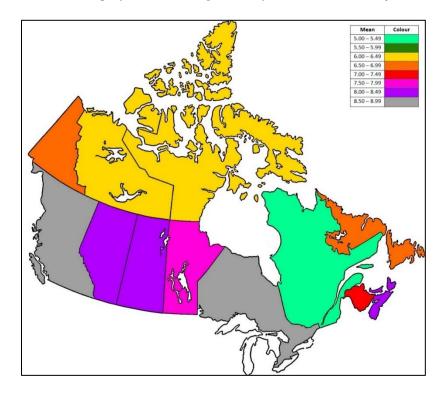
Participants in NL also seem to be linguistically insecure, similar to their neighbours in the maritime provinces and QC. Though the average rating for their province does not have the lowest rating (6.73), it is still lower than most of the other regions as shown in Table 18. Only QC is given a lower average rating, at 5.33. ON (8.87) and BC (8.60) are given the highest mean ratings, with AB (8.27), SK (8.13), NS (8.20), and PEI (8.20) following closely behind. MB and NB are grouped similarly, with ratings between 7.40 and 7.80, while NL and the territories have average ratings in the 6.00s (see Figure 43).

Table 18. Mean and Standard Deviations of Ratings by NL Participants on Correctness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.60	8.27	8.13	7.80	8.87	5.33	7.40	8.20	8.20	6.73	6.87	6.47	6.20
SD	1.06	1.39	1.13	1.37	0.83	2.29	1.18	0.94	0.94	2.22	1.73	1.60	2.11

Similar to the other default provinces discussed above, the heat map presented in Figure 15 shows NL participants agreeing with each other that many other regions of Canada speak differently than their own English. Part of these differences may be linked to the perception of 'correctness'. The findings for the rating task may also suggest that Newfoundlanders agree with the perception that they speak less 'correct' English, a stereotype that was discussed above in Section 5.4 when addressing the NEWFOUNDLAND category.





Of all the regions discussed above, some areas of Canada appear more linguistically secure than others. In particular, BC, ON, and AB tend to use a broader spectrum of the rating scale to rate other provinces and territories on the 'correctness' of their English, while NL and QC seem to be linguistically insecure, rating their own provinces low and/or using less of the rating scale.

At the end of each rating section, participants were given the option to provide further comments on the task in order to glean some further insights into the reasons behind participant's ratings. A total of 88 participants left a comment after this rating task. General comments ranged from lacking knowledge of other provinces/territories due to having never travelled to the region, to commenting on the idea that no English is more correct than another. This metalinguistic commentary was interesting as some of the participants suggested that no English is better than any other, but then point out specific phrases or words, or "accents", and rate the English of other

areas as less correct. For example, participant 18, whose default province was QC, said, "i [sic] honestly haven't heard people from the other provinces except Ontario. I wouldn't rank provinces on how well they speak English, but what I would say is that Quebec is the worst."

Another interesting concept is suggested by participant 39 who says, "[s]ome of the places on the East Coast have weird words for things or strange pronunciations or grammar. I wouldn't consider any of them less correct, but they are further from, say UK English, than some of the ways people speak in other regions." It seems that participant 39 uses the English spoken in the United Kingdom as the baseline for correctness. Further exploration through interviews into the rating task responses and further comments may suggest that participants do not only compare differences within Canadian English only but compare differences across other English varieties such as English spoken in the United Kingdom, American English, etc., as suggested by participant 39's comment.

Further comments suggest this task causes either confusion or even frustration in being asked to rate someone else's English, as shown in participant 38's comment, "... really? I speak acadienne French and hate it when people call my use of language incorrect, so this question really irks me. Minor quibble, but semantics matter. So instead I've ranked it by "closest to textbook english [sic]." Pairing this study with another that uses indirect approaches to language attitudes with the same participants may suggest that participants are overriding attitudes and perceptions when directly asked, perhaps due to fear of external judgement or in this case, avoidance of judging someone else's language due to personal experience. As discussed in Chapter 2, language regard is multifaceted and variable, and different components are explored when using direct or indirect methods. Similar attitudes towards rating someone on a characteristic(s) may also be relevant to the stereotype rating tasks, which is discussed below.

Other participants provided the reasons behind their rating or thinking of 'correctness' with some saying they rated it based on the amount of slang used, while others used grammar and textbooks as baselines to which to compare the English of areas'.

Overall, participants in all regions were hesitant to use the full scale from one to ten and tended to have averages falling between 5.00 and 9.00 when rating provinces and territories on the 'correctness' of the English spoken there. Most groups of participants did not show a high degree of linguistic security. The next section provides the mean ratings for the characteristic 'pleasantness' and offers further insight into the topic of regional linguistic security.

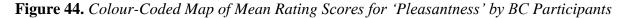
5.5.2 Pleasantness

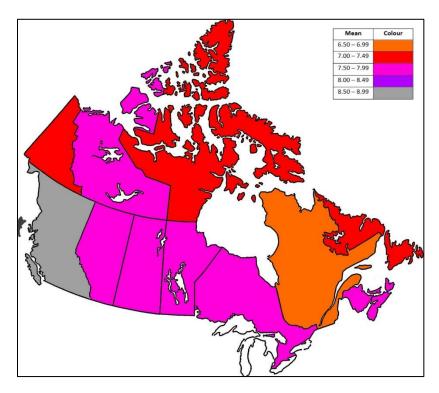
The second rating task asked participants to rate regions' English based on 'pleasantness'. They were provided the same scale as for 'correctness'. As above, means and standard deviations are presented below, alongside colour-coded maps to help visualize the differences in ratings.

BC participants have a high preference for their own English compared to other regions, almost having a single point higher on average than the other means for the other provinces/territories as shown in Table 19. Besides rating QC as least pleasant with a mean of 6.65, the other areas were given similar, average ratings between 7.40 (NL) – 7.80 (AB and MB). This lack of divergence is better shown in Figure 44, with only four colours being used across Canada to represent the average ratings for each region.

Table 19. Mean and Standard Deviations of Ratings by BC Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.65	7.80	7.70	7.80	7.75	6.65	7.55	7.55	7.65	7.40	7.45	7.50	7.45
SD	1.42	1.61	1.34	1.40	1.68	2.52	1.70	1.85	1.73	2.60	1.76	1.79	1.76



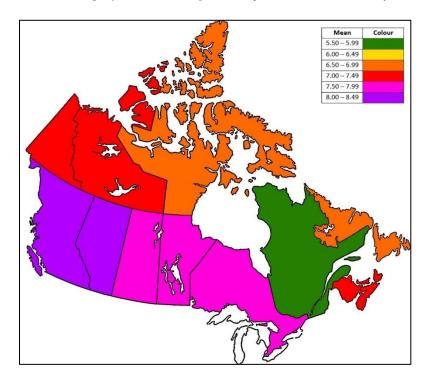


Unlike their neighbours, Albertans tend to use more of the scale, giving BC a higher average rating (8.32) than their own English (8.19) on 'pleasantness' as shown in Table 20. QC and NL are given the lowest average ratings at 5.89 and 6.64, respectively. NU is separated slightly from the other territories with an average rating of 6.91, while NT and YT are rated at 7.06 and 7.21, respectively, similarly to the maritime provinces. To the east of AB, the other prairie provinces are rated similarly to ON, with ON (7.53) receiving a lower average rating than SK (7.89) and MB (7.87), with these three provinces clustering together in Figure 45.

Table 20. Mean and Standard Deviations of Ratings by AB Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.32	8.19	7.89	7.87	7.53	5.89	7.11	7.21	7.28	6.64	7.21	7.06	6.91
SD	1.46	1.78	1.62	1.68	1.91	2.40	1.83	1.83	1.81	2.57	1.68	1.85	1.97

Figure 45. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by AB Participants



The rankings of regions on pleasantness by AB participants are very similar to McKinnie and Dailey-O'Cain's (2002) findings, with their data suggesting Albertans thought BC's English was the most pleasant, with AB English close behind. QC and NL were also perceived as having the least pleasant variety of English in their data, and the other areas were closely ranked together as sounding 'pleasant'. However, what differs is the lack of clustering of average ratings for 'pleasantness', which is often a sign of linguistically secure areas when rating for this characteristic (McKinnie & Dailey-O'Cain, 2002, p. 193). This suggests that perhaps, AB participants are not as linguistically secure as suggested in the above section. Further study into this area may be helpful to determine if there is a particular age group that is less linguistically secure among the AB participants, or if a different social factor may be playing a role in this change. It may be that there is a change in perceptions and attitudes of Albertans, and they are becoming less linguistically secure.

Table 21 shows that SK participants agree with AB and BC participants in that BC has the most pleasant-sounding English across Canada, with an average rating of 8.31. Unlike AB, SK participants tended to use less of the scale and rated things less harshly, with most of the regions having averages in the 7.00s. QC is the least pleasant sounding to SK participants, with a similar average of 6.08 to BC participant's ratings of QC (6.65). Figure 46 shows the similarities between many of the regions' average ratings on 'pleasantness' of English spoken in those areas, by SK participants. Note that six provinces and territories are highlighted in red and five are in pink, suggesting little divergence in the mean ratings. Follow up interviews may assist in determining why SK participants would rate ON lower than the provinces west of ON and some of the maritime provinces.

Figure 46. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by SK Participants

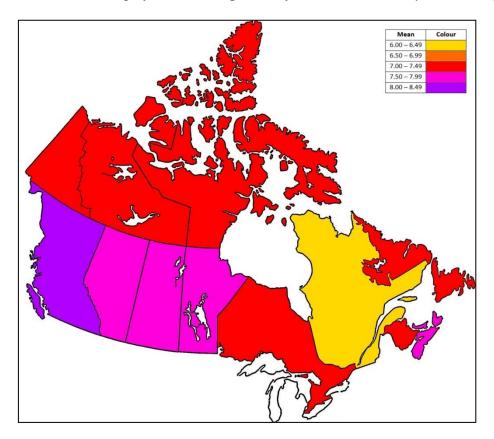
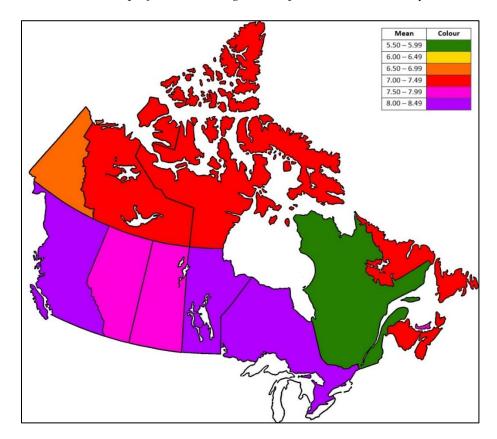


Table 21. Mean and Standard Deviations of Ratings by SK Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.31	7.62	7.69	7.62	7.38	6.08	7.38	7.62	7.54	7.00	7.15	7.00	7.08
SD	1.44	2.10	1.93	1.94	2.06	1.75	1.71	1.66	1.98	2.12	1.63	1.73	1.71

Unlike participants whose default province was SK, MB participants gave their own province a higher average rating on pleasantness (8.00), similar to the average AB and BC participants gave their own home provinces. However, this average did not surpass the average rating of 8.17 for BC speakers, resulting in the most 'pleasant' sounding English once again being spoken in BC according to MB participants. ON is also given a slightly higher average rating at 8.08. Like AB participants, Manitobans tend to separate themselves from the other prairie provinces on the rating task for 'pleasantness' as shown in Figure 47.

Figure 47. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by MB Participants



Like the other three provinces discussed above, QC has the lowest average rating by MB participants (5.92), with YT having the second lowest average (6.83). Interestingly, NL (7.33) has similar ratings as NB (7.17) and NS (7.33), while PEI (7.50) is given a higher rating than the other Atlantic provinces.

Table 22. Mean and Standard Deviations of Ratings by MB Participants on Pleasantness of English

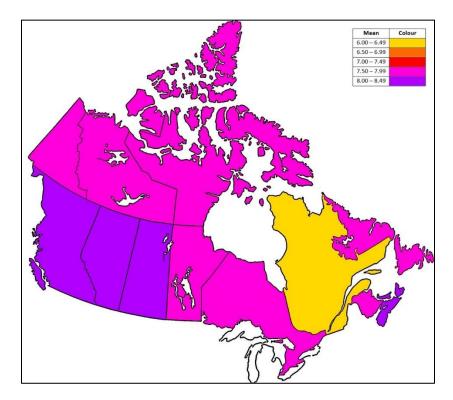
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.17	7.92	7.75	8.00	8.08	5.92	7.17	7.33	7.50	7.33	6.83	7.08	7.08
SD	1.70	2.07	2.05	1.41	1.56	2.27	1.85	1.78	1.73	1.72	1.90	1.68	1.68

The averages shown in Table 23 suggest that ON participants are linguistically secure as they tended to use less of the scale, clustering their responses between the 6.00s and low 8.00s. McKinnie and Dailey-O'Cain (2002) point out that with the 'pleasantness' rating, often participants from linguistically secure areas tend to cluster their ratings which differs from the use of most of the rating scale for 'correctness'. This clustering of averages is apparent in Figure 48 which shows seven regions in pink and five regions in purple. Interestingly, ON participants rated seven regions on average higher than their own for 'pleasantness', with BC (8.44), AB (8.03), SK (8.00), NS (8.41), and PEI (8.41) having the highest average ratings in the 8.00s. ON's average (7.93) is similar to that of MB (7.95), NB (7.93), and NL (7.98), something that has not been apparent in any of the above findings. No default province above has had the same average rating or less than NL. Despite this difference, QC is still rated the lowest by ON participants (6.28), with NT (7.61) and NU (7.51) receiving the next lowest average on pleasantness.

Table 23. Mean and Standard Deviations of Ratings by ON Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.44	8.03	8.00	7.95	7.93	6.28	7.93	8.41	8.41	7.98	7.59	7.61	7.51
SD	1.69	1.62	1.63	1.63	1.67	2.30	1.76	1.38	1.42	1.73	1.64	1.62	1.66

Figure 48. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by ON Participants



There is a noticeable difference in the data provided in Table 23 and Figure 48 when compared to McKinnie and Dailey-O'Cain's (2002) data. They found Ontarians rated their province as sounding the most pleasant, with BC close behind. The map they present is quite different from Figure 48, with all three prairie provinces being clustered together and BC and ON grouping together in their study. Further, the maritime provinces are also a cluster in their data, while PEI and NS stand out from NB in the current data, as shown in the figure below. Once again, these differences may be due to a social factor such as age. In their study, they focused on students, while the current study was open to all age groups. Further investigation

into whether age or another social factor may play a role in average ratings for characteristics, such as 'pleasantness', would be beneficial. Further discussion on why the Maritimes may be provided higher ratings for 'pleasantness' is provided in Section 5.6 when discussing the stereotype, "people living in the Atlantic provinces are friendly and homey."

The suggestion above that QC participants seemed to be linguistically insecure based on the lower average rating for their own province on 'correctness', is further supported by the data in Table 24. QC, on average, has the lowest rating for 'pleasantness' (6.20), with all other provinces and territories being rated at least 1.00 point higher. The most pleasant-sounding provinces to QC participants are BC (8.20), ON (8.20), NS (8.10), NL (8.10), and PEI (8.00). NB is half a point lower on average than the other Atlantic provinces, perhaps due to the French-speakers living there that QC participants may be aware of. The territories fare better than the prairie province with averages from 7.50 – 7.70. SK (7.40) and AB (7.20) are clustered together, as depicted in Figure 49 below.

Figure 49. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by QC Participants

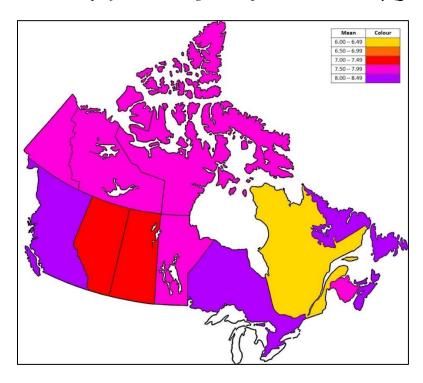
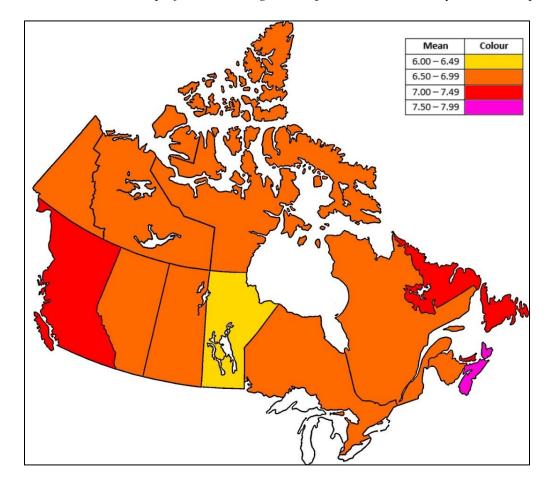


Table 24. Mean and Standard Deviations of Ratings by QC Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.20	7.20	7.40	7.60	8.20	6.20	7.50	8.10	8.00	8.10	7.70	7.70	7.50
SD	1.23	2.20	2.12	2.01	1.14	2.20	1.72	1.60	1.49	1.52	1.57	1.57	1.72

MA participants mean ratings for 'pleasantness' are much lower than those of other default provinces, with the highest average being 7.53 for NS. They are the only group of participants that did not have BC as the region with the highest average for pleasantness. Instead, the Atlantic provinces, except for NB (6.93), are given higher ratings than BC (7.33). As shown in Figure 50, most of the regions' averages sit between 6.50 and 6.99, with AB, SK, QC, and NT all having the second lowest average of 6.73.

Figure 50. Colour-Coded Map of Mean Rating Scores for 'Pleasantness' by MA Participants



The least pleasant-sounding English in Canada to MA participants is NU, with an average of 6.60, as shown in Table 25. These rankings of averages may suggest that MA participants are somewhat linguistically secure, as their averages cluster between 6.00 and 7.50, and they rate two of the three maritime provinces the highest on 'pleasantness'. McKinnie and Dailey-O'Cain (2002) suggest that provinces which are more linguistically secure will use less of the rating scale but provide high ratings for their own area.

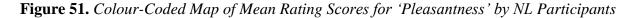
Table 25. Mean and Standard Deviations of Ratings by MA Participants on Pleasantness of English

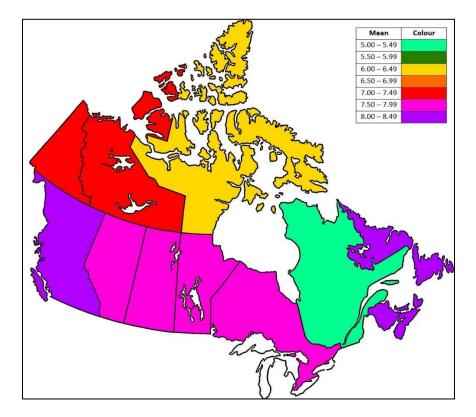
	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	7.33	6.73	6.73	6.47	6.93	6.73	6.93	7.53	7.40	7.47	6.80	6.73	6.60
SD	1.50	1.16	1.44	1.25	1.10	1.83	1.39	1.73	1.76	2.13	1.70	1.67	1.55

Finally, NL participants follow a similar trend to many of the other participants, giving BC the highest average rating (8.33) on 'pleasantness'. The prairie provinces are clustered together with ON, as shown in Figure 51, while QC is given the lowest average rating at 5.00. NU fares less well than the other territories while the Atlantic provinces are all clustered together with BC, as shown in Table 26. Interestingly, NL participants find their own English quite 'pleasant', with an average rating of 8.27. This finding contrasts with their ratings for 'correctness', which were among the lowest of all the provinces that they rated. Further, the east and west coast provinces, except for QC, were given the highest average ratings.

Table 26. Mean and Standard Deviations of Ratings by QC Participants on Pleasantness of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.33	7.93	7.93	7.80	7.53	5.00	7.20	8.00	8.13	8.27	7.27	7.13	6.47
SD	0.98	1.10	0.96	0.94	1.55	2.33	1.74	1.77	1.85	1.75	1.44	1.41	1.46





There were far fewer comments from participants following this category of rating tasks, with only 19 participants providing comments. Fewer participants commented on the 'subjective' nature of the task, while many of them commented on 'accents' playing a role in determining their ratings. For example, participant 28 commented saying, "I know that the frnch [sic] accent lends itself to a more melodic sound. I also know that I enjoy the maritime accent as it also tends to be, to my ear, more melodic and rounded." "Thicker" accents seemed to sway participants from providing a higher rating, depending on their preference as depicted in participant 31's comment, "[t]hick local accents are not as familiar to my ears, and therefore, not as pleasant to listen to. They can sound unsophisticated or uneducated sometimes." The comments from participants on this section suggest that they are more willing to rate people's English on 'pleasantness' than they were on 'correctness'.

Further, the averages provided in this section allow a clearer picture into which provinces may be more linguistically secure. The 'pleasantness' data for ON seems to suggest that these speakers are among the most linguistically secure speakers in the country. Interestingly, AB participants seemed to have more opinions on 'pleasantness' resulting in a wider range of averages on the scale, rather than the typical clustering expected for this characteristic (McKinnie and Dailey-O'Cain, 2002). That is not to say that AB participants are linguistically insecure, but it may be that they are not as linguistically secure as their ON counterparts. Further, the MA participants seemed to show some sense of linguistic security in their mean ratings for this characteristic, with many averages clustering together, while they gave their own provinces higher ratings than anywhere else in the country. Follow-up interviews would be beneficial to gathering further data and information to determine reasons behind the ratings and support for any areas thought to be linguistically secure.

5.5.3 Similarity

The final rating task asked participants to rate the provinces and territories on the similarity of the English spoken there compared to their own. The scales were the same as the other two rating tasks, with one representing 'not at all similar' and ten representing 'exactly the same'. As in the two previous sections, means and standard deviations were calculated for each province and means were depicted on colour-coded maps. The data from this rating task is closely related to the data found in the map tasks in Section 5.3 which presents the heat maps of areas participants highlighted as sounding different than their own English.

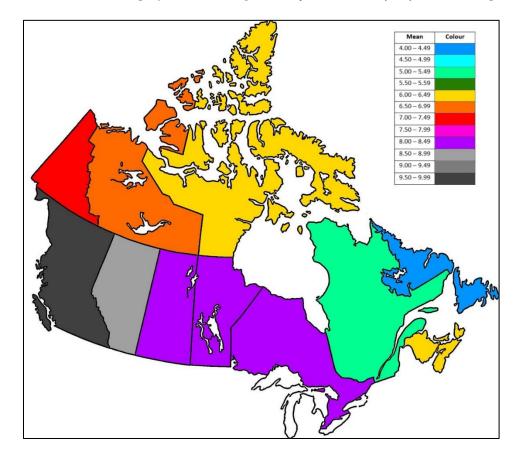
As might be expected, BC participants found their own English the most similar, with the prairie provinces and ON following close behind. The territories and maritime provinces were not quite as similar, while NL and QC both received the lowest averages, clearly shown in Table

27. NL had the lowest average rating (4.70) by BC participants out of all the other provinces' averages for NL, leaning towards the 'not at all similar' side of the scale. It is clear from Figure 52 that BC participants use a large spectrum of the scale for rating on similarity which correlates to the heat map above showing areas that spoke different English than the BC participants in Figure 6.

Table 27. Mean and Standard Deviations of Ratings by BC Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	9.55	8.85	8.20	8.30	8.30	5.35	6.45	6.40	6.15	4.70	7.30	6.90	6.40
SD	0.83	1.18	1.54	1.63	1.45	2.13	1.82	1.82	1.87	1.92	1.92	1.89	1.93

Figure 52. Colour-Coded Map of Mean Rating Scores for 'Similarity' by BC Participants



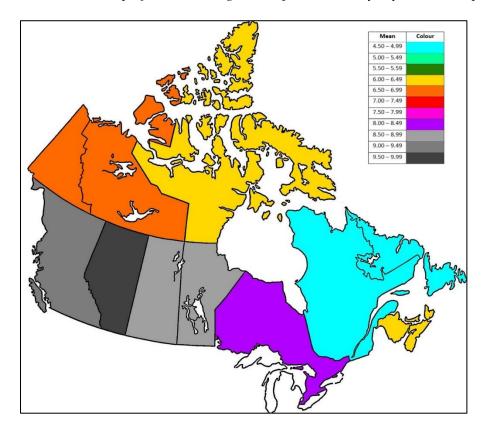
AB participants, like their neighbours, also used a wide range of the scale when rating regions on similarity. They give themselves high ratings of similarity (9.60), as well as BC

(9.09). Interestingly, their neighbour to the east, SK, gets a slightly lower rating (8.85), with the means dropping as one travels eastward. MB (8.74) and ON (8.04) still sound similar to AB participants, while QC and NL have the same low average rating of 4.83, suggesting Albertans do not find their English similar to these provinces. YT (6.68) seems to be more similar to Albertan's English than the other territories, by only a slight amount. Figure 53 shows a similar picture to Figure 52 in that AB participants used a wide range of the scale, resulting in several differently coloured areas. These findings are comparable to those in McKinnie and Dailey-O'Cain (2002).

Table 28. Mean and Standard Deviations of Ratings by AB Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	9.09	9.60	8.85	8.74	8.04	4.83	6.02	6.02	6.15	4.83	6.68	6.66	6.02
SD	0.95	0.83	1.00	0.99	1.44	2.00	1.75	1.92	1.82	2.16	1.83	1.78	2.08

Figure 53. Colour-Coded Map of Mean Rating Scores for 'Similarity' by AB Participants

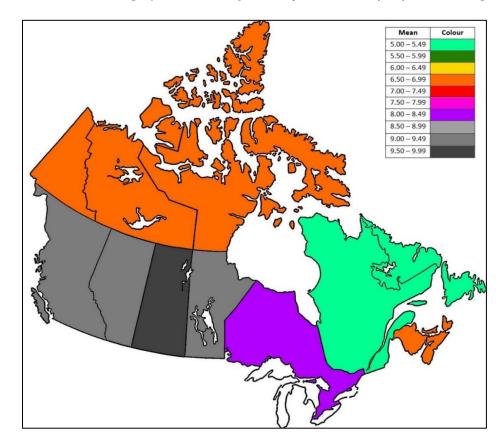


SK participants did not use as much of the rating scale as BC or AB participants did, as shown in Table 29; however, they did find their own province to be the most similar (9.69), with their neighbours to the east and west sounding like their own English. The Maritimes and territories all received similar average ratings, being somewhat different from the English spoken in SK according to SK participants. Once again, QC and NL are given the lowest average ratings at 5.31. These participants find QC and NL speakers to be somewhat different, but not so much as AB participants did. Finally, ON (8.46) is also quite similar to SK speakers, with an average rating very similar to that given by AB participants (8.04).

Table 29. Mean and Standard Deviations of Ratings by SK Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	9.08	9.46	9.69	9.38	8.46	5.31	6.69	6.77	6.92	5.31	6.77	6.77	6.69
SD	0.86	0.78	0.63	0.65	1.27	1.93	1.38	1.54	1.85	1.80	1.48	1.54	1.44

Figure 54. Colour-Coded Map of Mean Rating Scores for 'Similarity' by SK Participants



Once again, MB participants rated MB English as most similar to their own (9.42). These participants found the other prairie provinces and BC less like their own English compared to the average ratings given by those provinces for MB English, as shown by the varying colours in Figure 55. Though AB (8.75) and SK (8.58) average ratings are alike, and more similar to MB's average, BC (8.08) is clustered with ON (8.33), which differs from the three provinces' responses described above. That is to say, the other provinces discussed above for this characteristic often clustered BC with AB or on its own. The other provinces east of ON, and the territories are all given lower scores, with NL and QC once again receiving the same, lowest rating average for 'similarity' at 5.33 as shown in Table 30.

Figure 55. Colour-Coded Map of Mean Rating Scores for 'Similarity' by MB Participants

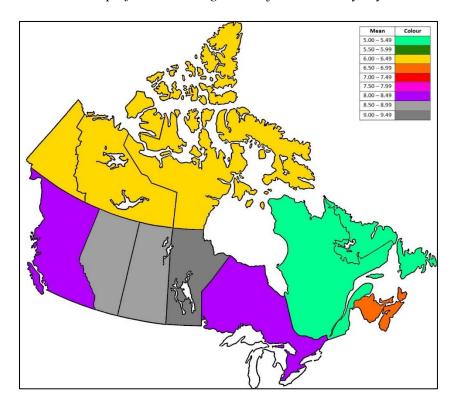


Table 30. Mean and Standard Deviations of Ratings by MB Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.08	8.75	8.58	9.42	8.33	5.33	6.50	6.58	6.67	5.33	6.42	6.42	6.17
SD	1.56	1.54	1.62	1.44	1.44	2.46	2.61	2.47	2.31	2.53	1.78	1.78	1.80

ON participants had a very high average for their own province (9.36), with BC (8.82) receiving the next highest average rating on similarity as shown in Table 31. The prairie provinces are slightly less similar, with SK (8.00) having the lowest average of the three. The territories are rated similarly on average, with Ontarians seeming to find them slightly different from their own English. The Atlantic provinces received a wider range of averages on similarity, with NL receiving the second lowest rating average at 5.82, and PEI receiving the highest rating average among the Atlantic provinces at 7.21. Finally, QC is again the least similar to the ON participants, with an average of 5.30. These means are similar to those found by McKinnie and Dailey-O'Cain (2002). Figure 56 shows the clear range of ratings used by ON participants.

Figure 56. Colour-Coded Map of Mean Rating Scores for 'Similarity' by ON Participants

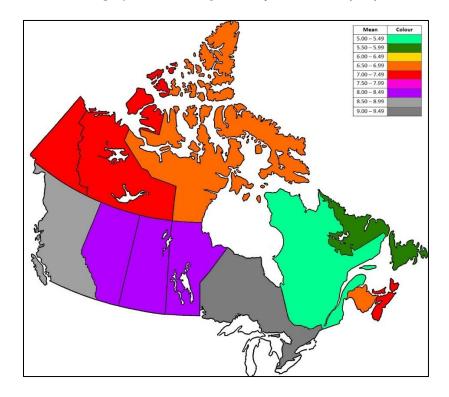


Table 31. Mean and Standard Deviations of Ratings by ON Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	8.82	8.20	8.00	8.07	9.36	5.30	6.87	7.15	7.21	5.82	7.07	7.08	6.89
SD	1.20	1.54	1.60	1.60	1.33	2.04	1.83	1.61	1.57	1.90	1.81	1.79	1.79

As one might expect, QC participants rated all provinces and territories as sounding somewhat different than their own English. This is clearly seen in Figure 57, with most provinces and territories being the same colour. QC participants perceive their own province as the most similar (9.10), with NL receiving the lowest average (5.70). The other provinces and territories are very close in average, but the high standard deviation suggests there is not as much agreement among QC participants as some other groups of participants (e.g., SK, BC, and AB). ON (7.20) receives the highest mean of all other regions besides QC, with NB (6.90) close behind. As shown in Table 32, several regions received the same average, BC, MB, PEI, YT, and NT at 6.70, with NS (6.60) following closely. SK (6.50), AB (6.40), and NU (6.20) are the next most similar, with the average for NL (6.20) being the lowest.

Figure 57. Colour-Coded Map of Mean Rating Scores for 'Similarity' by QC Participants

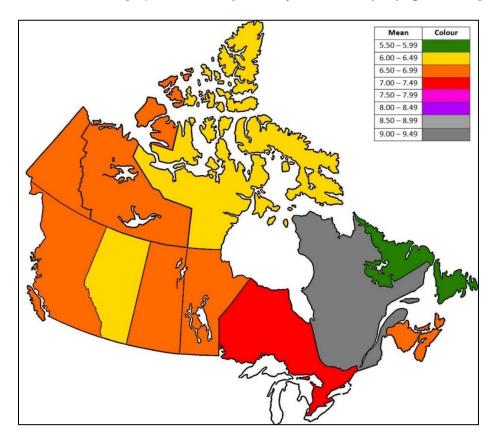


Table 32. Mean and Standard Deviations of Ratings by QC Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	6.70	6.40	6.50	6.70	7.20	9.10	6.90	6.60	6.70	5.70	6.70	6.70	6.20
SD	2.31	2.37	2.37	2.31	2.35	1.20	2.23	2.12	2.11	2.36	2.31	2.31	2.10

MA provinces used a wide range of the rating scale, with means starting at 9.00 and going as low as 4.80. This is depicted in Figure 58, with many provinces highlighted in a different colour. The maritime provinces receive the highest average, with NS sitting at 9.00, PEI at 8.60, and NB at 8.07. The next most similar region is ON with a mean of 6.87, with BC following closely at 6.60. AB (6.27), MB (6.13), and SK (5.93) are ranked as most similar, following BC, with NL (5.53) following the prairies. Finally, the territories are perceived as somewhat similar to MA participant's English, while QC is on the lower end of the scale, with a mean of 4.80 as shown in Table 33.

Figure 58. Colour-Coded Map of Mean Rating Scores for 'Similarity' by MA Participants

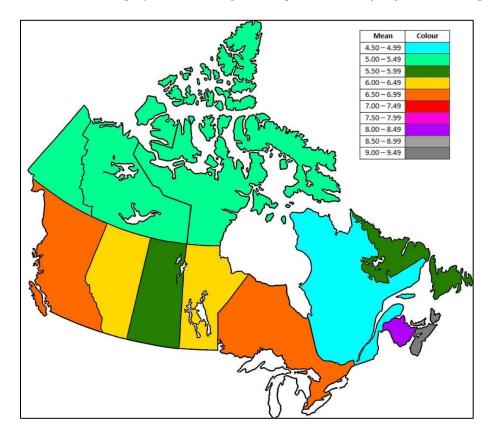


Table 33. Mean and Standard Deviations of Ratings by MA Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	6.60	6.27	5.93	6.13	6.87	4.80	8.07	9.00	8.60	5.53	5.47	5.40	5.07
SD	1.59	1.87	1.98	1.81	1.60	1.32	1.79	1.31	1.40	1.85	2.13	2.06	1.67

Finally, NL participants find their own province's English to be the most similar as shown in Table 34. NS is the next province rated as most similar, with a mean of 8.27. PEI and NB follow with means of 7.53 and 7.13, respectively. Further away, ON and AB receive the same average rating of 6.47, while BC is close behind at 6.33. MB (6.27) and SK (6.20) have a slightly higher average than the territories, while QC (4.53) has the lowest mean, suggesting that NL participants perceive QC as sounding dissimilar to their own English. As shown in Figure 59, the ratings by NL participants seem to cluster more than other provinces. Interestingly, it seems there is quite a bit of disagreement among participants ratings for BC, the prairies, ON, and QC, with the SD being higher than 2.00. Further data collection may mitigate this disagreement.

Figure 59. Colour-Coded Map of Mean Rating Scores for 'Similarity' by NL Participants

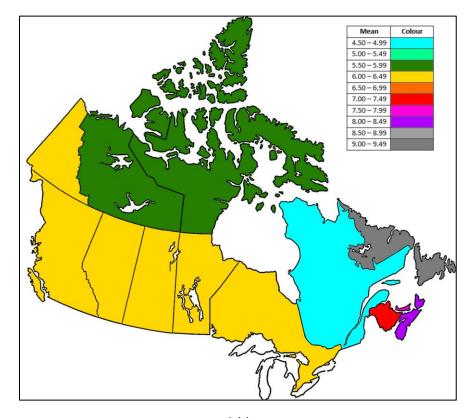


Table 34. Mean and Standard Deviations of Ratings by NL Participants on Similarity of English

	BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	YT	NT	NU
Mean	6.33	6.47	6.20	6.27	6.47	4.53	7.13	8.27	7.53	9.27	6.00	5.87	5.67
SD	2.53	2.26	2.21	2.25	2.92	2.33	1.68	1.03	1.55	1.22	1.93	2.03	2.19

Of the 192 participants, 43 left further comments following this section of the rating task. Many of these comments were explanations for the reasoning behind ratings, while others commented on the fact that they had never met people from particular regions (e.g., the territories). There were several participants who noted that there were regional differences within their own provinces, as stated by participant 52 from ON: "Even though im [sic] from Ontario. i dont [sic] speak like many here. For example, the Northern Ontario French accent is different from mine, and the American influence in accent in southern Ontario is different, and in Toronto many immigrants speak differently."

The rating tasks provide supplementary data alongside the map task and content analysis above. It is clear from the map tasks that participants split into default provinces perceive "different sounding English", while the rating task on 'similarity' confirms this. The 'similarity' rating task also allows for a form of quantification of those differences. The means show on a scale how different an area sounds as perceived by speakers in a particular region, while also giving insight into what areas sound similar. Further supplementary data is provided through the task of rating stereotypes, as well as potential interactions between correctness, pleasantness, and similarity with the proposed stereotypes, in the next section.

5.6 Stereotype Rating Results

This section provides the data collected for the survey section rating potential stereotypes. This portion of the survey was exploratory in nature and a direct approach to attitudes toward and ideologies about inhabitants of various regions of Canada. I thought that exploring the agreement or disagreement towards the stereotypical statements would provide

insight into why participants rated some provinces more correct or pleasant than others, as well as why they highlighted certain areas on the map task.

Participants were asked to rate their agreement with the statements on a five-point scale from "strongly disagree" to "strongly agree". The five choices were converted to a number to calculate the mean and standard deviation for each group of participants. One was used for "strongly disagree" and five was used for "strongly agree".

Table 35 shows the means and standard deviation for each default province's ratings of their agreement to the first statement, "People living in British Columbia are hippies." Most regions' averages sit in the middle of the scale (3.00), leaning slightly towards disagreeing. NL participants had the highest mean among the provinces, at 3.20, suggesting the slightest agreement with the statement. AB (2.94) and SK (2.92) were the closest provinces to neutral (3.00), disagreeing the slightest bit. Interestingly, BC does not "strongly disagree" with this statement, but instead has a mean of 2.53, suggesting there is slight disagreement with this statement among BC participants.

Table 35. Means and Standard Deviations for the Statement: "People Living in British Columbia are Hippies"

Province	Mean	Standard Deviation
ВС	2.53	1.09
AB	2.94	1.05
SK	2.92	0.95
MB	2.58	0.90
ON	2.82	1.06
QC	2.70	1.06
MA	2.87	0.93
NL	3.20	0.94

Referring to the map task and content analysis findings seems to suggest agreement that most Canadians do not perceive BC as sounding different due to being "hippies", because most

participants do not agree that the population of BC is made up of "hippies." Two participants did include this label for polygons marking BC in the map task, but because of this small number, it should be expected that most participants would not agree with the stereotypical statement regarding the BC population and hippies.

Table 36 shows the means of agreement to the statement, "People living in the Prairie Provinces (AB, SK, MB) are all farmers." Once again, there is agreement across all the participants, with most disagreeing to some extent with the statement. NL participants are closest to being neutral with a mean rating of 2.93, while AB participants disagree with it most with a mean rating of 2.19. SK (2.23), MA (2.27), and BC (2.32) participants also seem to disagree with this statement. MB, (2.67), ON (2.74), and QC (2.80) are similar to NL participants in that their average leans more towards neutral than 2.00.

Table 36. Means and Standard Deviations for the Statement: "People Living in the Prairie Provinces (AB, SK, MB) are all Farmers

Province	Mean	Standard Deviation
BC	2.32	0.80
AB	2.19	0.95
SK	2.23	0.93
MB	2.67	0.98
ON	2.74	1.09
QC	2.80	1.14
MA	2.27	0.96
NL	2.93	1.10

These means do not reflect the findings in the heat maps in the content analysis, specifically the COUNTRY/RURAL category, which would suggest some participants would agree with this statement. However, it is important to note that the means above involve all the participants providing a rating, while only 15 participants provided a label in the COUNTRY/RURAL category. The difference in English in the prairies, seen in the composite

map that includes all participants' polygons (Figure 5) may be due to features unrelated to country or rural stereotypes, as the ratings in Table 36 would suggest something else may cause the perception of underlying differences in English spoken in the prairie provinces.

Diverging from the consistency in Table 35 and Table 36, the means in Table 37 show a different picture for the statement, "People living in Ontario think Ontario is the most important province." The MA participants and MB participants agree most with the statement, with means of 4.13 and 4.08, respectively. AB is close behind with a mean of 3.98, while ON is the next highest in average agreement at 3.95. Despite 3.00 being neutral, the mean for ON is on the higher end and could be rounded up to 4.00 which is "agree" on the rating scale. It is interesting that ON participants admit to this perception which seems to be shared across Canada by other participants. In fact, QC has a lower mean (3.80) and is slightly more neutral than any other province towards this statement.

Table 37. Means and Standard Deviations for the Statement: "People Living in Ontario Think Ontario is the Most Important Province"

Province	Mean	Standard Deviation
BC	3.79	1.10
AB	3.98	0.79
SK	3.92	0.76
MB	4.08	0.79
ON	3.95	1.04
QC	3.80	1.03
MA	4.13	0.52
NL	3.93	1.10

Table 38 shows the means of participants' ratings towards the statement, "The Anglophones living in Quebec are different from Anglophones in other parts of Canada."

Interestingly, many of the provinces are mostly neutral towards this statement, though lean slightly towards the "agree" side of the scale. MB participants "agree" with the statement, with a

mean of 4.00, while all other regions' means range between 3.21 and 3.67, suggesting some neutrality across Canada. QC participants are neutral towards this statement yet rate their own English on "pleasantness" and "correctness" lower than the other provinces, suggesting there is a dichotomy between attitudes towards the English spoken in their own province.

Further, from the content analysis, several of the categories shed light on the differences perceived by participants towards QC English. The category FRENCH and QUÉBEC suggest that Anglophones in QC are perceived to have accents as participant 105 uses the label: "French English" to describe a polygon drawn over QC. Perhaps when rating this stereotype, participants were not considering language, but social aspects instead, such as occupations or socio-economic status. Follow-up interviews asking participants why they gave a neutral rating, if they did, for this statement would provide insight into the dichotomy between the content analysis and the average ratings in Table 38.

Table 38. Means and Standard Deviations for the Statement: "The Anglophones Living in Québec are Different From Anglophones in Other Parts of Canada"

Province	Mean	Standard Deviation
BC	3.21	1.00
AB	3.51	0.83
SK	3.31	1.03
MB	4.00	0.74
ON	3.43	1.06
QC	3.60	1.26
MA	3.53	0.74
NL	3.67	0.98

The statement "People living in the Atlantic Provinces are friendly and homey" was thought to be a relatively positive stereotype, with four groups agreeing with the statement: NL (4.53), MA (4.47), QC (4.10), and ON (4.05) as shown in Table 39. The west, MB (3.83), SK (3.69), AB (3.89), and BC (3.63) tended to lean towards agreeing with the statement but were

largely neutral in their ratings. NL agreed the most with the statement, with a mean of 4.53, with the MA participants close behind with a mean of 4.47. BC participants, the participants furthest from the east coast, had the lowest mean at 3.63, which still suggests that there is slight agreement among BC participants.

Table 39. Means and Standard Deviations for the Statement: "People Living in the Atlantic Provinces are Friendly and Homey"

Province	Mean	Standard Deviation
BC	3.63	0.98
AB	3.89	0.73
SK	3.69	0.95
MB	3.83	0.58
ON	4.05	0.67
QC	4.10	0.57
MA	4.47	0.64
NL	4.53	0.64

The fact that participants from outside of the Atlantic provinces agree with this statement, may suggest that the differences in English perceived by other provinces, discussed in the content analysis, may contribute to the positive identity of being friendly and homey. However, referring to the 'correctness' and 'pleasantness' rating task results, suggests that being friendly and homey does not always correlate to speaking 'correct' or 'pleasant' English. Further study is required to determine any correlation between the language regard held by participants and this positive stereotype and identity of being friendly and homey, in particular for the residents of the Atlantic provinces. Interestingly, those who live in the Atlantic provinces agree the most with the statement that they are friendly and homey. Follow-up interviews would be helpful in determining the reason behind those high ratings of agreement.

Despite several comments provided at the end of the map task and rating tasks suggesting that participants had little contact with speakers from the territories, the means in Table 40

suggest that there is neutrality towards the statement, "People living in the territories don't have much contact with the rest of the country." From some of the comments, one may have thought participants from some provinces would agree with the limited access to the rest of the country by speakers from the territories; however, all regions had a mean between 3.23 and 3.60, suggesting some neutrality, while others leaned towards somewhat agreeing with the statement. Standard deviations are also low, which suggests that participants agree with each other on the ratings given.

Table 40. Means and Standard Deviations for the Statement: "People Living in the Territories Don't Have Much Contact With the Rest of the Country"

Province	Mean	Standard Deviation
BC	3.37	0.81
AB	3.60	0.88
SK	3.23	0.83
MB	3.58	0.90
ON	3.76	0.72
QC MA	3.60	0.97
MA	3.47	0.52
NL	3.40	0.74

Referring to the content analysis above, some of the labels provided suggested isolation or remoteness of the area, such as the label given by participant 125 for the territories, "Remote northern areas". Participant 5 provided the label, "Isolated, Relaxed, Fishing, and Wind-bitten English" for the territories, suggesting a remoteness that allows residents of the territories to relax and go fishing. In future studies, it may be beneficial to ask speakers from the territories to rate their agreement on this statement to see if they agree or disagree with it. Further, one could also ask if participants had met anyone from particular provinces and territories in the demographic portion of the survey to determine the amount of contact between participants and certain areas of Canada.

Table 41 shows the means for the statement "People living in urban areas are smarter and more sophisticated than those living in rural areas." This negative stereotype was met with disagreement from all regions. BC participants disagreed the most, with a mean of 1.89. All other regions had mean ratings between 2.00 and 2.50, suggesting they all disagree with the statement. This is not surprising as there was a mix of urban and rural participants in the survey data, and there was not a significant number of labels referring to the semantic category of "urban", "intelligence", or "sophistication" suggesting this perception in participants.

Table 41. Means and Standard Deviations for the Statement: "People Living in Urban Areas are Smarter and More Sophisticated Than Those Living in Rural Areas"

Province	Mean	Standard Deviation
BC	1.89	1.12
AB	2.06	0.87
SK	2.46	0.88
MB	2.00	0.85
ON	2.33	1.03
QC	2.20	1.03
MA	2.00	0.76
NL	2.07	1.03

Finally, Table 42 shows the averages of agreement for the statement, "People in different provinces/territories across Canada are more alike than different." Most participants from across Canada are somewhat neutral towards this statement, though lean slightly towards agreement, while SK agrees with the statement, having a mean of 4.00. Table 42 complements the findings in the map task and rating tasks, as many labels and comments suggested homogeneity across the country. The rating tasks on 'similarity' also complement this finding as participants did not generally use the full scale from one to ten to rate regions on, but rather they generally used the higher end of the scale. Note that this general idea of similarity across Canada does not solely imply similarity in language, as shown by the 766 polygons drawn by participants on the map

task indicating areas that spoke different sounding English than their own. Rather, this broad statement may be perceived as referring to all aspects of Canadians, including not only language, but many social factors as well.

Table 42. Means and Standard Deviations for the Statement: "People in Different Provinces/Territories Across Canada are More Alike Than Different"

Province	Mean	Standard Deviation
BC	3.89	0.64
AB	3.89	0.67
SK	4.00	0.41
MB	3.42	1.08
ON	3.85	0.93
QC	3.50	1.18
MA	3.73	0.70
NL	3.40	0.99

The stereotype statements above provide insight into whether participants wish to present themselves as directly agreeing with the stereotypes or not based on mean ratings. This information provides complementary data to the map tasks and content analysis and vice versa. As follow-up interviews were not conducted, this is another method to explore stereotypes held by Canadians towards other regions of Canada when collecting data remotely. The data from this rating task can then be compared to labels given (or not) for an area, as well as exploring any differences that appear, such as the statement on QC Anglophones differing from the content analysis category, QUÉBEC.

A section for further comments was available at the end of the stereotype rating task and 19 participants provided further feedback. These comments ranged from discussing the differences across regions, with some describing the urban/rural divide, such as in participant 91 from ON, "I find people in urban areas much less interesting than those in rural areas. There is too much uniformity in the cities, even amoungst [sic] those who are supposedly opposed."

Many of the comments regarding the urban/rural divide seem to have a more positive attitude towards rural, as shown in the above comment, and in participant 68's comment, "Living further from larger urban areas with more immediate access to more multifaceted arts and cultural venues, those of us living in more rural areas make a greater effort to learn more about current events in our own area, our country and the world."

Surprisingly, only a couple of participants provided negative comments towards the task, such as participant 76's comment, "These are all assumptions, biases, and the perpetuation of stereotypes." Most of the other comments provided either focused on a specific stereotype, or even suggested these stereotypes are true to some extent, as shown in participant 47's comment, "I guess the stereotypes are true... I'm surprised with how much I agreed with some of these. Particularly the comment about the Territories, seeing as that is the only dialect I can't clearly recall." There were fewer comments that seemed to show annoyance or resistance to the rating of these stereotypes than there were of rating different region's English on the three characteristics discussed in Section 5.5. As to why this may be, follow up interviews or questions to the participants on how they perceived the two rating tasks and exploring what the difference was between them may provide a reason as to why participants are more willing to rate stereotypes rather than characteristics of language and speakers.

Further complementary data is provided through the lexical variation results. Throughout the content analysis it was apparent that participants noticed some lexical variation in different regions. The content analysis and heat map task also allow scholars to understand which lexical items may be more salient than others, providing new opportunities for variationist studies focused on new variables.

5.7 Lexical Variation Results

Using methods outlined in Chapter 4, the net variation, total variation, and major isoglosses were calculated for the regional boundaries of Canada (e.g., BC and AB, AB and SK, etc.) for the 23 lexical variables. All of the provided variants for each variable are given in Appendix A. Following, is the data presented for each calculation beginning with the total variation for each region, before focusing on the net variation and major isoglosses between boundaries. These rates are summarized in the discussion below. It is important to remember that the total variation can be higher than 100% because it is the sum of multiple proportions (also presented in percentages), as described in Section 4.6.

Table 43 shows the total variation percentage for each variable by descending order, starting with the DRAWING variable which has a total net variation of 104%.

Table 43. Total Variation Percentages of all Variables Listed by Descending Order

Variable	Variants ⁶	Total Variation %
DRAWING	Coloured pencils, leads, pencil leads, pencil crayons	104%
TRUCK	Semi truck, Semi, 18-wheeler, truck, transport truck, tractor trailer	103%
SHOE	Runners, Running shoes, Sneakers, Shoes, Track shoes	92%
PARKING	Parkade, garage, parking lot, underground parking, indoor parking, parking garage	73%
BABY	Soother, Pacifier, Dummy, Sooky	65%
HOUSE	Cottage, cabin, chalet, lake house	64%
DADDY LONG- LEGS	Spider, fly, both	59%

 $^{^6}$ Note these are not all the responses that participants presented, but the most common responses. A full list is available in Appendix E.

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SPORT	Unsure, kickball, soccer, soccer baseball	56%
BEVERAGE	Pop, soda, soft drink, drink	56%
CLOTHING ACCESSORY	Toque, winter hat, cap	51%
CLOTHING	Hoodie, bunnyhug, jumper, pullover, sweatshirt	47%
DRIVING	Honk, blew, barmp, beep	42%
UTENSIL	Spatula, lifter, big spoon, egg turner, flipper	41%
SNOW ACTIVITY	Toboggan, sled, sleight	41%
SNOW VEHICLE	Skidoo, snowmobile, sled, snow machine	39%
FURNITURE	Couch, sofa, chesterfield	39%
DECK	Porch, veranda, patio, bridge, front deck	36%
HAIR ACCESSORY	Hair elastic, hair band, hair tie, ponytail, hair holder	34%
BAG	Backpack, knapsack, book bag	24%
CLEANING	Napkin, serviette	21%
SHOPPING	Shopping cart, grocery cart, buggy, cart	56%
TV	Remote, clicker, flicker, converter	7%
FOOD	Pancakes, flapjacks	1%

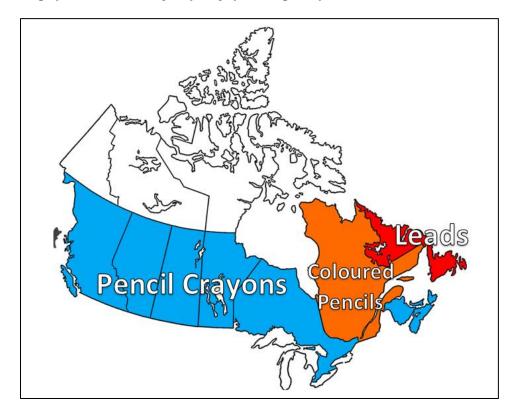
The variable with the highest total variation percentage is DRAWING (104%), which was comprised of four variant categories: *coloured pencils*, *leads*, *pencil crayons*, and *other*. As shown in Table 44 and Figure 60, the western provinces have similar rates of variant use, in that the majority of the respondents from BC (95%), AB (83%), SK (100%), and MB (92%) used one variant, *pencil crayons*. ON also follows this pattern, with 82% of responses falling into the *pencil crayons* category. QC diverges, with 60% of participants using *coloured pencils*, while the other 40% used a variant in the *other* category (see Table A21 for *other* responses). The MA respondents are nearly split, with 53% responding with *pencil crayons*, while 40% responded

with *coloured pencils*. Finally, NL seems to be an outlier, with 80% of respondents using *leads*, a category only used by NL respondents.

 Table 44. Response Rates for the DRAWING Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Coloured pencils	0%	9%	0%	8%	15%	60%	40%	13%
Leads	0%	0%	0%	0%	0%	0%	0%	80%
Pencil crayons	95%	83%	100%	92%	82%	0%	53%	0%
Other	5%	6%	0%	0%	3%	40%	7%	7%

Figure 60. Map of Variants Used by Majority of Participants for the DRAWING Variable



A previous study conducted by Gallinger and Motskin (2018), which is outlined in Chapter 3 explored this variable in their national lexical survey. Their findings are similar to those presented here, with the west preferring *pencil crayons* and the provinces east of ON differing in their variant use. QC and NB in their data show a preference for *coloured pencils*, while NL preferred *leads* as reflected in the current study. Though these studies do not provide

insight into whether change is occurring over time, due to being completed relatively close together, they are complementary and provide support for each other's findings.

The variable, TRUCK, had the second highest percentage of total variation, and the data in Table 45 shows a large degree of variation across regions. Responses made up six categories of variants: semi, eighteen-wheeler, truck, transport, tractor trailer, and other (see Table A1 for other responses). The majority of participants in BC, AB, SK, and MB gave the semi variant, with the highest response rate for this variant being in MB at 92%. AB participants gave this variant slightly less, with 89% of AB participants using the semi variant, while 85% of SK participants gave this variant. BC drops in usage slightly, with 58% of participants giving the semi variant, while the next highest variant used by BC participants is truck (21%). ON participants are split on their usage of variants for the TRUCK variable, with 48% using transport, while 16% and 13% used truck and tractor trailer, respectively. Further east, 55% of QC participants responded with the *truck* variant, while the MA participants were split on their usage of variants, transport, (27%) and other variants (27%). Further, 20% of MA participants used eighteen-wheeler and 13% used semi, with another 13% using tractor trailer. Finally, NL participants generally gave transport, with 47% responding with that variant, while 20% used tractor trailer. Thirteen percent of NL participants preferred to use eighteen, while the semi, truck, and other variants all had 7% of responses.

Table 45. Response Rates per Variant Category for the Truck Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Semi	58%	89%	85%	92%	10%	9%	13%	7%
Eighteen	5%	0%	0%	0%	3%	18%	20%	13%
Truck	21%	2%	8%	8%	16%	55%	0%	7%
Transport	0%	0%	0%	0%	48%	0%	27%	47%
Tractor Trailer	0%	2%	0%	0%	13%	0%	13%	20%
Other	16%	6%	8%	0%	10%	18%	27%	7%

From the numbers outlined above, the western provinces differ from the east, with more of the western provinces agreeing on the usage of *semi*, while the eastern provinces vary considerably amongst each region. One thing to note about many of the variables studied is that unlike some of the variables studied in Scargill and Warkentyne (1972), they are used on a regular basis by many of the participants as they would encounter many of these objects/things in their daily lives. This variable has not to my knowledge been studied previously, and the above provides preliminary baseline data on the variable. Further analysis below focusing on the net variations and major isoglosses provides further insight into the regional boundaries of this variable.

The SHOE variable had four variant categories: *runners*, *running*, *sneakers*, and *other* (see Table A3 for *other* responses). This variable had the third highest total variation, at 92%. Respondents from BC (63%), AB (53%), SK (54%), and MB (50%) favoured *runners* as shown in Table 46. Further, 21% and 16% of BC respondents preferred *running* and *other* variants, respectively. This is similar to the other respondents in AB, with 26% using *running*, 11% using *sneakers*, and another 11% using *other* variants. There were slightly more SK participants who preferred *running* than AB and BC participants, at a rate of 31%. Eight percent of SK participants preferred *sneakers*, and another 8% preferred an *other* variant. Similarly, MB participants who did not give a *runners* variant, used one of the other three variants, with 25% preferring *running*, 17% preferring *sneakers*, and 8% preferring *other*.

Table 46. Response Rates for the SHOE Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Runners	63%	53%	54%	50%	5%	10%	0%	0%
Running	21%	26%	31%	25%	75%	60%	0%	13%
Sneakers	0%	11%	8%	17%	8%	30%	93%	73%
Other	16%	11%	8%	8%	11%	0%	7%	13%

Once again, there is a split between the western provinces from the east, starting at ON, which is clear in Figure 61. The majority of ON participants (75%) preferred *running*, while only 5% preferred *runners*. Eleven percent of ON participants responded with *other* variants, and 8% responded with *sneakers*. Similarly, QC participants preferred *running* with a 60% response rate, while 30% preferred *sneakers* and 10% responded with *runners*. Further east, the MA and NL participants both preferred *sneakers* with 93% and 74% response rates, respectively. Seven percent of MA participants preferred *other* variants, while 13% of NL participants gave a *running* variant and another 13% used an *other* variant.

Figure 61. Map of Variants Used by Majority of Participants for the SHOE Variable



The SHOE variable has been studied previously in several studies as outlined in Chapter 3. The earliest of these studies, the NARVS study, found the presence of a major isogloss between ON and MB, separating the western provinces from the east (Boberg, 2005; 2010). The

NARVS participants from ON and QC preferred the *running* variant, as they did in the current study. Finally, in the NARVS data, the maritime provinces and NL used the *sneakers* variant most often, as depicted in the above data. Boberg (2016) studied this variable again, as did Gallinger and Motskin (2018), and both studies found similar findings to the NARVS data and the current data. This suggests a relatively stable variable that varies according to provincial boundaries, which will be discussed further below when net variation and major isoglosses are addressed.

PARKING had 73% total variation and was made up of four variant categories: *parkade*, *garage*, *parking lot*, and *other* (see Table A4 for *other* responses). Looking at the response rates from each region it is apparent that this variable patterns similarly to DRAWING, TRUCK, and SHOE with the west diverging from the east. The exception for this variable is that MB does not follow with the other western provinces, shown in Table 47. The majority of BC (63%), AB (77%), and SK (54%) participants responded with *parkade* as the variant of choice for this variable. Twenty-six percent of BC participants gave *garage* as a variant of use, while 5% used *lot* or *other* variants. Similarly, 13% of AB participants provided the *garage* variant, 2% used the *lot* variant, and 9% used the *other* variant. Thirteen percent of SK participants used the *garage* variant, while 15% used the *other* variant.

Table 47. Response Rates for the PARKING Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Parkade	63%	77%	54%	33%	5%	0%	20%	13%
Garage	26%	13%	31%	50%	77%	40%	80%	73%
Parking lot	5%	2%	0%	8%	7%	20%	0%	7%
Other	5%	9%	15%	8%	11%	40%	0%	7%

MB participants start to create a gradient across Eastern Canada with their responses to the PARKING variable. Half of MB participants used the *garage* variant, while 33% used the

parkade variant. Both *lot* and *other* were each used by 8% of respondents from MB. The usage of *garage* increases when moving east, with 77% of ON participants responding with this variant. The use of *parkade* drops to 5% of ON respondents, while *lot* and *other* had 7% and 11% of respondents using these variants, respectively. QC participants are a slight anomaly, with no majority preference for any variant. Forty percent of respondents used *garage* while another 40% gave an *other* variant. Lastly, twenty percent of QC participants responded with *lot*.

Following the trend found in ON, the MA participants favoured *garage* with 80% of respondents using this variant. The other 20% of MA participants used *parkade*. NL participants followed a similar pattern to the MA respondents, with 73% responding with *garage*, 13% using *parkade*, and 7% using *other*.

This variable was investigated previously in the NARVS study (Boberg, 2005; 2010) and the current data follows a similar trend to the NARVS data with respect to BC, AB, and SK preferring *parkade*. However, in the current study, the data suggests that MB and ON participants prefer *garage* rather than *parkade*. Further, Boberg's (2016) study following the NARVS study suggested that *parkade* was slightly increasing in use, but the current data suggests that may not be the case. Boberg's later study still found a divergence between the west and east at the ON border, which the current data supports. Due to the smaller number of MB participants, it would be beneficial to gather further data on this variable from speakers in this province to determine if there may be a change occurring with MB participants using *garage* more often than *parkade* now, as the NARVS data suggested MB previously favoured the *parkade* variant.

The BABY variable had a total variation of 65% and was comprised of three variant categories: *soother*, *pacifier*, and *other* (see Table A10 for *other* responses). The majority of

participants in provinces west of QC used the *soother* variant, with 74% of BC participants, 89% of AB participants, 77% of SK participants, 67% of MB participants, and 64% of ON participants preferring this variant (see Table 48). Sixteen percent of BC participants used an *other* variant, while 11% used *pacifier*. In AB, 6% gave an *other* variant, and 4% gave *pacifier*. In SK, 23% of participants gave an *other* variant. Twenty-five percent of MB participants gave *pacifier*, while 8% gave an *other* variant. Similarly, 25% of ON participants gave *pacifier*, while 11% gave an *other* variant. In QC, the majority of participants (60%) gave *pacifier*, while 20% gave *soother* and another 20% gave an *other* variant. In the MA, 53% of participants gave *soother*, 27% gave *pacifier*, and 20% gave *other*. Lastly, 53% of NL participants gave *pacifier* and 47% gave an *other* variant. This variable has not been studied before, with the current data suggesting the presence of regional variation as depictured in Figure 62. This is further explored below when addressing the net variation and major isoglosses.

Figure 62. Map of Variants Used by Majority of Participants for the BABY Variable

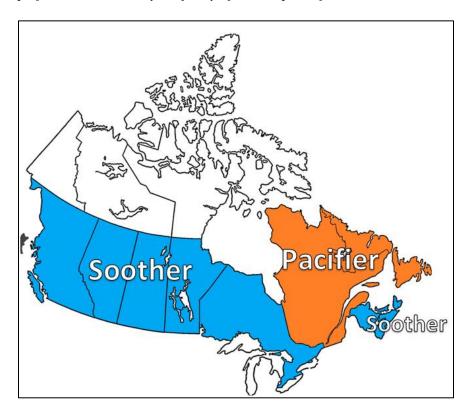


Table 48. Response Rates for the BABY Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Soother	74%	89%	77%	67%	64%	20%	53%	0%
Pacifier	11%	4%	0%	25%	25%	60%	27%	53%
Other	16%	6%	23%	8%	11%	20%	20%	47%

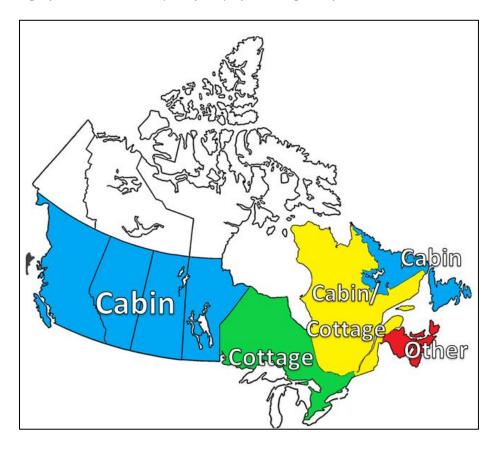
The next variable that showed variation across regions was the HOUSE variable, with three variant categories: *cottage*, *cabin*, and *other* (see Table A5 for *other* responses). Variant usage was once again split at the border of ON and MB as shown in Table 49. The provinces to the west all favoured *cabin* with 89% of BC participants, 94% of AB participants, 77% of SK participants, and 75% of MB participants giving this variant. Eleven percent of BC participants gave *cottage*, while only 2% of AB participants used this variant. Four percent of AB participants provided an *other* variant, while 8% of SK and MB participants gave an *other* variant. The other 15% of SK participants used *cottage*, while 17% of MB participants used this variant. The majority of ON participants (79%) used *cottage*, while 13% used an *other* variant and 8% gave a *cabin* variant.

Table 49. Response Rates for the HOUSE Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Cottage	11%	2%	15%	17%	79%	40%	47%	13%
Cabin	89%	94%	77%	75%	8%	40%	33%	80%
Other	0%	4%	8%	8%	13%	20%	80%	7%

Further east, QC and MA participants were split in usage of variants. Forty percent of QC participants used *cottage* and another 40% used *cabin*. The remaining 20% gave an *other* variant. Similarly, 20% of MA participants also used an *other* variant, while 47% preferred the *cottage* variant, and 33% preferred the *cabin* variant. NL participants tended to pattern similarly to the western provinces as shown in Figure 63, with 80% of participants using the *cabin* variant, 13% using *cottage*, and 7% providing an *other* variant.

Figure 63. Map of Variants Used by Majority of Participants for the HOUSING Variable



The HOUSE variable is well studied and was among the top distinguishing variables in the NARVS data for regional variation (Boberg, 2005; 2010). Boberg's findings from the NARVS study and newspaper study (2016) complement the findings above. Gallinger and Motskin (2018) also had similar findings, with the western provinces and NL preferring *cabin* and ON favouring the *cottage* variant. The data in the current study for QC and MA participants is less clear on preference of variant, but there is a large portion of participants who used *cottage*, similar to the findings in previous studies. This suggests that there is little change occurring for this variable.

The next variable, DADDY LONG-LEG is slightly different from other variables in this study as participants were asked to select an image of a spider, a fly, or the option of 'both' for what represented the animal they call a "daddy long-leg". This differed from the other questions

in the lexical variation section which asked participants to type the word or name of what the image was presenting. As shown in Table 50, all provinces, except for NL participants, had most participants select the spider image with the following breakdown: 89% of BC participants, 98% of AB participants, 100% of SK participants, 92% of MB and ON participants, 90% of QC participants, and 53% of MA participants. Eleven percent of BC participants selected the fly. Two percent of AB participants selected the 'both' option. Eight percent of MB participants selected the fly image. Two percent of ON participants selected the fly image, and 7% selected the 'both' option. Ten percent of QC participants selected the 'both' option. Seven percent of MA participants selected the fly image and 40% selected the 'both' option. Lastly, 40% of NL participants selected the fly image, 40% selected 'both', and 20% selected the spider image.

Table 50. Response Rates for the DADDY LONG-LEG Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Spider	89%	98%	100%	92%	92%	90%	53%	20%
Fly	11%	0%	0%	8%	2%	0%	7%	40%
Both	0%	2%	0%	0%	7%	10%	40%	40%

The DADDY LONG-LEG variable has not been studied prior to this study. The findings suggest there may be a divide between the east coast, which seems to be split between the fly and spider images, while the other provinces largely refer to a spider when using the variable DADDY LONG-LEG. The mean net variation among provinces with regards to this specific variable, is discussed further below.

The next two variables in Table 43, SPORT and BEVERAGE, both had 56% total variation. SPORT was made up of four variant categories: *unsure*, *kickball*, *soccer*, and *other* (see Table A7 for *other* responses). Many participants did not know what sport the image depicted; thus an *unsure* category was used for responses that clearly showed the participant was unaware of what sport it was, compared to the responses that people gave referring to a sport that

only one or two people referred to, which were put in the *other* category. Sixty-eight percent of BC participants used the *kickball* variant, while 21% were *unsure* as shown in Table 51. Both *soccer* and *other* were made up of 5% of BC respondents' responses.

Table 51. Response Rates for the SPORT Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Unsure	21%	19%	31%	0%	18%	20%	20%	27%
Kickball	68%	51%	38%	67%	15%	30%	27%	53%
Soccer	5%	9%	15%	8%	10%	0%	0%	7%
Other	5%	21%	15%	25%	57%	50%	53%	13%

Like BC, AB participants also favoured *kickball* with 51% giving that variant. Nineteen percent of Albertans were *unsure*, 9% used *soccer*, and 21% used an *other* variant. SK participants were more diverse in their responses, with 38% using *kickball*, 31% were *unsure*, and both *soccer* and *other* had 15% of responses. MB participants followed a similar pattern to BC and AB, with 67% of respondents using *kickball*, 8% using *soccer*, and 25% using *other*. Interestingly, all MB participants had a word for this sport, with a 0% response rate for the *unsure* category. ON participants were not in agreement with each other, with 57% using an *other* variant, 18% providing an *unsure* response, 15% using *kickball*, and 10% using *soccer*. QC and MA participants had similar responses, with 50% of QC participants and 53% of MA participants using an *other* variant. Thirty percent of QC participants and 27% of MA participants used *kickball*, while 20% of QC and MA participants provided an *unsure* response. The majority of NL participants (53%) used *kickball*, while 27% provided an *unsure* response. Thirteen percent of Newfoundlanders used an *other* variant, and 7% used the *soccer* variant.

Some of the findings above are similar to the findings of Gallinger and Motskin (2018) for the SPORT variable. Their data suggested that western provinces favoured *kickball*, while the remaining preferred the *soccer* variant. However, in the current data, it seems there is some

divergence in ON, with most participants unaware of what to call the sport. Further, the current NL data suggests a preference for the *kickball* variant, something Gallinger and Motskin did not find. It may be that this variable does not vary based on region, but rather a different independent variable, such as age or gender. Multivariate analysis with more data would be beneficial to determining if this variable varies due to the influence of an independent variable or factor, and if so, what factor.

A further word on the SPORT variable may be beneficial to this analysis. Upon discussion with colleagues, friends, and family, many referred to the cartoon, "Recess" (Germain & Ansolabehere, 1997-2001) when this sport was discussed. In this popular cartoon this sport is played frequently and is referred to as "kickball." Similar to Chambers' (2018) findings for the term wedgie, for the schoolyard prank young boys play on each other where they pull another boy's underwear up, the SPORT variable may follow a similar pattern. In previous studies, Chambers found that the name used for this prank varied, with several variants being used by speakers in a previous study conducted in 1990 (Chambers, 1994). When he conducted the same study ten years later, he found that the variant wedgie had largely replaced all other variants. This may be a similar finding for the SPORT variable where previously many variants had been used to describe this sport but following the production of "Recess" (Germain & Ansolabehere, 1997 – 2001) the term "kickball" grew in popularity. The difference between the SPORT variable and wedgie is that no SPORT variant has become the preferred variant across all speakers. However, if one were to conduct a study that allowed multivariate analysis of this variable while considering social factors, such as age, it may emerge that those who grew up watching the cartoon, which largely uses "kickball", may prefer that variant. Further, whether this variant is

being passed onto younger generations, now that the generation which watched the cartoon is older, may become apparent.

Three variants were presented for the BEVERAGE variable: *pop*, *soda*, and *other* (see Table A15 for *other* responses). The majority of BC (95%), AB (87%), SK (100%), MB (67%), ON (93%), and MA (93%) participants provided the *pop* variant, with response rates shown in Table 52. Five percent of BC participants and 6% of AB participants used an *other* variant. Six percent of AB participants used the *soda* variant. There were 17% of respondents that gave an *other* or *soda* response in MB. ON had 7% of participants used the *soda* variant, while 7% of MA participants used an *other* variant. QC and NL participants were more split on their usage of the variants. Forty percent of QC participants provided the *soda* variant, 30% provided the *pop* variant, and 30% provided the *other* variant. Forty-seven percent of NL participants gave the *pop* and *other* variants, while 7% gave the *pop* variant.

Table 52. Response Rates for the BEVERAGE Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Pop	95%	87%	100%	67%	93%	30%	93%	47%
Soda	0%	6%	0%	17%	7%	40%	0%	7%
Other	5%	6%	0%	17%	0%	30%	7%	47%

Previous studies on the BEVERAGE variable suggest there may be a change occurring in some provinces. In the NARVS data (Boberg, 2005; 2010), it was clear that all provinces except for MB, Eastern ON, Montréal, and NL preferred the variant *pop*. The competing variant in the other provinces was *soft drink*. In Gallinger and Motskin's (2018) national study, they found that everyone in Canada preferred *pop*, except for QC, which preferred *soft drink*. From the above data, all provinces except for NL and QC are in favour of using *pop*, while the other two provinces are more divided. Forty-seven percent of NL participants used *pop*; however, another 47% used an *other* variant, such as 'drink'. Forty percent of QC participants preferred the *soda*

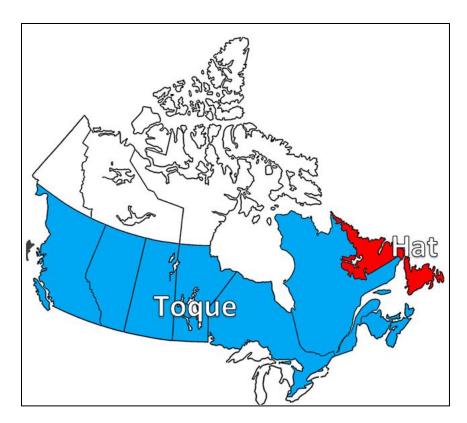
variant, which outnumbered the *soft drink* responses. The NARVS data split Montréal into a separate category from the rest of QC, and this may be why there is a difference between the current data and NARVS. A similar situation may be occurring in the current data with the NL responses, with many of the respondents being from outside the urban centre of St. John's and coming from more rural communities. A multivariate analysis of data from more participants in both provinces would allow further insight into whether there is a smaller regional influence on this variable.

The variable following SPORT and BEVERAGE on the descending list of total variation, is CLOTHING ACCESSORY which has three variant categories: *toque*, *hat*, and *other*. As shown in Table 53, all BC participants gave a *toque* variant, with 96% of AB participants also giving this variant. Only 4% of AB and 8% of SK participants used an *other* variant. Ninety-two percent of SK participants used the *toque* variant. There is the slightest change in participants east of SK, with 75% of MB participants using *toque*, while 17% used *hat* and 8% used an *other* variant. In ON, 70% of participants used *toque*, 20% used *hat*, and 10% used an *other* variant. QC had the same breakdown as ON participants. MA participants follow a close pattern to ON and QC, with 67% of participants using *toque*, 20% using *hat*, and 7% using *other*. NL is the only region where the majority of participants (60%) gave the *hat* variant, 20% gave the *toque* variant, and 20% gave the *other* variant. The difference between NL and the other regions is clear in Figure 64. The only other study investigating this term is Gallinger and Motskin's (2018) national study which found similar usage rates as the above for each variant in each region.

Table 53. Response Rates for the CLOTHING ACCESSORY Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Toque	100%	96%	92%	75%	70%	70%	67%	20%
Hat	0%	0%	0%	17%	20%	20%	20%	60%
Other	0%	4%	8%	8%	10%	10%	7%	20%

Figure 64. Map of Variants Used by Majority of Participants for the CLOTHING ACCESSORY Variable



The CLOTHING variable had a total variation of 47% and had two variants: *hoodie*, and *other* (see Table A19 for *other* responses). The majority of participants in all regions, except for SK used the variant *hoodie*, with the following breakdown: 79% of BC participants, 94% of AB participants, 92% of MB participants, 79% of ON participants, 90% of QC participants, 80% of MA participants, and 93% of NL participants, as shown in Table 54. Seventy-seven percent of SK participants used an *other* variant, with *bunny hug* as the most popular write-in response.

 Table 54. Response Rates for the CLOTHING Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Hoodie	79%	94%	23%	92%	79%	90%	80%	93%
Other	21%	6%	77%	8%	21%	10%	20%	7%

This variable has been studied before and Boberg (2016) provides the data and regional breakdown in his newspaper study. Interestingly, he combines the prairie provinces and finds that all provinces prefer the variant *hoodie*. However, he also notes that the majority of SK participants actually prefer the variant *bunny hug*. Further, Gallinger & Motskin (2018) also find all provinces to agree on the usage of *hoodie*, except for SK which prefers *bunny hug*. The etymology of this term is unclear and the reason behind why SK residents prefer this term has yet to be determined. From my experiences living in SK and growing up with many friends and family from the province, it seems that this term is a part of SK identity. It is clear to speakers when someone says *bunny hug* that they are from SK and different from other Canadian regions with regards to this term. In the map task, one participant even circled SK and labeled it, "Bunny hug". Investigating the stereotypes and ideologies surrounding this term used by SK residents, as well as other Canadians would provide insight into the importance of this term in constructing a SK identity.

The next variable, DRIVING, follows a similar pattern to the CLOTHING ACCESSORY variable, and consists of two variant categories: *honk* and *other* (see Table A22 for *other* responses). The majority of participants in all of the regions, except for NL used the *honk* variant with the following breakdown: 100% of BC participants, 83% of AB participants, 92% of SK participants, 83% of MB participants, 93% of ON participants, 70% of QC participants, and 87% of MA participants, as shown in Table 55. Sixty-seven percent of NL participants provided an *other* variant. No other studies have examined this variable, but it does seem from the current data that there may be a distinction between NL and the rest of Canada. Further discussion on the net variation and major isoglosses is provided below.

Table 55. Response Rates for the DRIVING Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Honk	100%	83%	92%	83%	93%	70%	87%	33%
Other	0%	17%	8%	17%	7%	30%	13%	67%

The variables UTENSIL and SNOW ACTIVITY both had 41% total variation. UTENSIL consisted of four variant categories: *lifter*, *spatula*, *flipper*, and *other* (see Table A2 for *other* responses). This variable showed a lot of variation among participants in the provinces west of QC. Forty-seven percent of BC participants provided the *spatula* variant, 37% provided the *flipper* variant, and 16% used an *other* variant. AB participants followed similar patterns to their western neighbours as shown in Table 56, with 51% providing a *spatula* variant, 38% providing a *flipper* variant, and 11% providing an *other* variant.

Table 56. Response Rates for the UTENSIL Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Lifter	0%	0%	8%	0%	10%	0%	0%	0%
Spatula	47%	51%	54%	67%	67%	90%	80%	93%
Other	16%	11%	8%	17%	7%	10%	7%	7%
Flipper	37%	38%	31%	17%	16%	0%	13%	0%

Fifty-four percent of SK participants provided a *spatula* variant, while 31% of them provided a *flipper* variant. Both *lifter* and *other* had 8% of SK participant's responses. Sixty-seven percent of MB participants used a *spatula* variant, while both *flipper* and *other* had 17% of MB participant's responses. The majority of ON participants, 67%, gave a *spatula* variant, while 16% gave a *flipper* variant. Ten percent of ON participants gave a *lifter* variant and 7% gave an *other* variant. Ninety percent of QC participants gave the *spatula* variant, while 10% gave an *other* variant. Similarly, MA participants favoured the *spatula* variant with 80% of their responses, 13% provided the *flipper* variant, and 7% gave an *other* variant. NL participants also favoured the *spatula* variant (93%), while 7% gave an *other* variant. Once again, there is no

previous work on this variable. The mean net variation and major isoglosses related to this term are discussed below.

Similar to UTENSIL, the variable, SNOW ACTIVITY, also showed a lot of variation within regions and consisted of three variant categories: *toboggan*, *sled*, and *other* (see Table A12 for *other* responses). As shown in Table 57, the slightest majority of BC participants (53%) gave the *sled* variant, while 42% gave the *toboggan* variant. In contrast, 62% of AB participants gave the *toboggan* variant, while 30% gave the *sled* variant. Fifty-four percent of SK participants provided the *toboggan* variant and 31% provided the *sled* variant. *Toboggan* was also favoured in MB participant's responses (50%), with *sled* close behind (42%). Similar to SK, 54% ON participants gave the *toboggan* variant, 36% gave the *sled* variant, and 10% gave an *other* variant. QC participants seemed to find it difficult to provide an English term for this picture. Fifty percent of them used an *other* variant, 30% preferred *toboggan*, and 20% used *sled*. On the east coast, there was a strong favour towards the use of the *toboggan* variant, with 80% of MA and 60% of NL participants providing this variant. Twenty percent of MA participants and 33% of NL participants used the *sled* variant. No previous studies have been completed to compare this data to.

Table 57. Response Rates for the SNOW ACTIVITY Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Toboggan	42%	62%	54%	50%	54%	30%	80%	60%
Sled	53%	30%	31%	42%	36%	20%	20%	33%
Other	5%	9%	15%	8%	10%	50%	0%	7%

At 39% total variation, SNOW VEHICLE and FURNITURE provide less insight into variation among regions. SNOW VEHICLE consisted of four variant categories as shown in Table 58: *skidoo*, *snowmobile*, *sled*, and *other* (see Table A11 for *other* responses). West of QC, *snowmobile* was given by the majority of participants with the following breakdown: 58% of BC

participants, 60% of AB participants, 62% of SK participants, 75% of MB participants, and 70% of ON participants. In BC, 26% of participants used *skidoo*, 11% used *sled*, and 5% gave an *other* variant. The breakdown in AB is similar, with 19% of participants giving a *skidoo* variant, 9% giving a *sled* variant, and 13% giving an *other* variant. Twenty-three percent of SK participants gave *skidoo* and 15% provided an *other* variant. Seventeen percent of MB participants used an *other* variant, while 8% used *skidoo*. ON has nearly the same breakdown as MB, except 8% of participants used *sled*, while 13% used an *other* variant. In QC, 50% of participants gave *skidoo*, 40% gave *snowmobile*, and 10% gave an *other* variant. The MA and NL participants vary more in their responses, with 53% of MA participants giving *snowmobile*, 33% giving *skidoo*, and 7% giving *other*. In NL, 53% participants gave *skidoo* and 47% gave *snowmobile*. No previous studies completed have focused on this variable to my knowledge.

Table 58. Response Rates for the SNOW VEHICLE Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Skidoo	26%	19%	23%	8%	8%	50%	33%	53%
Snow mobile	58%	60%	62%	75%	70%	40%	53%	47%
Sled	11%	9%	0%	0%	8%	0%	0%	0%
Other	5%	13%	15%	17%	13%	10%	7%	0%

A popular variable of study, FURNITURE, shows less regional variation in the current study and is made up for three variant categories: *couch*, *sofa*, and *other* (see Table A18 for *other* responses). The majority of participants from BC (63%), AB (74%), SK (77%), MB (67%), ON (74%), MA (53%), and NL (60%) prefer using *couch* as shown in Table 59. Sixteen percent of BC participants used *sofa*, while 21% used an *other* variant. Seventeen percent of AB participants used an *other* variant and 9% used *sofa*. Similarly, 15% of SK participants used *other* and 8% used *sofa*. Twenty-five percent of MB participants gave *sofa* and 8% gave an *other* variant. Both *sofa* and *other* had 13% of participants' responses in ON. QC participants were

split, with 40% of participants using *sofa*, 40% using an *other* variant, and 20% using *couch*. The MA and NL participants patterned similarly to each other, with 27% of MA participants and 20% of NL participants using *sofa*.

Table 59. *Response Rates for the FURNITURE Variable*

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Couch	63%	74%	77%	67%	74%	20%	53%	60%
Sofa	16%	9%	8%	25%	13%	40%	27%	20%
Other	21%	17%	15%	8%	13%	40%	13%	20%

This variable has been studied in many lexical variation studies, with Scargill and Warkentyne (1972) first documenting its usage across Canada, when the variant chesterfield was still used by the majority of respondents regardless of age or region. Following Scargill and Warkentyne, Chambers (1990) provided further insight into the variable and found a change occurring in Canada's younger generations along the US-Canada border. Older generations were still using chesterfield, while the younger generations preferred couch. In Boberg's (2010) data, an increase in the usage of couch among all age groups was prevalent. Gallinger and Motskin's (2018) data also confirmed a change had occurred over the past fifty years, with the majority of participants across Canada using the couch variant. The current study further supports and confirms that the change has solidified from *chesterfield* to *couch*, though it should be noted that sofa is still being used by a number of Canadians across many of the provinces. Some of the other variants included chesterfield, but often included another variant alongside it, such as "Chesterfield/couch" (see Table A18 in Appendix A). However, there was not a large number of singular "chesterfield" responses to create its own variant category. Further to the studies discussed above, the current data does not allow for a generational study.

With a total variation of 36%, the DECK variable follows similar trends to FURNITURE, with regional variation within each region less prevalent, as shown in Table 60. The variable has

three variant categories: *porch*, *veranda*, and *other* (see Table A8 for *other* responses). BC (74%), AB (60%), SK (62%), MB (75%), and ON (72%) participants used the *porch* variant, while 50% of QC participants used this variant. On the east coast, this variant is used by 47% of MA participants and 27% of NL participants. In BC, 16% of participants used an *other* variant and 11% used *veranda*. AB and SK participants are similar in their usage of *veranda* with 17% of AB participants and 15% SK participants responding with this variant, and 23% of participants in both these regions using *other* variants. Seventeen percent of MB participants used an *other* variant, while 8% used *veranda*. In ON, 20% used an *other* variant, while 8% used *veranda*. The split is greater among QC participants in their usage of *other* variants, with 40% responding with a variant in this category and 10% using *veranda*. Thirty-three percent of the MA participants used an *other* variant, while 47% of NL participants used a variant in this category. Finally, 27% of NL participants used *veranda*. No other studies have explored this variable before, with further insight provided below.

Table 60. Response Rates for the DECK Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Porch	74%	60%	62%	75%	72%	50%	47%	27%
Veranda	11%	17%	15%	8%	8%	10%	0%	27%
Other	16%	23%	23%	17%	20%	40%	33%	47%

The HAIR ACCESSORY variable was made up of five variant categories: *elastic*, *hair band*, *hair tie*, *ponytail*, and *other* (see Table A16 for *other* responses). Participants from all regions varied considerably in their usage of these variants. Seventy-four percent of BC participants gave the *elastic* variant, 16% gave the *hair tie* variant, and 5% gave *hair band* and an *other* variant, as shown in Table 61. In AB, 43% participants used *elastic*, 21% used *hair tie*, 13% used either *ponytail* or an *other* variant, and 11% used *hair band*. Thirty-eight percent of SK participants used the *ponytail* variant, 31% used the *elastic* variant, 23% used the *hair tie*

variant, and 8% used an *other* variant. A slight increase in usage of *elastic* from the other prairie provinces is evident in MB participant's responses with 50% using this variant. Thirty-three percent of MB participants used *hair tie*, and 8% used *ponytail* or *other*. Similarly, 52% of ON participants used *elastic*, while 26% used *hair tie*. Eleven percent of ON participants used an *other* variant, 7% used *hair band*, and 3% used *ponytail*. In QC, 40% of participants used *elastic*, 30% used *hair tie*, 20% used *ponytail*, and 10% used *hair band*. On the east coast, there were higher responses given for *elastic*, with 87% of MA and 60% of NL participants giving this variant. Seven percent of MA participants used *hair tie* and another 7% used *ponytail*. Twenty percent of NL participants used *hair band*, while 7% of participants used either *hair tie*, *ponytail*, or an *other* variant. This variable has not been studied previously and further insight is provided below.

Table 61. Response Rates for the HAIR ACCESSORY Variable

	BC	AB	SK	MB	ON	$\mathbf{Q}\mathbf{U}$	MA	NL
Elastic	74%	43%	31%	50%	52%	40%	87%	60%
Hair band	5%	11%	0%	0%	7%	10%	0%	20%
Hair tie	16%	21%	23%	33%	26%	30%	7%	7%
Ponytail	0%	13%	38%	8%	3%	20%	7%	7%
Other	5%	13%	8%	8%	11%	0%	0%	7%

The BAG variable had a total variation of 24%, suggesting that there is not a lot of regional variation among or within provinces. Two variant categories made up the responses for this variable: *backpack* and *other* (see Table A20 for *other* responses). Across all the regions, the *backpack* variant was favoured by the majority of participants, with 100% of BC participants, 96% of AB participants, 92% of SK and MB participants, 90% of ON and QC participants, 87% of MA participants, and 60% of NL participants using this variant (see Table 62). These findings differ slightly from Boberg's (2005) original findings of the variable in the NARVS study. Though most of Canada west of Montréal preferred *backpack*, he found speakers in PEI

preferred *schoolbag*, and those from NB and NL preferred *bookbag*. Further, in his 2016 study, Boberg found the same findings, except that a subset of participants in Toronto preferred *knapsack*. Unfortunately, the data from the current study does not allow for smaller regional distinctions, including exploring the speakers of PEI more specifically due to the small number of respondents from this province. A number of NL participants (40%) do prefer an *other* variant, but the present data suggests they favour the *backpack* variant currently, which may signal a change occurring with this variable. It would not be uncommon for NL speakers to be shifting towards variants used by other provinces on the mainland, as found in more recent studies with other types of variables, such as the retracting of the /æ/ vowel in certain contexts (Clarke, 2010, p. 142).

Table 62. Response Rates for the BAG Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Backpack	100%	96%	92%	92%	90%	90%	87%	60%
Other	0%	4%	8%	8%	10%	10%	13%	40%

With a total variation of 21%, the CLEANING variable also had similar results to the BAG variable and consisted of three variant categories: *napkin*, *serviette*, and *other* (see Table A14 for *other* responses). The majority of participants used the *napkin* variant, with 68% of BC participants, 89% of AB participants, 92% of SK participants, 83% of MB participants, 77% of ON participants, 90% of QC participants, and 93% of MA and NL participants using this variant as shown in Table 63. No MA and NL participants gave the *serviette* variant, with 7% giving an *other* variant. Twenty-six percent of BC participants gave the *serviette* variant, while 5% gave an *other* variant. In AB, 9% of participants gave an *other* variant and 2% gave *serviette*. In both SK and MB, 8% of participants gave *serviette*, while another 8% in MB gave an *other*

variant. Thirteen percent of ON participants used *serviette* and 10% used an *other* variant. Lastly, in QC, 10% of participants gave *serviette*.

Table 63. Response Rates for the CLEAINING Variable

	BC	AB	SK	MB	ON	\mathbf{QU}	MA	NL
Napkin	68%	89%	92%	83%	77%	90%	93%	93%
Serviette	26%	2%	8%	8%	13%	10%	0%	0%
Other	5%	9%	0%	8%	10%	0%	7%	7%

Scargill and Warkentyne (1972) studied this variable in their early study of Canadian lexical variation and found that there was a slight difference between two questions, with one question referring to a paper material and the other referring to a cloth material. Some of the adults distinguished between the use of *napkin* (for paper) and *serviette* (for cloth). However, they also noted that there were a high number of responses that did not distinguish between the two and the respondent always used *napkin* or *serviette* regardless of the material. The image in this study showed a square of paper material, which may have caused an influence on participant's choice of variant. It is interesting to see that most participants used the *napkin* variant, suggesting that participants either have shifted to preferring this variant regardless of material or they use this variant for this particular material. Further insight would be provided if an additional question were included showing a picture of the same object but made of cloth.

The SHOPPING variable had a total variation of 16%, once again suggesting little variation among and within regions. It has two variant categories: *cart* and *other* (see Table A13 for *other* responses). Similar to the two variables discussed above, CLEANING and BAG, all regions had similar usage of variants. As shown in Table 64, the majority of participants used *cart* with totals for each region being: 84% of BC participants, 94% of AB participants, 85% of SK participants, 100% of MB, ON, and NL participants, 80% of QC participants, and 93% of MA participants. The remaining participants in each region gave an *other* variant. This variable

was included in the NARVS study (Boberg, 2005), but was not reported on as resulting in significant variation among variants. The current data supports the previous findings regarding a lack of significant variation.

Table 64. Response Rates for the SHOPPING Variable

	BC	AB	SK	MB	ON	QU	MA	NL
Cart	84%	94%	85%	100%	100%	80%	93%	100%
Other	16%	6%	15%	0%	0%	20%	7%	0%

The TV variable also had a lower total variation of 7% and consisted of two variant categories: *remote* and *other* (see Table A6 for *other* responses). Response rates are given in Table 65, with 89% of BC participants, 96% of AB participants, 92% of SK and ON participants, 83% of MB participants, 90% of QC participants, and 93% of MA and NL participants used *remote* while the remaining participants gave an *other* variant. It would be interesting to discuss this variable with speakers to determine if they ever used a different variant throughout their life. For example, I remember specifically calling it a "clicker" when I was in my youth, but do not remember when I switched to calling it the "remote." Boberg (2005) also included this variable in the NARVS study, but does not report on the findings, which suggests little variation was found for this variable.

Table 65. *Response Rates for the TV Variable*

	BC	AB	SK	MB	ON	QU	MA	NL
Remote	89%	96%	92%	83%	92%	90%	93%	93%
Other	11%	4%	8%	17%	8%	10%	7%	7%

The last variable, FOOD, consisted of two variant categories: *pancakes* and *other* (see Table A9 for *other* responses). This variable showed almost no variation, with 100% of participants from all regions, except AB (98%) using *pancakes*, while 2% of AB participants used *other*.

It is now possible to examine the mean net variation and major isoglosses across regional boundaries, with the above rates providing insight into which variables may be showing regional variation between contiguous borders (with an exception being MA and NL as they are separated by the ocean). The net variation for each variable at all nine boundaries is given in Table 66 and is discussed below in correlation with mean net variation for each boundary.

Table 66. Net Variation of Each Variable for the Nine Contiguous Regions

Variable	BC- AB	AB- SK	SK- MB	MB- ON	ON- QC	QC- MA	MA- NL	QC- NL
TRUCK	67%	14%	15%	164%	123%	108%	67%	133%
UTENSIL	10%	21%	44%	21%	52%	27%	27%	7%
SHOE	30%	12%	19%	107%	54%	140%	40%	113%
PARKING	33%	50%	55%	60%	84%	120%	27%	93%
HOUSE	17%	33%	4%	134%	77%	13%	93%	80%
TV	13%	7%	18%	17%	4%	7%	0%	7%
SPORT	39%	37%	76%	104%	34%	7%	80%	73%
DECK	28%	4%	27%	6%	44%	20%	60%	47%
FOOD	4%	4%	0%	0%	0%	0%	0%	0%
BABY	31%	33%	50%	6%	88%	67%	107%	53%
SNOW VEHICLE	18%	17%	29%	16%	84%	33%	33%	20%
SNOW ACTIVITY	46%	16%	22%	11%	80%	100%	40%	87%
SHOPPING	19%	18%	31%	0%	40%	27%	13%	40%
CLEANING	48%	17%	18%	13%	26%	20%	0%	20%
BEVERAGE	15%	26%	67%	54%	127%	127%	93%	67%
DADDY LONG- LEG	21%	4%	17%	13%	7%	73%	67%	140%
HAIR ACCESSORY	62%	55%	60%	24%	48%	93%	53%	73%
CLOTHING ACCESSORY	9%	7%	35%	9%	1%	7%	100%	100%

FURNITURE	23%	5%	35%	24%	108%	73%	20%	80%
CLOTHING	29%	141%	137%	26%	23%	20%	27%	7%
BAG	9%	7%	1%	3%	0%	7%	53%	60%
DRAWING	21%	32%	17%	19%	164%	107%	160%	160%
DRIVING	34%	19%	18%	20%	47%	33%	107%	73%

The mean net variation was calculated using the net variation for each variable at these boundaries, as well as major isoglosses, with Table 67 showing the results of the mean net variation by descending order on the left. The results of t-tests of the difference between the mean net variation for boundaries is given in the column titled, *significantly less than*, with the significance criteria being set as p = 0.05. To the right, the major isoglosses are given for each boundary in descending order.

Table 67. The Mean Net Variation for Contiguous Boundaries in Descending Order with Results From t-tests Given in Sig. Less Than Column With the Significance Criterion set at p = 0.05.

Division	Mean net	Significantly	Division	Major Isoglosses
DIVISION	variation	less than	DIVISION	Major isogrosses
QC-NL	67%	-	QC-MA	7
ON-QC	57%	-	MB-ON	5
MA-NL	55%	-	MA-NL	5
QC-MA	53%	-	QC-NL	3
MB-ON	37%	QC-NL	ON-QC	2
SK-MB	35%	ON-QC	SK-MB	2
BC-AB	29%	QC-MA	AB-SK	2
AB-SK	25%	QC-MA	BC-AB	0

Note that not all the mean net variations are significantly different from each other. For those that are significantly less than another boundary, it is important to note that the boundary given in the third column in Table 67 is the boundary with the lowest mean net variation that differs from the boundary in question. For example, the SK-MB boundary has a mean net variation of 35% which is significantly less than the ON-QC mean net variation of 57%. In addition, the QC-NL boundary with a 67% mean net variation is also significantly higher than

the mean net variation of SK-MB. For the BC-AB boundary, QC-MA and the boundaries listed above in Table 67 have significantly higher mean net variations than the BC-AB boundary.

As shown in Table 67, the borders with the highest mean net variations are those involving QC, NL, and MA participants. This is not surprising from previous findings in studies, such as the NARVS study (Boberg, 2005, 2010), where six lexical regions were identified from that data set. Within those six regions, QC, NL, ON, and the MA were all found to be distinct areas. From the current data, it seems that the QC border signals a high degree of lexical variation compared to the other provinces, being in three of the top boundaries for mean net variation. Favoured terms by QC participants from the lexical analysis above are: truck for TRUCK, with 55% of QC participants using this variant, the highest use of this variant among any of the regions; pacifier for BABY, with the highest rate of use for this variant across all of Canada with 60% of QC respondents giving this variant; soda for BEVERAGE, with QC usage being at 40%, the highest among all regions; 40% of QC participants report sofa as their variant of use for FURNITURE, unlike other provinces which prefer couch; and, coloured pencils being the preferred variant for 60% of QC participants for the DRAWING variable. QC participant's usage of the above variants is higher than participants in any other region, suggesting there may be a lexical boundary for these terms at the QC border.

The data presented above for some of the variants that are preferred by QC participants have complementary data in previous studies, also discussed above for each variable. For example, Gallinger and Motskin (2018) also found that *soft drink* and *soda* were preferred variants by QC participants. In the same study, they also found that QC participants preferred the *coloured pencils* variant. The other variants that differ among QC participants above, have not

been studied previously, but may provide further support for a lexical boundary existing at the QC borders.

NL is also among the top three boundaries with the highest mean net variation (note it only has two boundaries, unlike QC which has three). This is not surprising with NL's distinctly unique history, as outlined in Chapter 2. From the usage rates outlined above for each variable, particular variants that seem to be unique to NL participants are: sneakers for SHOE, with 73% of NL participants using this variant (though this is not the highest rate of use among regions it is the second highest following the MA participants); pacifier for the BABY variable, though QC participants had a higher rate of usage for this variant, NL participants had the second highest rate of usage at 53%, meanwhile, also using other variants at a higher rate (47%) than the other regions; 40% of NL participants selected the fly variant for DADDY LONG-LEG, with almost all other provinces having a 0% rate for this variant; hat for CLOTHING ACCESSORY, with 60% of NL participants using this variant and the majority of all other region's using the toque variant; leads for DRAWING, with 80% of participants using this variant; and finally, providing an other variant for DRIVING, with 67% of NL participants giving a variant other than honk. All these variants, except for *sneakers* and *pacifier*, as noted, had the highest percentage of use in NL compared to any other region.

Once again, previous studies have found similar rates of usage among some of these variants, as described above. In particular, *leads* being preferred for DRAWING (Gallinger & Motskin, 2018), *sneakers* being the preferred variant for SHOE (Boberg, 2005, 2010; Gallinger & Motskin, 2018), and *hat* being the preferred NL variant for CLOTHING ACCESSORY (Gallinger & Motskin, 2018). The current data, with new variables which have not been studied before provides even more support for a lexical boundary existing around NL.

The MA participants also had relatively high mean net variation at the boundaries they share with other regions. Again, Boberg (2005, 2010) also found this, and it was expected due to the historical development of English in these areas, as well as from previous study's findings. MA participants had higher rates of the following variants than any other region: sneaker for SHOE, with a 93% usage rate; 80% of MA participants used garage for PARKING; toboggan for SNOW ACTIVITY is used by 80% of MA participants; napkin for CLEANING, with MA participants using this variant at the same rate as NL participants at 93%; 40% of MA participants, used the term DADDY LONG-LEG for both, the same rate as NL participants; and, elastic for HAIR ACCESSORY, with 87% MA participants using this variant. There are a couple of variants that seem to be used more frequently in the Atlantic provinces (MA and NL), in particular, napkin for CLEANING and both for DADDY LONG-LEG. As discussed above, the findings for the CLEANING variable are interesting because Warkentyne and Scargill (1972) suggested that a high proportion of participants did not distinguish between the material the object was made from when using either the *napkin* or the *serviette* variants. In the current study, it appears that the majority of participants prefer *napkin*, with few using *serviette*. This suggests participants may distinguish based on the material, or there has been a shift and Canadians are using *napkin* more so than *serviette*. Several other variables (e.g., SHOE, SNOW ACTIVITY, and HAIR ACCESSORY) differ in variants of preference for MA participants compared to their western neighbours in QC, suggesting a lexical boundary existing, at least with regards to the variables discussed above for both MA and QC participants. This supports Boberg's (2005, 2010, 2016) findings in his studies of lexical variation across Canada.

ON participants are in the boundary group with the second highest (ON-QC) and the fifth highest (MB-ON) mean net variation. Similarly, the results presented in the NARVS study

(Boberg, 2005, 2010), suggested there was a significant lexical boundary at the MB-ON and the QC-ON boundaries. ON participants had the highest rates of the following variants than any other participants: *transport* for TRUCK with 48% of ON participants using this variant; 75% of ON participants used *running* for SHOE; 79% of ON participants used *cottage*; and 57% of ON participants used an *other* variant for the SPORT variable. The difference is noticeable most between ON participants usage of particular variants compared to the variants used by QC participants for particular variables (e.g., *pop* (ON) vs *soda* (QC) for BEVERAGE, *soother* (ON) vs *Pacifier* (QC) for BABY). The difference on the ON-QC border is also quite a bit larger than the ON-MB border, though not significantly different according to t-test results.

The other boundaries and provinces have relatively similar mean net variations, which indicates lower lexical variation between the boundaries. When examining the major isoglosses, it seems that the highest number of differences at the 50% mark occur in the east, with a couple of major isoglosses occurring on the boundaries of SK. Due to the smaller amount of data in this study, there needs to be further exploration and data collection to analyze the major isoglosses in more detail. Boberg (2005) notes that when the mean net variation and major isogloss rankings begin to differ, this distinguishes between the boundaries that differ more widely across variables, with smaller differences in variant use (i.e., resulting in a higher mean net variation) and the boundaries that have large distinctions between variant use for a few variables (i.e., major isoglosses).

There were seven major isoglosses between the MA and QC boundaries, with the variants being: *truck* for TRUCK, which is used by 55% of QC participants and none of the MA participants; *running* and *sneakers*, with 60% of QC participants using *running* and 93% of MA participants using *sneakers*; *toboggan* and *other* for SNOW ACTIVITY, with 50% of QC

participants using *other*, and 80% of MA participants using *toboggan*; *pop* for BEVERAGE, with 93% of MA participants using *pop*, compared to the 30% of QC participants who gave this variant; and *pencil crayons* for DRAWING, with 53% of MA participants using this variant, while no QC participants provided this variant.

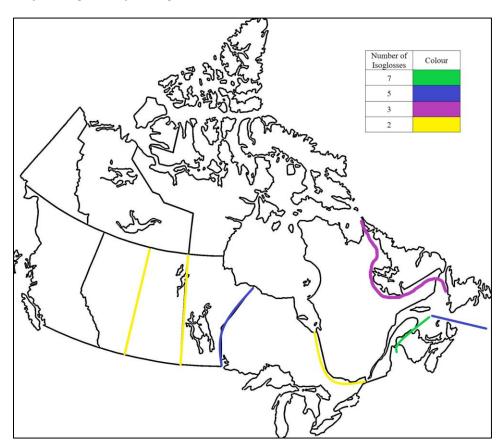
The MA and NL boundary has five major isoglosses. The variants that have an absolute difference greater than 50% between these regions are: *soother*, with 53% of MA participants using this variant, and 0% of NL participants using it; *leads* and *pencil crayons*, with NL participants using *leads* more often, and MA participants using *pencil crayons*; and *honk* and *other* for DRIVING, with NL participants preferring an *other* variant (67%) compared to 87% of MA participants using *honk*.

Similarly, the boundary between MB and ON also had five major isoglosses that occurred with the following variants: *semi* for the TRUCK variable, which is used by 92% of MB participants and 10% of ON participants; *running* for the SHOE variable, with 75% of ON participants using this variant, while only 25% of MB participants used it; *cottage* and *cabin*, with 75% of MB participants using *cabin* and 79% of ON participants using *cottage*; and *kickball* for SPORT, with 67% of MB participants using this variant and only 15% of ON participants using it.

The three major isoglosses between QC and NL were due to the variants: *spider* for DADDY LONG-LEG, with 90% of QC participants using this variant, while only 20% of NL participants did; *toque* for CLOTHING ACCESSORY, with 70% of QC participants using this variant, while only 20% of NL participants did; and *leads* for DRAWING, with 80% of NL participants using this variant and none of the QC participants using it.

The two major isoglosses between SK and both of its neighbours, AB and MB, occurred with the same variable, CLOTHING. An *other* variant is used by 77% of SK participants, while only 6% of AB participants and 8% of MB participants used an *other* variant. All the SK participants who gave an *other* variant included *bunny hug* in their response, a term often associated with the province. Interestingly, two participants from QC and AB reported using this term as well. Both of these participants did not give any indication to having lived in SK before, with both being born, growing up, and still residing in their respective provinces. It is not known where this term originated from, but further study, such as interviews with SK participants may shed light on why they continue to use this term.

Figure 65. *Major Isoglosses for Regional Boundaries*



The above section gives insight into the ranking of degrees of difference by determining the mean net variation and major isoglosses for each region's contiguous boundary. Though Boberg (2005) suggested that 50% is the cut off for determining the major isoglosses if there is a minimum of 25 participants in each region, I decided to continue to use this cut-off, knowing that there may not be a significant difference between two regions' use of a variant which would result in a major isogloss. Further data collection would bring to light which major isoglosses are significant. However, I do note that findings above are similar to those in the NARVS data, and suggest the findings are complementary to the previous studies discussed above.

5.8 Conclusion

The above results and discussion have brought forward several variables that are new to the study of the Canadian lexicon, while results of other variables provide further insight into the progress of change and stabilization. Due to the limited number of participants in most provinces (with the exception being AB, ON, and NL), it is recommended that further data is collected so multivariate analysis can be completed to determine significant factors that may be playing a role in the variation present. Some variables, such as FOOD and TV show little variation and may not need to be further studied, while other variables, such as DRAWING, TRUCK, and BABY, which have received little exploration prior to this study, may be revealing variables to investigate further.

Alongside the lexical variation data, the rating scales for characteristics and stereotypes provide a broader view of how Canadians perceive the English spoken across the country.

Further comments provided by participants, and discussed above, also give insight into what participants are willing to share directly, while other stereotypes, ideologies, and attitudes may need to be explored in an indirect method to piece together a fuller picture of their underlying

regard for the English language in Canada. The content analysis and heat maps also complement the lexical data, providing insight into where participants perceive differences and provide metalinguistic comments that help linguists with the evaluation problem (Weinreich, Labov, & Herzog, 1968). The lexical data also complements the content analysis and map task data as it shows where lexical differences occur and how these differences may play a role in participant's perceptions of different sounding English.

Overall, it is clear that boundaries do exist within Canadians' perceptions of the English spoken in different regions, as do boundaries based on a number of lexical variables studied here and in previous studies. The east coast, in particular, NL, is quite salient to Canadians, and also has lexical boundaries with the provinces closest to it, QC and the Maritimes. NL and the Maritimes are also perceived as being friendly and homey, one of the few stereotypes, that had general agreement across most provinces. However, the 'homeliness' and 'friendliness' does not make these province's English more 'correct' or 'pleasant' sounding according to the rating task data. NL also did not appear to be as linguistically secure throughout the rating task, as some other provinces did (e.g., BC, AB, and ON). Further, the MA participants were much harsher with their ratings on the rating tasks than any other province.

QC is also a salient region for Canadian speakers, as depicted on many of the composite maps and throughout the content analysis. It too has lexical boundaries and major isoglosses with the provinces it shares borders with: ON, the Maritimes, and NL. The English spoken in QC was consistently ranked low on all three characteristics for the rating tasks, but interestingly many provinces were neutral when rating their agreement for the stereotype suggesting that Anglophone Quebeckers differed from other Canadian Anglophones. This dichotomy provides opportunity for further study through either indirect methods or follow-up interviews. Further

study into the perceptions of Canadians towards speakers located in QC may also shed light on whether participants are thinking of Anglophone Quebeckers or Francophone Quebeckers who speak English as a second language (L2 speakers). This may also enlighten scholars on how Quebeckers perceive their own population of speakers and whether the linguistic insecurity that seems prevalent is really a result of rating L2 speakers low on the proposed characteristics rather than Anglophone Quebeckers.

As we look west, ON seems to have fewer lexical boundaries and major isoglosses with the MB border than the QC border, but still differs from MB on the usage of several variants (e.g., semi (MB) vs. transport (ON) for the TRUCK variable or cabin (MB) vs. cottage (ON) for the HOUSE variable). ON is also less salient overall to Canadian participants when asked where English sounds different but was highlighted and labeled frequently with ONTARIO and URBAN/CITY labels. Some participants went as far as describing regional differences within the province of ON, such as the labels, "Northern Ontario English", "Eastern Ontario English", and "Toronto English", provided by participant 46. Boberg (2005, 2010) had enough data from ON participants to split it into smaller regions and found some lexical variation that occurred within the province. If further data was collected from a larger range of area in ON, it may provide differences in the map task that are not presently seen due to many participants being from southeastern ON.

The prairie provinces followed similar patterns in the lexical data presented and discussed above, except for one notable variant, *bunny hug* which fell into the *other* category for the CLOTHING variable. This variant was predominantly used in SK and created a major isogloss between both AB and MB. Further, the heat maps generated for each default province also suggest a noticeable difference to some participants in the heart of the prairies, mainly SK. The

stereotype that all people living the prairie provinces are farmers was meant to determine if participants thought of the prairies as being rural, which seems to be the case for some participants when their labels were analyzed in the content analysis. However, this stereotype was generally met with neutrality or even disagreement. Yet, the category RURAL/COUNTRY in the content analysis largely applied to the prairie provinces. Follow-up interviews would provide beneficial data on what specifically makes the prairies unique to some participants, while also determining if they are largely perceived as being more rural.

Finally, BC participants were found to be linguistically secure, and perceived as being the most 'correct' and 'pleasant' sounding province by most participants. For the most part, BC participants followed similar patterns lexically to the prairie provinces, suggesting that the increased perception of 'correctness' and 'pleasantness' is not largely based on lexical choice, but perhaps phonetic or grammatical variants. The boundary between AB and BC had the second lowest mean net variation, suggesting these speakers are quite similar in their use of the lexical variables studied. This aligns with previous studies that suggest there is no lexical boundary between BC and the other western provinces (e.g., Boberg, 2005).

6.0 Conclusion

Lexical variation and language regard have both been studied extensively across the world, with some studies focusing on large areas, such as multiple or entire countries (e.g., Boberg, 2005, 2016; McKinnie & Dailey-O'Cain, 2002; Preston, 1989), while other studies have investigated much smaller regions such as states (e.g., Evans, 2011, 2013a, 2013b) or provinces (e.g., Clarke, 2010). The current study proposed to investigate the language regard and lexical variation of participants from across Canada. This research was among the first language regard studies to investigate the perceptions and attitudes held by Canadians from many regions, rather than one or two provinces (e.g., McKinnie & Dailey-O'Cain, 2002). It also aimed to investigate new lexical variables that had not been studied previously, alongside several lexical variables for which there was previous data. I had hoped that by investigating new lexical variables, further evidence for lexical boundaries that have been proposed in previous studies (e.g., Boberg, 2005, 2016) might be reinforced.

From the results and discussion in Chapter 5, it is clear that lexical boundaries and perceptions of where English is spoken differently exist across the population of Canada. Though there were not large numbers of participants from some areas, the data presented above provides preliminary findings to be shored up by further research. This study also shows how language regard studies can be completed alongside more traditional sociolinguistic studies of variation to complement the findings from both fields. Lexical variants unique to regions were often noted in the labels, while the content analysis highlighted areas that were noticeable to speakers, suggesting the existence (or perception) of linguistic variation in these areas. The inclusion of the rating tasks on characteristics and stereotypes allows for insights into participants' perceptions and builds a more complete picture of their language regard. Further comments alongside the

rating tasks provided another element of metalinguistic commentary allowing for a better understanding of the patterns found in the data, as discussed in Chapter 5.

The overall findings from the lexical variation portion of the study largely agree with previous findings and the suggestion of lexical boundaries across several regions in Canada. They support Boberg's (2005) suggestion of six lexical regions in Canada with slight adjustments due to the grouping together of the maritime provinces in the current study. This resulted in five lexical regions which differed with regards to several lexical variables and the content analysis: NL, the Maritimes, Québec⁷, Ontario, and the western provinces. Among the variables studied, DRAWING, TRUCK, and SHOE were the variables with the highest total variation, suggesting a large amount of regional variation across the provinces. Findings for these variables were similar to previous work, with the addition of the TRUCK variable as no previous study has focused on this variable. Finally, although there were fewer major isoglosses than in Boberg's (2005) study, these results support his findings that the highest number of isoglosses occur at the provincial borders of QC.

The findings from the content analysis and rating tasks suggest regional variation is perceived in many areas across Canada, supporting McKinnie and Dailey-O'Cain's findings (2002). The East Coast seems to be most noticeable to Canadians, though it becomes clearer to which Canadians when heat maps are composed for each province's responses (cf. Figures 6 – 15). Many of the participants did not label the polygons they drew on their maps, while the categories, NEWFOUNDLAND, FRENCH, and MARITIME contained 26% of the labels provided, supporting the general heat map in Figure 5 which shows the salience of the eastern provinces. Further, the rating tasks showed a further regional divide among participants based on

⁷ Note, Boberg (2005) suggests Montréal is a separate lexical region rather than QC. Due to the lack of regional differences among QC participants, the category is extended to the entire province.

what their default province was when rating other provinces on 'correctness', 'pleasantness', and 'similarity'. Findings suggest that BC, AB, and ON are among the most linguistically secure, though the MA participants' ratings also suggest they may be linguistically secure. It appears from the data that QC and NL speakers are among the least linguistically secure.

The methods used for this study were a combination of well-established methods in language regard, such as the map task (Preston, 1989) and rating tasks of characteristics (e.g., McKinnie & Dailey-O'Cain, 2002), and an exploratory direct method that had participants rate their agreement on stereotype statements. Though the statements were not focused specifically on the linguistic nature or features of a particular group of speakers, they did provide further comment and insight on how different populations across Canada may be perceived by others. I would not discourage scholars from using this technique, but rather, to think very carefully about the statements that are used in the study to determine how they may be perceived by participants and what they may reveal once the data has been collected. For example, what does an 'agree' mean compared to a 'disagree' to a statement about all prairie residents being farmers? In addition, does the word 'all' cause a different reaction from participants compared to the statement without it? It was insightful to see how dichotomies can appear between what participants perceive linguistically and include in their comments and labels, and whether they agree or disagree with a statement about that population without necessarily referring to specific linguistic features or differences (e.g., the stereotype regarding Anglophone Quebeckers).

As noted above, the current study provides a starting point for additional research.

Gathering data from provinces other than AB and ON, where a larger number of participants came from, would allow for multivariate analysis that provides more reliable results and interpretations of the results from both the content analysis and the lexical variation portions of

the study. This analysis would provide insight into significant differences in perceptions and lexical variation across Canada. Further, the use of a clustering analysis may provide more definitive results for dialect boundaries and may confirm preliminary results presented above. Follow-up interviews with at least some of the participants would allow for metalinguistic commentary that may provide further insight into why participants rated areas a certain way or gave labels to an area. This commentary may also assist the researcher in understanding whether a particular label was considered positive or negative. Interviews have been used in language regard studies with great success (see Niedzielski & Preston, 1999), allowing scholars to describe and understand the language regard of speakers. Interviews would also provide insight into whether participants notice lexical variation across regions and which variables are salient to them. The results from these interviews could lead scholars to study new variables to determine if significant variation is occurring, and if not, ask the question why are these variables so salient to speakers?

The findings of this study are not only supported by previous research but reinforce those findings and provide contribution to linguistic theory, in particular the embedding and evaluation problem (Warkentyne, Labov, & Herzog, 1968). By researching another angle of language regard of Canadians, scholars can better understand how attitudes, perceptions, and ideologies play a role in variation and in the development of identity through linguistic choices. The combination of a language regard study and a lexical variation study provides complementary data that can help understand the many facets that make up language regard, while also highlighting variables that may have not been studied previously. Lastly, the direct methods used for language regard and lexical variation studies lend themselves well to the digital world, allowing the scholar to gather data from many participants in a shorter period. With further

development of survey software, the map task will continue to be a useful tool in developing and exploring the theory of language regard, while also allowing scholars the opportunity to study language variation. These combined studies will allow for a better understanding of the building of identities through language use and of linguistic theory overall.

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 University of Texas Press.

Appendices

Appendix A: List of Variants Provided for Each Variable

 Table A1. TRUCK Responses

Variant	Responses
Semi	Semi truck; Semi; A semi or Semi-truck; Semi, or sometimes a semi-truck; Semi, semi truck; Semi-truck; Semi trailer; Semi-trailer truck; Semi (with long e)
Eighteen-wheeler	18-wheeler; (#)-wheeler (sorry I forget the number)
Truck	truck
Transport	Transport; Transport Truck; cTransport truck; Transport truckegg
Tractor trailer	Tractor Trailer Tractor Trailer / truck
Other	A semi truck, or tractor trailer; a truck, transport, or 18 wheeler; 18-wheeler or tractor-trailer; Tractor trailer / truck; Tractor-trailer or Semi; Semi or a tractor; Semi or truck; Emi or rig; Truck or 18 wheeler; Transport truck or mac truck; 18 wheeler transport truck; Van/transport; Big rig; Mac truck; Van; Long haul truck; transfer truck

 Table A2. UTENSIL Responses

Responses
Lifter; A lifter
Spatula; A spatula; Spatchella; Slotted Spatula; Platula
Flipper; Flippe; FlipperRunning; Flippet

Big Spoon; Egg Turner; Platula; Pancake Flipper; Flipper/Spatula; Flipper or spatula; Spatula or flipper if I am talking to my husband; spatula, flipper, pancake flipper; Flipper or lifter

 Table A3. SHOE Responses

Variant	Responses
Runners	Runners; Runner
Running	Running; Running Shoes; Running shoesparking garage
Sneakers	Sneakers; Sneakers (I own the 2 nd pair from the right)
Other	Shoes; Track shoes; Trainers; Runners/Runnign Shoes; Runners or running shoes; runners, sneakers, shoes, nikes; Running shoe, runners, tennis shoe; runners/running shoes; Sneakers or runners; running shoes/runners; Sneakers or running shoes; runnung shoes /sneakers; sneakers / running shoes; running shoes or sneakers; Sneakers, runners, or shoes; Runners, running shoes; runners or sneakers

Table A4. PARKING Responses

Variant	Responses
Parkade	Parkade; Parkcade; multi story parkade; Park aid; Parkade.
Garage	(parking) garage; A parking garage; Garage; Parking garage; Parking garage (both); public parking garage
Parking Lot	Covered Parking lot; Above ground parking lot; Parking lot
Other	Parking; underground parking; Indoor parking; parking building; Parkade or Parking Garage; parkade or parking garage; a. Underground parking. b. Parkade; car park, parking garage; Car garage or underground parking; Parking lot/garage; A) parking garage (if

underground and/or closed off) b. Parkade(above ground); Parking garage/Parking structure; Parking garage/car park
Parking loft or parking garage
Parking garage, parkade

Table A5. HOUSE Responses

Variant	Responses
Cottage	Cottage
Cabin	Cabin; cabin (unlike SK people who always refer to 'the lake' as if they have their own lake ;); Cabin, log house, lounge; Log cabin
Other	A cottage, a chalet; A cottage if it is on a lake or seashore, a camp if it is in the woods or on a small river.; A cottage in Ontario, cabin in western Canada, chalet in Quebec and dont know in the Atlantic; Cabin (US), cottage (Canada); Cabin or cottage; Cabin, cottage, lake house,; cabin/cottage; Cottage (on water), cabin (not near water). So the one in this picture is a cottage.; Cottage or cabin; Camp; Chalet; Lake house; secluded house; vacation property

 Table A6. TV Responses

Variant	Responses
Remote	A remote control; Remote; Remoe; Remite; remote (control); remote (remote control); Remote control; Remote control; Remote Controller; remote so; TV Remote
Other	clicker or the remote.; remote, remote control, controller; Remote, flicker Remote control, channel changer; remote, clicker; Remote, or Remote Control, or Flicker; converter or remote; Remote control or converter; Clicker or remote; Remote, controller, remote control.; Converter (iccasuonally remote); Clicker; controller

 Table A7. SPORT Responses

Variant	Responses
Unsure	?; ??? Never heard of it.; Abomination; Bewildering; Confused; Don't know; foosball?; I am unaware of this sport; I Don't know; I don't know sports; i don't know that sport; I have never heard of this. Soccer baseball?; i have no idea what this is supposed to be.; I have no idea what this is.; I have no idea what this sport is.; Kickball (?); kickball?; Kickball?, never heard of it before Never heard of it; no clue; No idea; Not familiar with this sport. If there was a paddle shown I would say lacrosse; Not sure; Rugby? Football?; soccer baseball?; Stupid; Unknown
Kickball	Kickball; California kick ball; California Kick-ball; Kick-ball; Kick ball
Soccer	soccer
Other	Soccer baseball; Soccer baceball; Soccer-Baseball; Baseball; Football; Cricket; Rugger; Football; football due to my Brazilian husband;); Chinese baseball canadian baseball; Rugby; Handball; Groundball; Soccer ball; Soft ball; Grew up calling this soccer baseball; after living in New York- kickball; Soccer Baseball (or sometimes Kickball)

 Table A8. DECK Responses

Variant	Responses
Porch	Front porch; Poarch; Porch or spesifically a Front Porch; pourch
Veranda	Veranda; Varanda; Verandah
Other	Front Patio; Patio; Front deck; Deck; Balcony; Bench; Bridge; Colonial; Column; Plant; Plant (or swing, if that is what you mean); Port has; Stairs; Steps; Swing; the stairs?; Pourch swing; porch or deck; Porch or veranda; Porch or Verhanda; Veranda or Porch; Verandah or porch; veranda/porch; Porch or verandah; Porch/verranda; Verandah/ porch; Porch/ bridge; front porch, deck, veranda; Porch, deck, sun deck, or front deck; Porch/veranda

 Table A9. FOOD Responses

Variant	Responses
Pancakes	Pancakaes; Pancake; Pancakes; Pancakaes; Pancakes with butter, maple syrup, blueberries and raspberries
Other	pancakes, flapjacks

Table A10. BABY Responses

Variant	Responses
Soother	baby soothers; Soother; Soothers; Sou Sou; Suzy; Suther; Suce; Soos (unsure of spelling)
Pacifier	Pacifer; Pacificer; Pacifier; Pacifier; pacy (pacifier); Pacifiers; pascifier
Other	Dumb tit; Dummies; Dummy; Dumbtit; Ciucetto (or pacifier in English); I don't know (no anglo friends have babies?); nuk; Sickies; Sooky; Specifier; Sookies; Sucker; Teether; In my house their called Soothies or Pasifiers; Soother/pacifier; Soother or pacifier; Soothers, suckers, pacifiers; pacifiers/soothers/doodoos; soother or sucky; pacifier or suce; soother, pacifier, suckie, plug; Soother, pacifier or dummy

Table A11. SNOW VEHICLE Responses

Variant	Responses
Skidoo	Ski-Doo; Skidoo; Skidoos; Skido
Snowmobile	Snowmobile; Snow mobile; Snowmobile; Snowmobiles; Snowmobile because ski doo is a brand name; Snowmobubble; Snowmobile, everyone else I know says sled
Sled	Sled

Other

Snow Machine; I have no idea what that is; Snowmobile??? (Don't know); Snow atv; Snow machine; Skidoo?; Snowmobile or skydoo; Snowmobile/sled; Skidoo or snowmobile; Skidoo or Snowmobile; Snow mobile, snow machine, ski-doo; Snowmobile, snow machine or Skidoo; Snow mobile/skidoo; Skidoo (snowmobile); Sled, snowmobile; Snowmobile or snow machine; Skidoo/ snow machine; Snowmobile (slang: Sled)

Table A12. SNOW ACTIVITY Responses

Variant	Responses
Toboggan	Tabogan; Taboggan; Tobaggan; Tobaggan; Tobaggan; Tobaggan; Tobaggan; Tobaggan; Toboggan; Toboggan; Toboggan; Tobogin; Tobogen; Toogan; tobaggon (major throwback to my childhood)
Sled	Sled; sledcar
Other	Sledge; Bogotogan; Slid; Sleight; Slay; Sledge; Sleigh; ?; i don't know the word in English; traîneau; sled or toboggan; toboggan, sled; Tobaggan or sled; Toboggan or sled; Sled or Toboggan

Table A13. SHOPPING Responses

Variant	Responses
Cart	(Shopping) Cart; Cart; Cart or shopping cart cart, grocery cart; grocery/shopping cart; Kart; shapping cart; Shoppinh cart; Shopping Cart; Shopping kart
Other	Buggy; Caddy; Carriage; shopping trolley; No answer; Grocery cart of shopping cart; Cart or a shopping cart; Shopping cart or buggy; buggy or a shopping cart; Trolley/shopping cart

Table A14. CLEANING Responses

Variant	Responses
Napkin	Napkin; Napkin (my grandparents' generation calls them serviettes); paper napkin
Serviette	Serviette
Other	Napkin (if cloth= serrviette); Napkin or setviette depending on where; Napkin/serviette; Serviette or napkin; napkin, serviette; napkin or a serviette; Napkin or serviette; Napkin (serviette in formal settings); Napkin or serviette. I use both interchangeably.; Serviette or paper napkin

 Table A15. BEVERAGE Responses

Variant	Responses
Pop	Рор
Soda	Soda
Other	Soft Drinks; Soft Drink; Drink; pop (but i don't actually use that word, i'll just name the brand); Pop, soda; Pop, coke, Pepsi, soda-depends on which one; Pop or soda; soda or pop (USA living); Soda / drink

Table A16. HAIR ACCESSORY Responses

Variant	Responses
Elastic	Elastic; Elastics; Elastic band; elastic bands; Hair Elastic; Hair elastics; (hair) elastic; covered hair elastic; Elastic or hair elastic
Hairband	Hair Band; Hair band? Lol; Hair bands
Hair tie	Hair Tie; Hair Ties; Hairties; Hairtie

Ponytail	Ponytail; Pony tail band; ponytail holder; Pony tail holder; Ponytail holders; Pony Tail
Other	Hair holder; Hair thing (elastic); Hair Scrunchies; Ties; Scrunchies; ?; Hair elastic, hair tie, scrunchie; elastic or hair tie; elastic, hair tie; Scrunchy (?) or hair elastic; hair elastic or ponytail holder; Hair tie or ponytail; Hair elastic or hair tie; Hair tie, hair elastic, elastic; Ponytail, hair tie; Ponytail/hair elastic

 $\textbf{Table A17.} \ \textit{CLOTHING ACCESSORY Responses}$

Variant	Responses
Toque	Toque; Touque; Took; Tuke; tuque
Hat	HatHat-winter cap; winter hat
Other	Beanie; Cap; Stocking cap; Tossle Cap; tpiqie; Toque, winter hat; toque/beanie; tuque or hat toque, hat; winter hat or toque; Hat or toque; Hat / beanie; hat or toque; hat/ touque

 Table A18. FURNITURE Responses

Variant	Responses
Couch	Couch; couch (although from my childhood I learned chesterfield from my parents); Couch (my parents and older generations say "chesterfield"); Coucj
Sofa	Sofa
Other	Chesterfield; Chersterfield; Couch, sofa; Couch or sofa; Chesterfield/couch; couch/sofa; sofa or couch; Couch or chesterfield. I use both interchangeably.; sofa, chesterfield; couch or sofa; couch, sofa, or chesterfield; sofa/chesterfield; couch or a sofa - it's not a chesterfield - just saying; chesterfield or couch; Chesefield or couch or sofa;

sofa/chesterfield; Couch or sofa; Sofa, couch, or love seat. Depends in design and room it is in

Table A19. CLOTHING Responses

Variant	Responses
Hoodie	Hoddie; Hoodie; Hoody; hoodie, used to call them kangaroo jackets - not sure when that went out of style.; hoodie. bunny hug as SK people call it is ridiculous term ahaha; kangaroo sweater (when i was a kid) now hoodie
Other	Bunnyhug; Bunny hug; Sweater; Sweater (hooded); Hooded sweater; Hoodie, sweater; kangaroo sweater or hoodie (more recently); hoodie, sweatshirt; sweater / hoodie; Jumper; Sweatshirt; Pullover; kangaroo jacket; sweatshirt or hoodie; hoodie/bunnyhug; hoodie or sweat jacket; Angaroo jacket or bunny hug; Hoodie or bunny hug; Sweater/hoodie; Hoodie or sweatshirt; Hoody or sweatshirt; Sweatshirt/hoodie; hoodie or bunny hug

Table A20. BAG Responses

Variant	Responses
Backpack	Backpack but I used to call it book bag when I was young. Kid influences me to change name of it.; Back pack; Backpack; Expensive backpack; Backpackpen; Backpakc (napsack when I was a kid); Backpack uh
Other	Book bag; bookbag; Backsack; Bag; Bagback; Knapsack; Pack sack; Packsack; Backpack, bag; Book bag or nap sack; knapsack/ rucksack; Backpack or knapsack; bag or backpack; Back pack, sac a dos

 Table A21. DRAWING Responses

Variant	Responses
Coloured pencils	Coloured Pencils; colouring pencils; Coloring pencils; colour pencils; Colour Pencil; Colouring pensils; Colored pencil; Colouring pencil; Coloured pencil
Leads	Leads; colouring leads; Coloured pencil leads; Coloured leads; Coloured lead pencils; lead pencils; Pencil Leads; Pencil Leads; Colouring leds; Coloring leds
Pencil crayons	Pencil crayons; Crayons; Pencil canyons; Pencil caryon; Pencil crayonstooted; Pensil Crayon; Pensil Crayons
Other	Pencils; Pencil; Pencil ends or copped crayons; Pencil crayons, coloured pencils; pencil crayons (sometimes coloured pencils); crayons or coloured pencils.

 Table A22. DRIVING Responses

Variant	Responses
Honk	Honk; Honked; Honking the horn; Honking; Honks; Is honking; To honk. "The driver honked the horn".
Other	Blew; Barmped; Barmp; Beeped; Beeps; Beep; Burmp; Hit; Horn; Slammed on; Hooted; Pressed; Toots; Honked, beeped; blew, honked, leaned on; honk or beep; Blowing, honking or tooting the horn. Cant tell which.

Appendix B: Screenshots of Survey

Figure B1. *Screenshot of Survey Homepage*

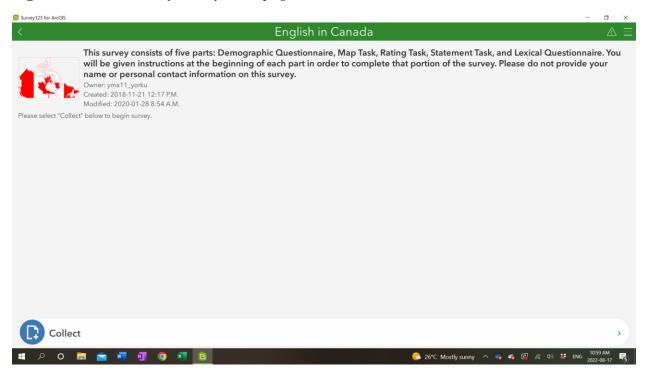


Figure B2. Screenshot of Consent Form A

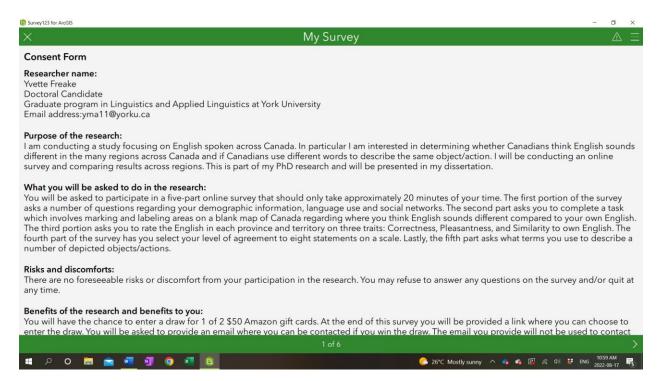
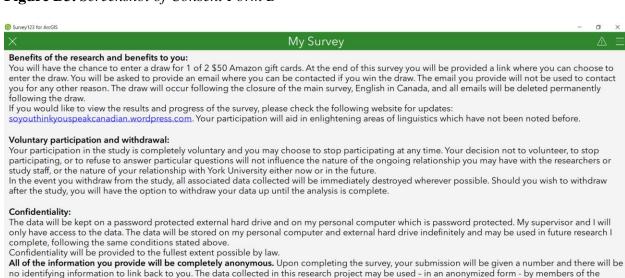


Figure B3. Screenshot of Consent Form B



research team in subsequent research investigations exploring similar lines of inquiry. Such projects will still undergo ethics review by the HPRC, our institutional REB. Any secondary use of anonymized data by the research team will be treated with the same degree of confidentiality and anonymity as in the original research project.

The researcher acknowledges that the host of the online survey (Survey123) may automatically collect participant data without their knowledge (i.e., IP

The researcher acknowledges that the host of the online survey (Survey123) may automatically collect participant data without their knowledge (i.e., IP addresses). Although this information may be provided or made accessible to the researchers, it will not be used or saved without participant's consent on the researchers system. Further, because this project employs e-based collection techniques, data may be subject to access by third parties as a result



Figure B4. Screenshot of Consent Form C

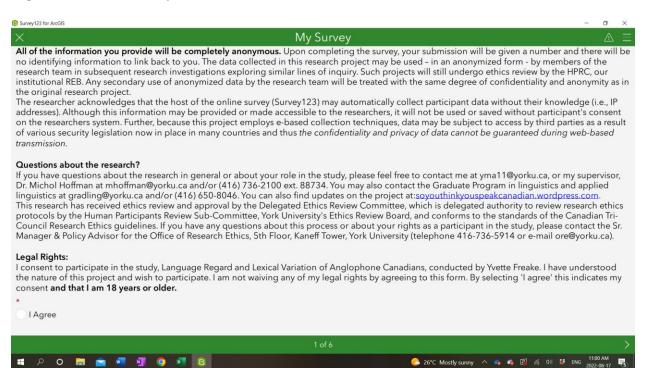


Figure B5. Screenshot of Demographic Questionnaire A

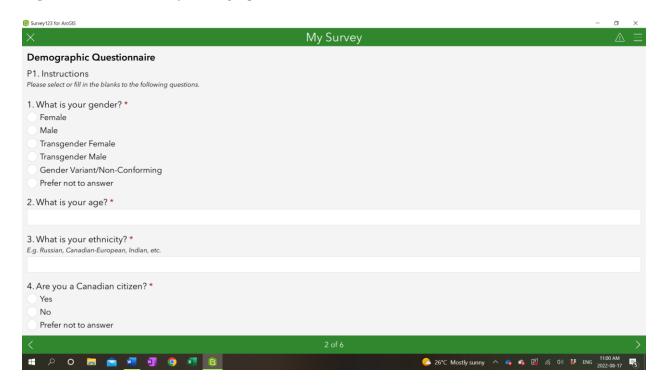


Figure B6. Screenshot of Demographic Questionnaire B

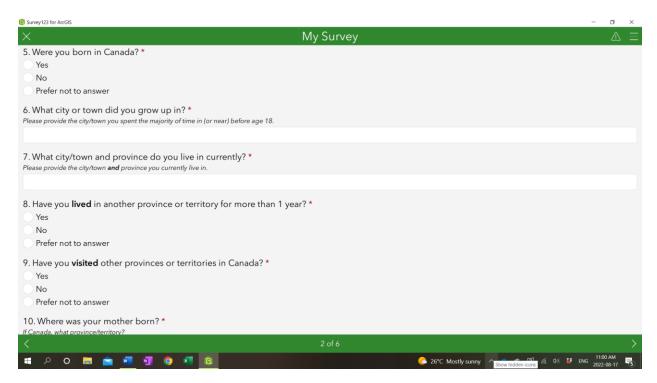


Figure B7. Screenshot of Demographic Questionnaire C

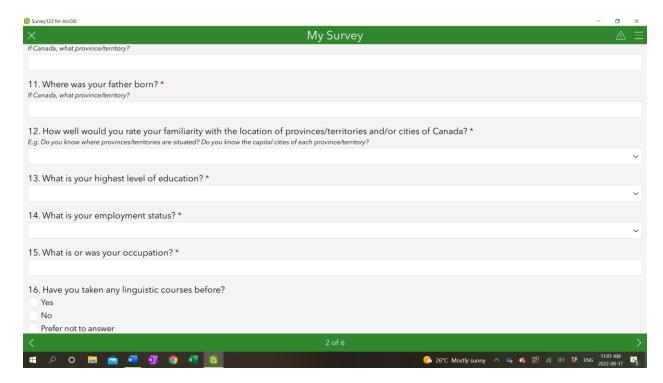


Figure B8. Screenshot of Map Task A

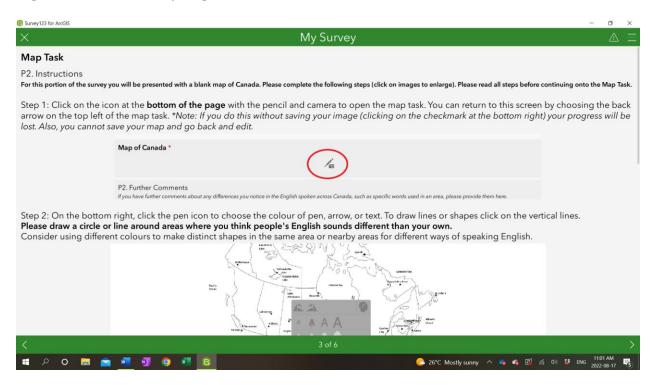


Figure B9. Screenshot of Map Task B

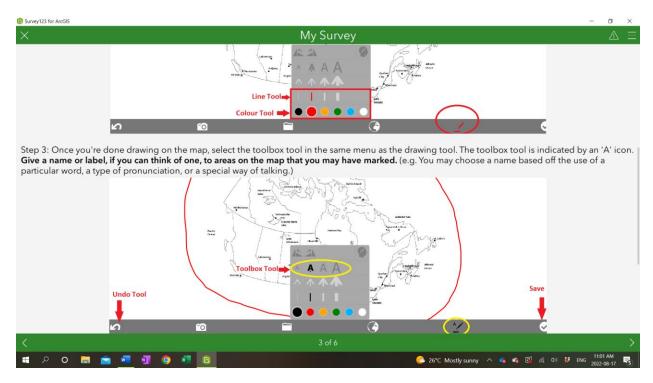


Figure B10. *Screenshot of Map Task C*

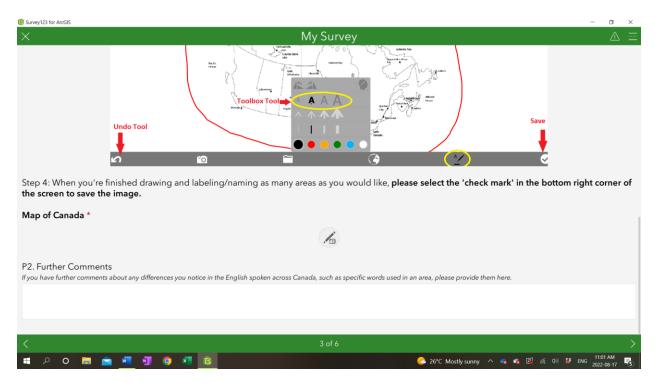


Figure B11. Screenshot of Map Task D

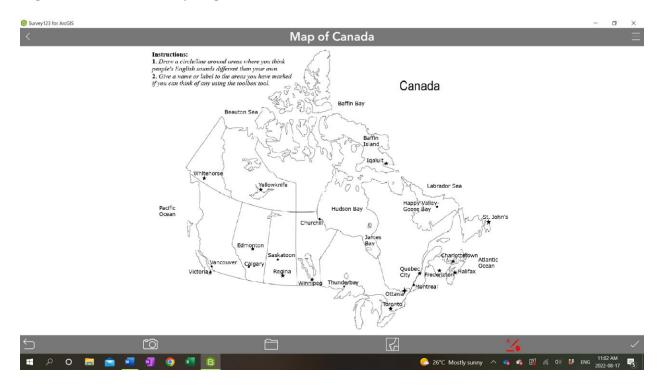


Figure B12. Screenshot of Characteristic Rating Task A

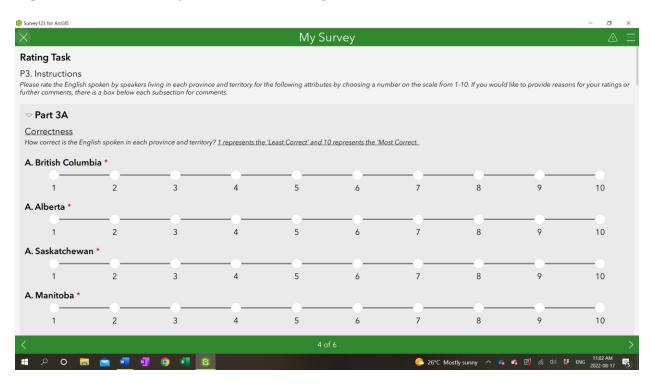


Figure B13. Screenshot of Characteristic Rating Task B

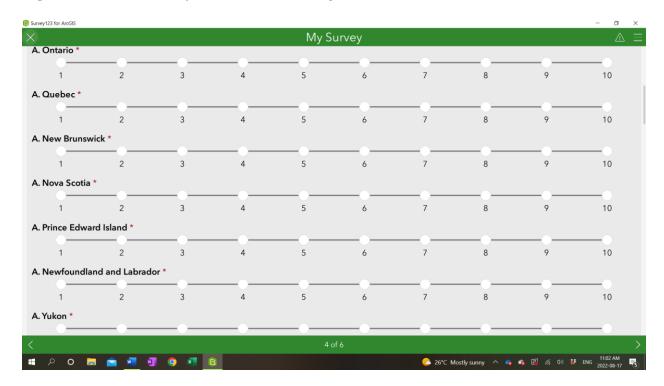


Figure B14. Screenshot of Characteristic Rating Task C

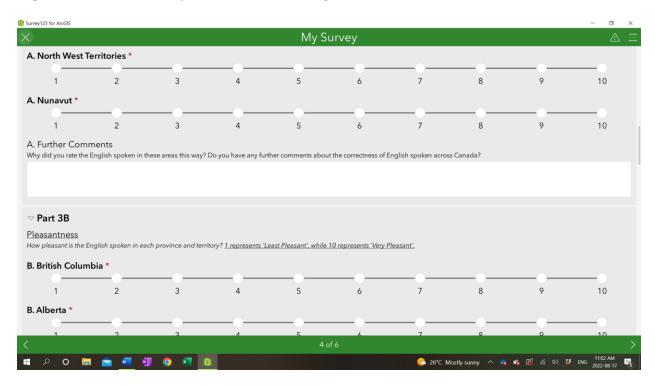


Figure B15. Screenshot of Characteristic Rating Task D

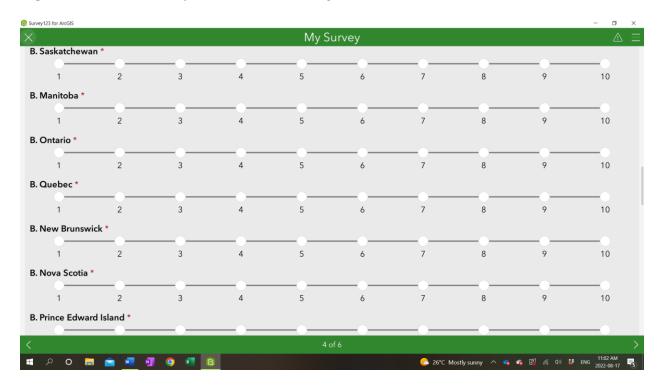


Figure B16. Screenshot of Characteristic Rating Task E

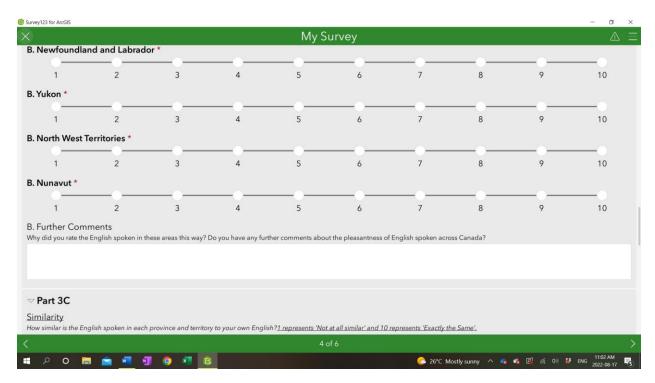


Figure B17. Screenshot of Characteristic Rating Task F

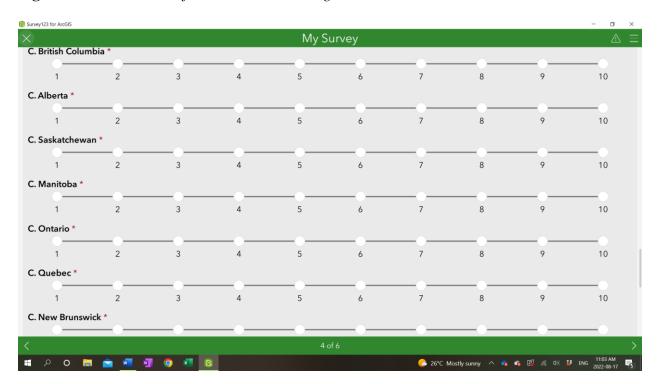


Figure B18. Screenshot of Characteristic Rating Task G

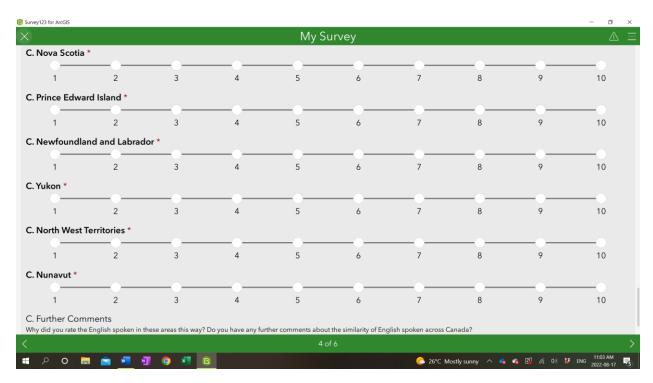


Figure B19. Screenshot of Characteristic Rating Task H

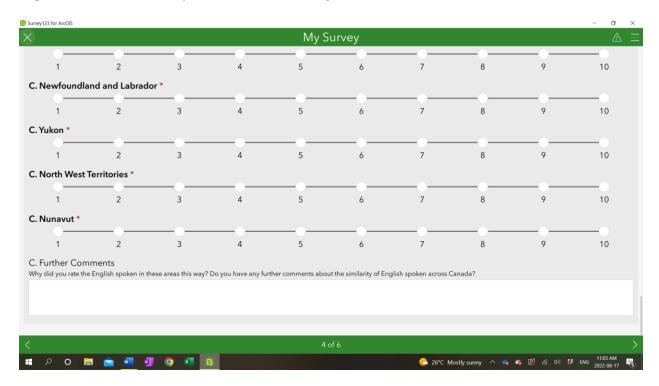


Figure B20. Screenshot of Statements Rating Task A

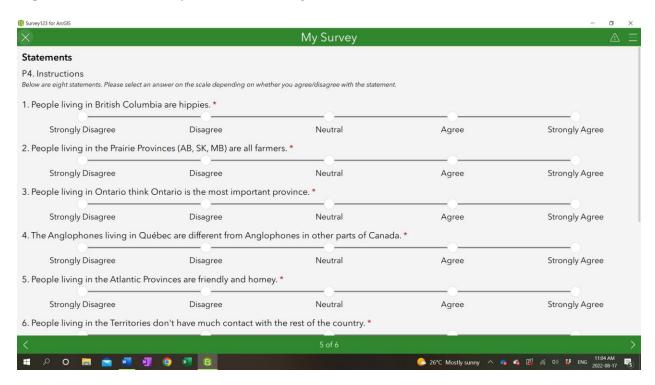


Figure B21. Screenshot of Statements Rating Task B

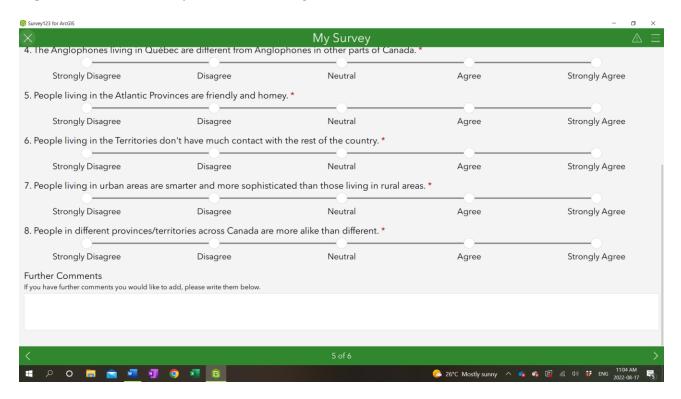


Figure B22. Screenshot of Lexical Survey A

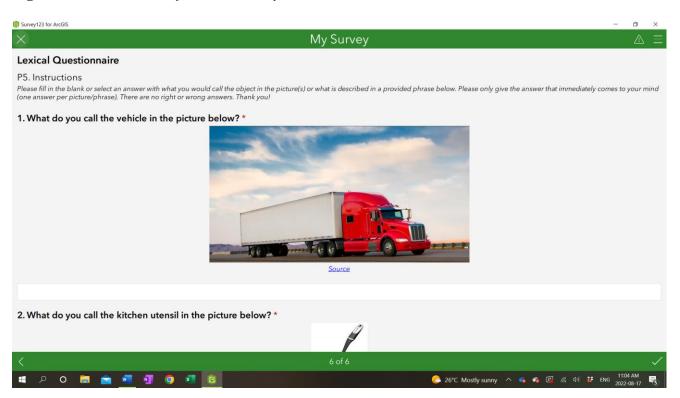


Figure B23. Screenshot of Lexical Survey B

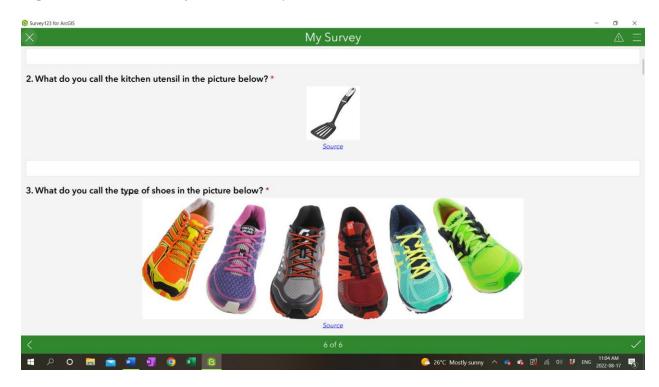


Figure B24. Screenshot of Lexical Survey C

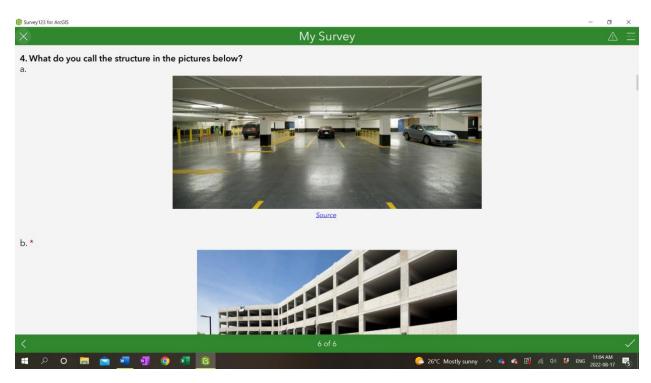


Figure B25. Screenshot of Lexical Survey D

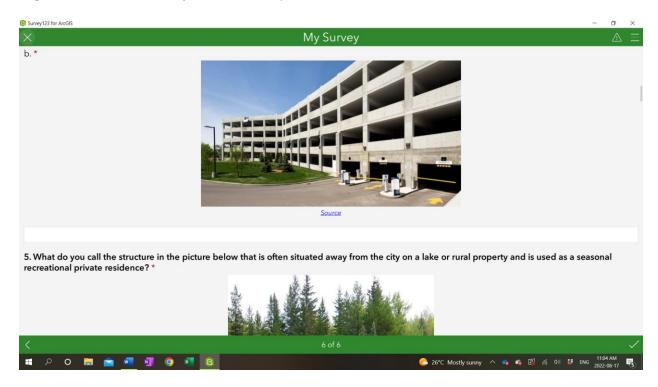


Figure B26. Screenshot of Lexical Survey E

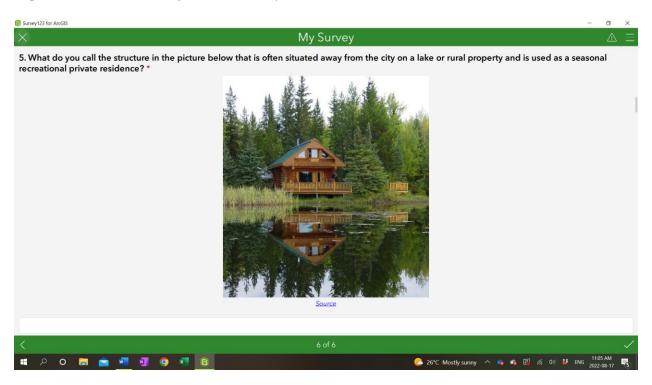


Figure B27. Screenshot of Lexical Survey F

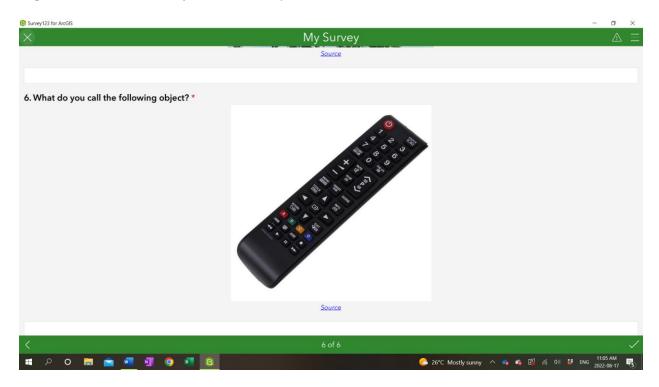


Figure B28. Screenshot of Lexical Survey G

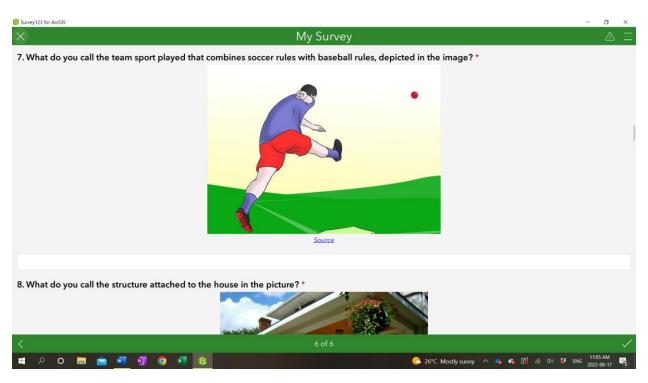


Figure B29. Screenshot of Lexical Survey H

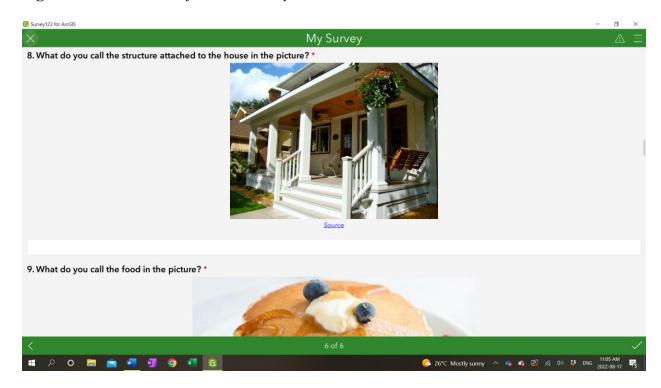


Figure B30. Screenshot of Lexical Survey I

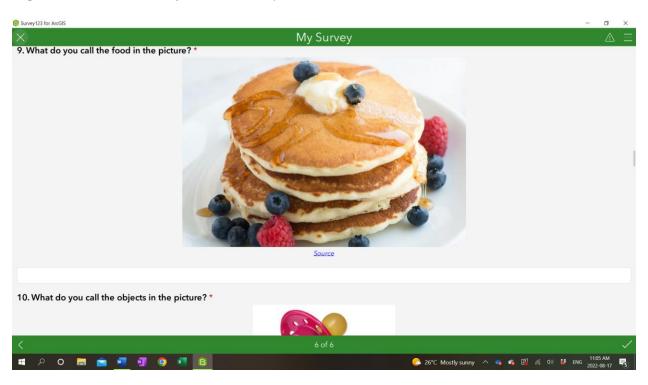


Figure B31. Screenshot of Lexical Survey J

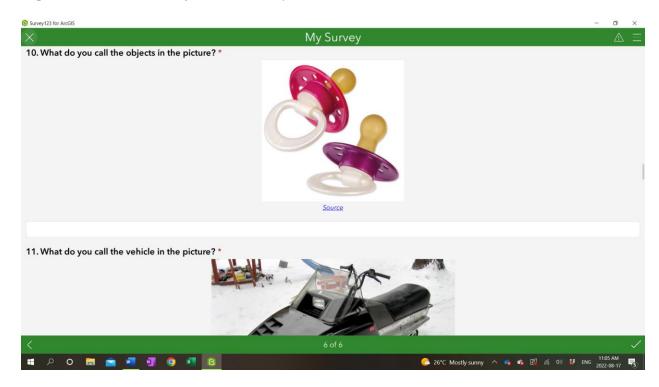


Figure B32. Screenshot of Lexical Survey KB

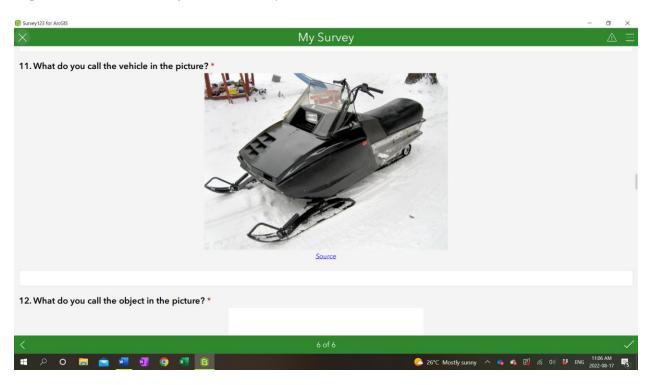


Figure B33. Screenshot of Lexical Survey L

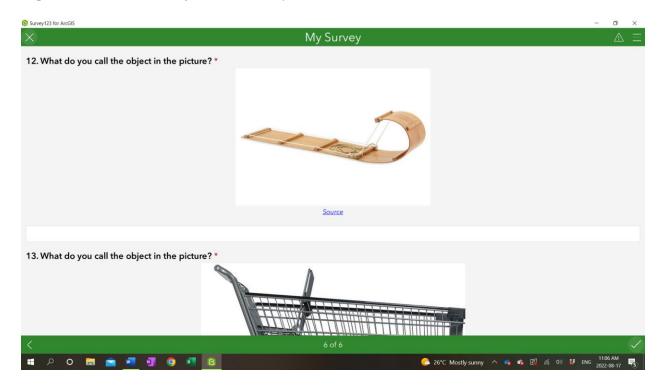


Figure B34. Screenshot of Lexical Survey M

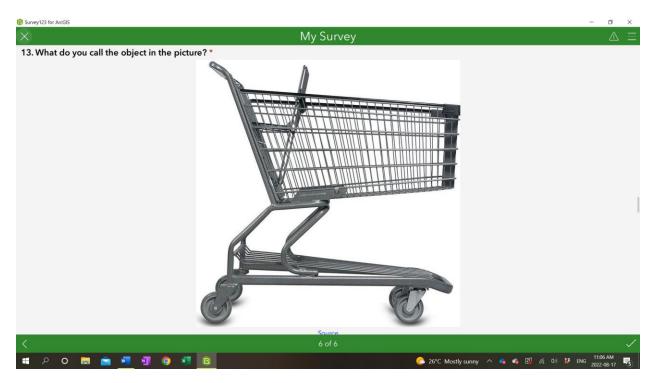


Figure B35. Screenshot of Lexical Survey N

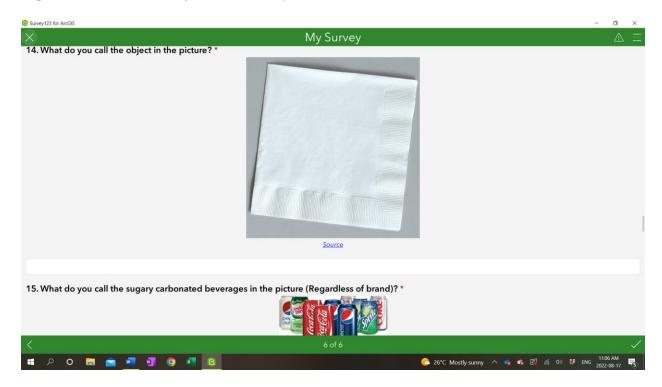


Figure B36. Screenshot of Lexical Survey O

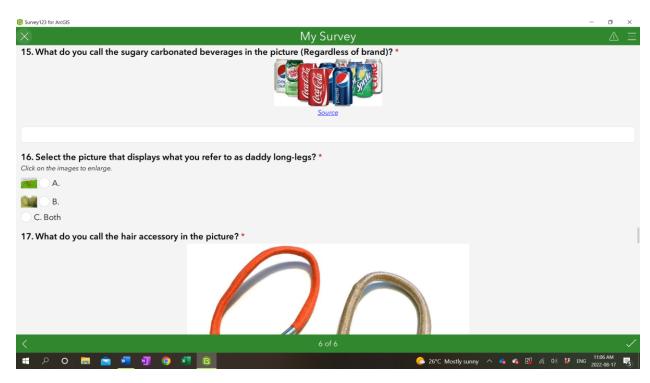


Figure B37. Screenshot of Lexical Survey P

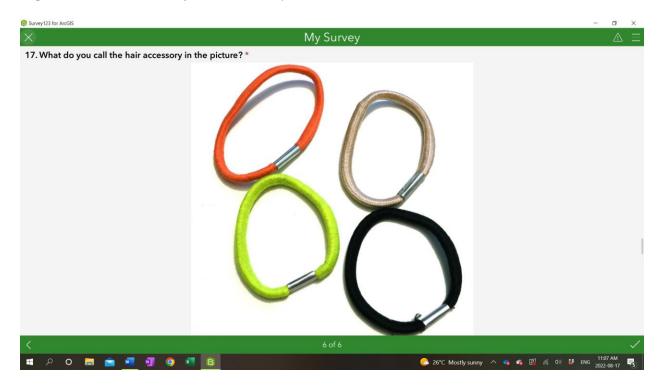


Figure B38. Screenshot of Lexical Survey Q

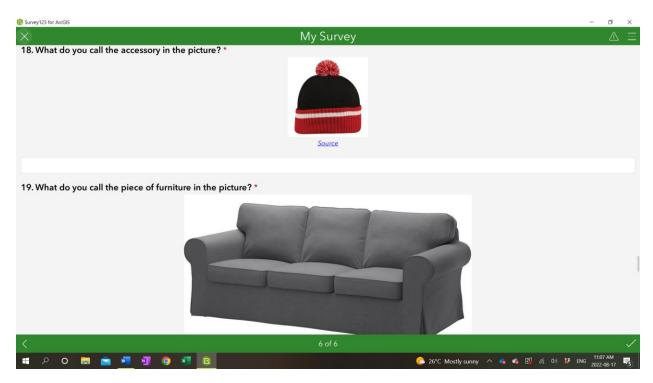


Figure B39. Screenshot of Lexical Survey R

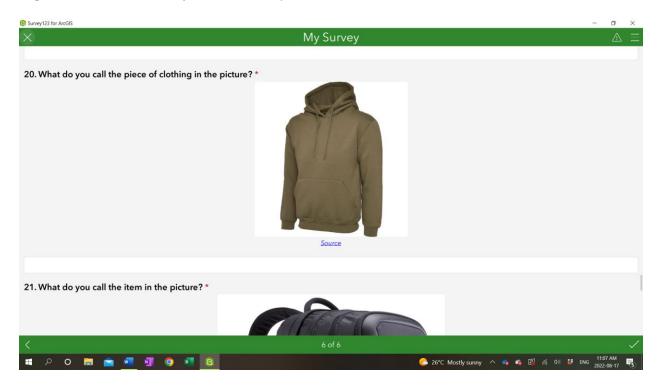


Figure B40. Screenshot of Lexical Survey S

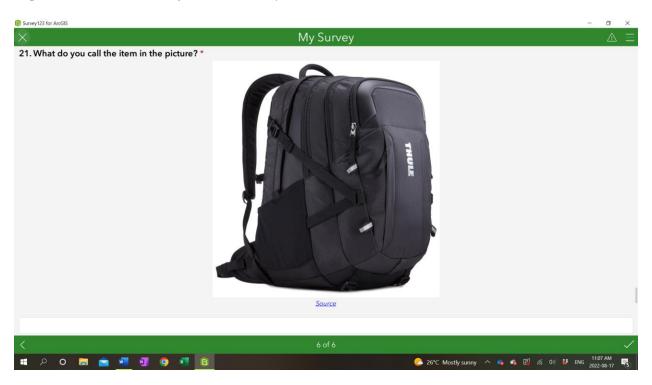


Figure B41. Screenshot of Lexical Survey T

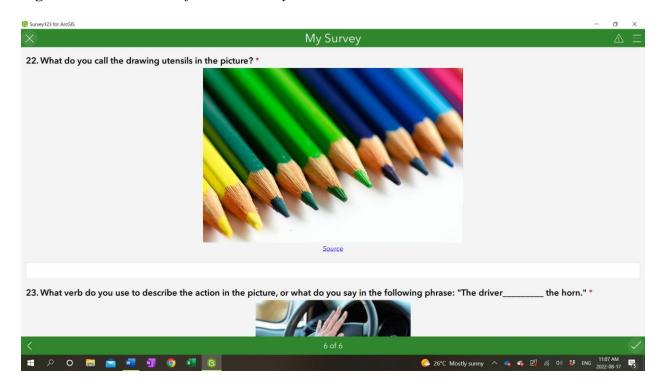


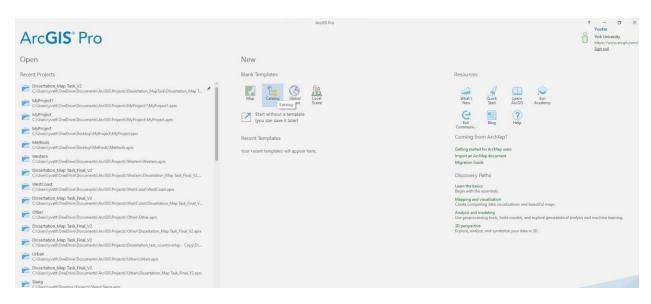
Figure B42. Screenshot of Lexical Survey U



Appendix C: Map Task Analysis Walkthrough

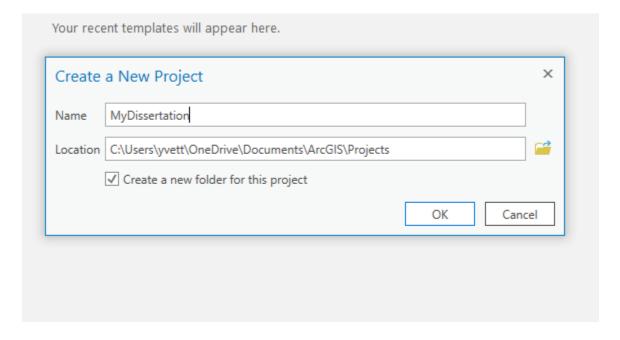
Step 1 – Open ArcGIS Pro and select 'Catalog'.

Figure C1. ArcGIS Pro Open Menu



Step 2 – Name your project and select the location you would like to save the project.

Figure C2. Create a New Project Window



Step 3 - Double click "databases" and then right click your database. Select "new > Feature Class" from the menu.

Figure C3. Catalog Window

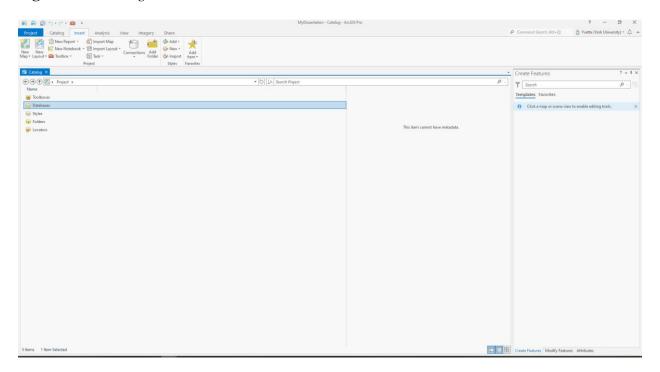
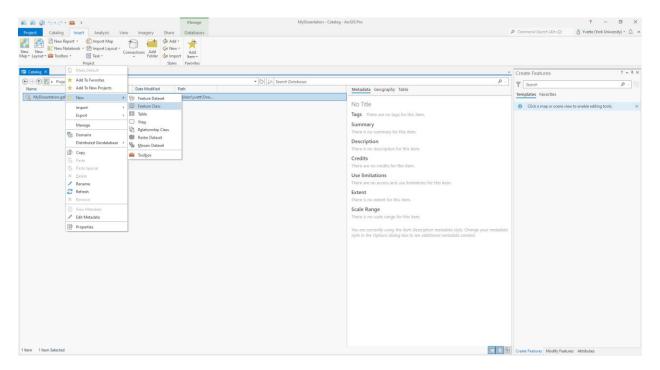
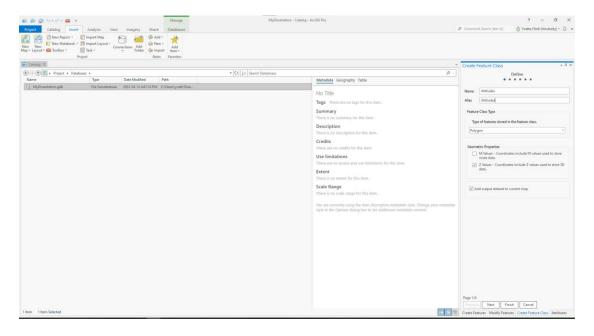


Figure C4. Opening a New Feature Class



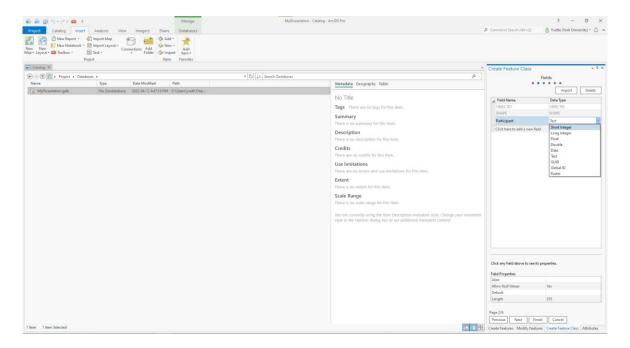
Step 4 – Type in a name and alias in the 'create feature class' on the right and select 'next'.

Figure C5. Naming the New Feature Class



Step 5 - Fields let you put in demographic information to attach to polygons created in an attribute table. Add whatever information you would like to attach to the polygons (e.g., participant, gender, socioeconomic status, etc.). Once completed, select 'next' at the bottom.

Figure C6. Adding Fields



Step 6 – Select 'next' on the 'Spatial Reference', 'Tolerance', 'Resolution', and 'Storage Configuration.'

Figure C7. Spatial Reference Settings

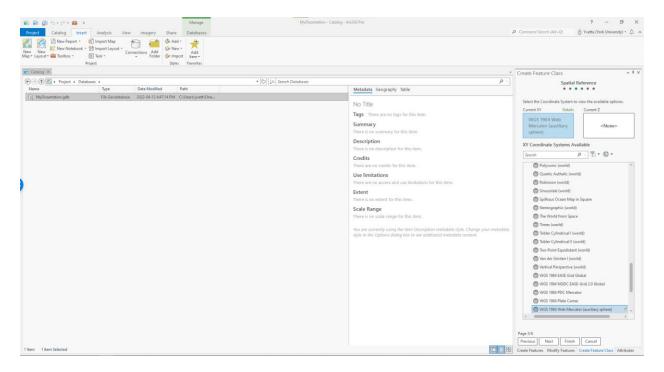


Figure C8. *Tolerance Settings*

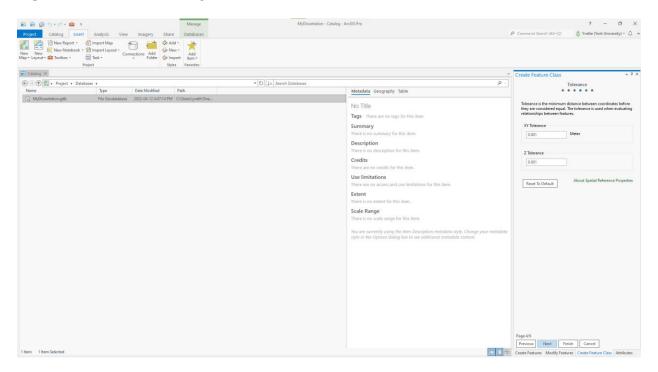


Figure C9. Resolution Settings

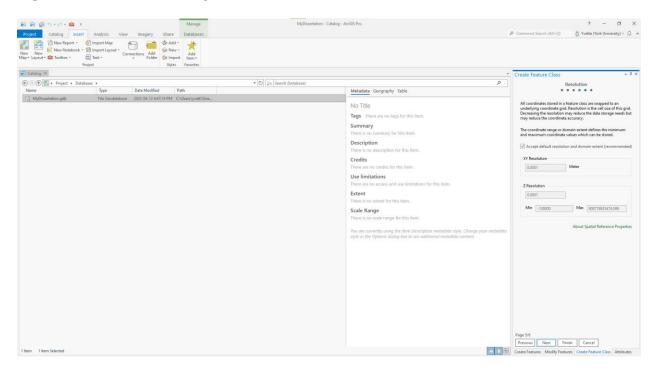
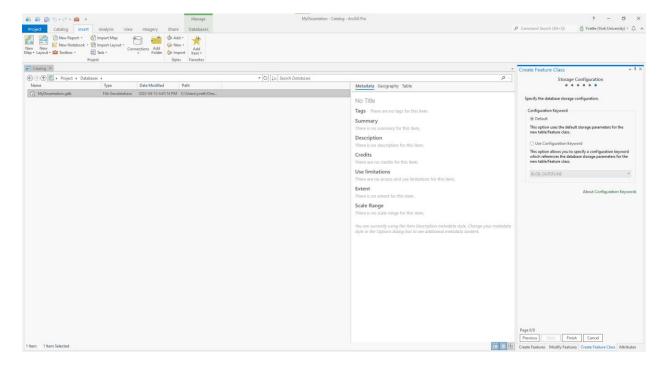
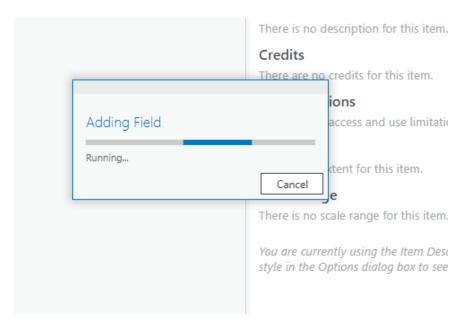


Figure C10. Storage Configuration Settings



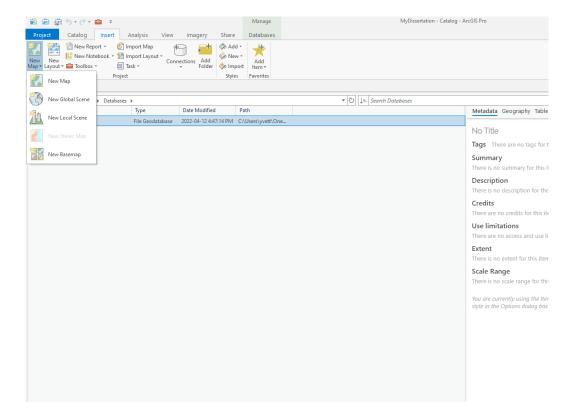
Step 7 – Select 'Finish' at the bottom right of the side menu

Figure C11. Adding Field Window



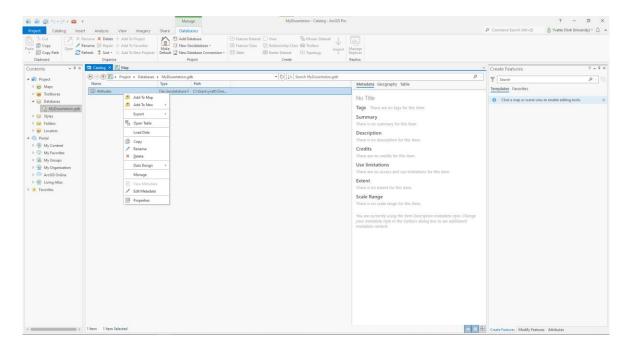
Step 8 – Once the field has been added, select 'New Map' from the top left toolbar.

Figure C12. Adding a New Map



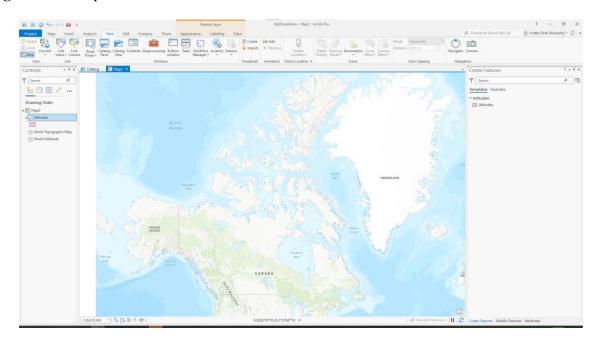
Step 9 – Return to the 'Catalog' by selecting the 'Catalog' window and select your data base on the right 'Contents' menu. Right-click the database you created and select 'Add To Map'.

Figure C13. Adding a Database to a Map



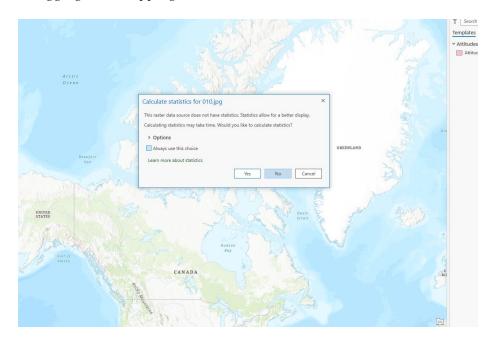
Step 10 – On the 'Map' tab you will see the database name in the left 'Contents' menu.

Figure C14. Map Tab



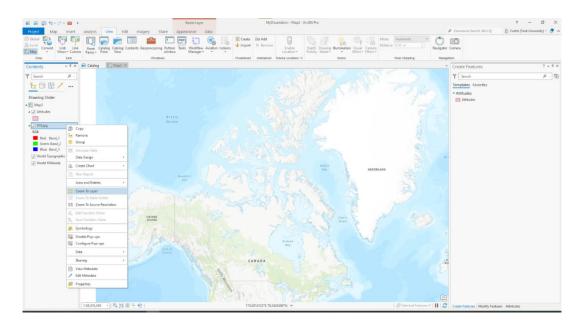
Step 11 - Drag and drop your maps in JPEG format into ArcGIS and select 'no' when a popup window appears.

Figure C15. *Dragging and Dropping a JPEG*



Step 11 - If you cannot see the JPEG map you dragged into ArcGIS, right click the new layer that appeared in the 'Contents' menu and select 'Zoom To Layer'.

Figure C16. Zoom to Layer



Step 12 – Open the 'Imagery' menu and select 'Georeference', then select 'Add Control Points'.

Figure C17. *Georeference Toolbar*

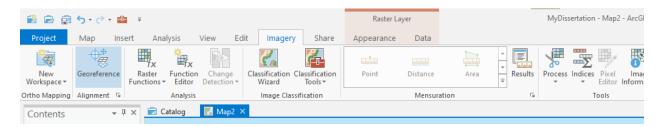
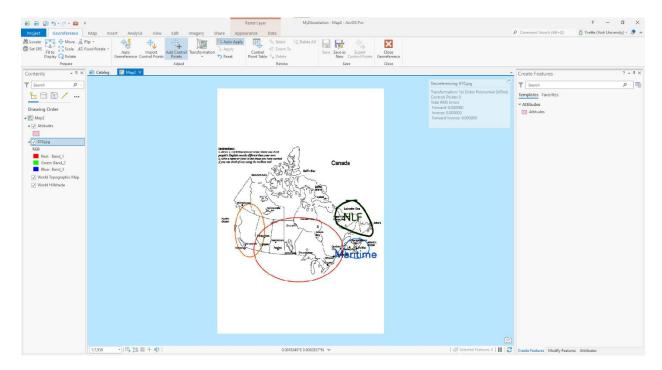
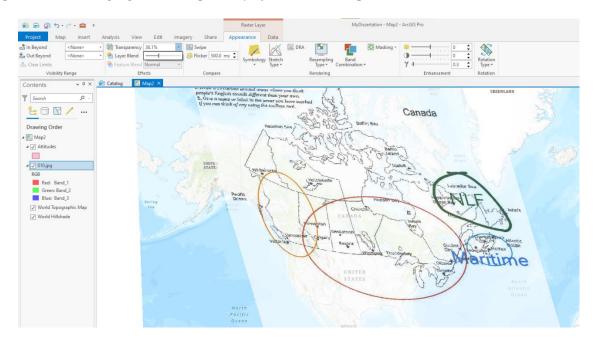


Figure C18. Adding Control Points



Step 13 – Select a point of reference on the JPEG map (e.g., border, river, city, etc.) and zoom out to find that point of reference on the ArcGIS map. You must add at least three control points. Note, if you do not used a georeferenced image to collect data, your map may be skewed as shown below and result in unreliable data points. Once your map is georeferenced and close to fitting over the area your JPEG map represents, select 'Save' and 'Close Georeference'. Step 14 – You can change the transparency of the JPEG map by selecting the 'Appearance' tab and increasing the 'Transparency' under 'Effects'.

Figure C19. Changing the Transparency of the JPEG Map



Step 15 – Select the 'Edit' menu and 'Create'. This will open a new toolbar on the right. Click the name of your database and select the puzzle piece to create a new polygon. This will open a new toolbar on the bottom of your window. You can select different types of lines to trace the polygons. Select the polygon to use freehand or 'Streaming'.

Figure C20. The Create Features Toolbar

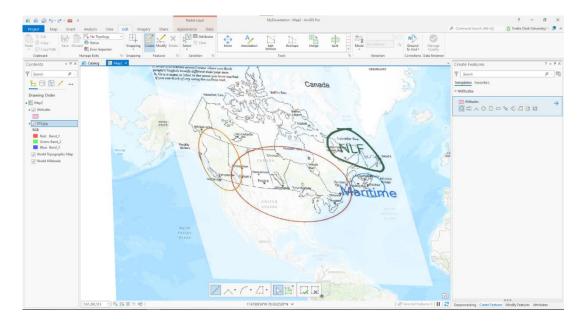
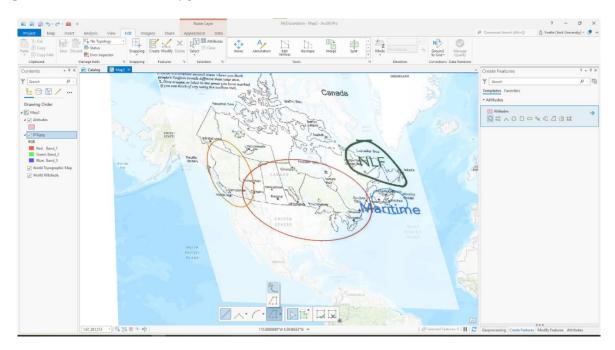
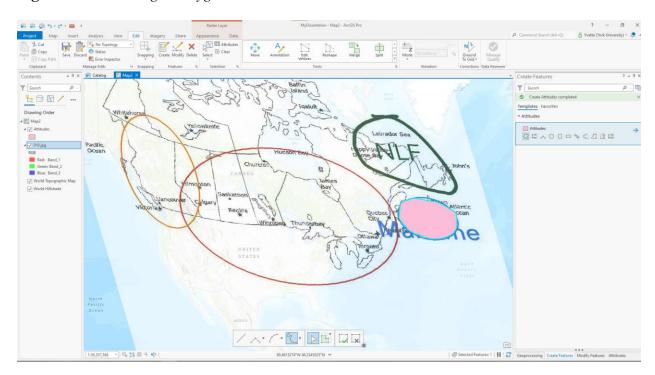


Figure C21. The Create Polygon Toolbar



Step 16 – Trace one polygon at a time. When completed, double click to stop tracing. If you select the checkmark beside the JPEG name on the lefthand toolbar, the JPEG image will disappear and you can see where the polygon you traced shows over the ArcGIS base map.

Figure C22. Creating a Polygon



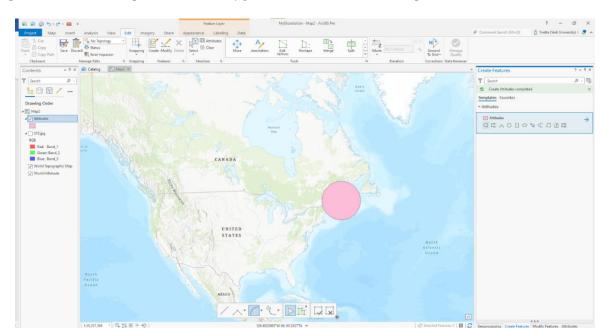


Figure C23. Base Map With New Polygon and Without JPEG Map

Step 17 – When you complete tracing a polygon, right-click the database name on the lefthand menu and select 'Attribute Table' to add the demographic information for the participant that drew the polygon on the JPEG map.

Figure C24. Opening the Attribute Table

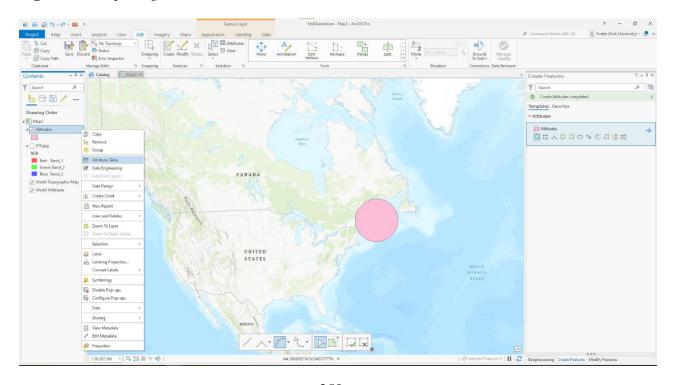
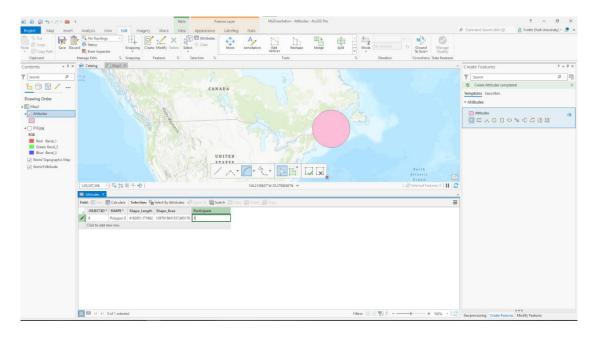


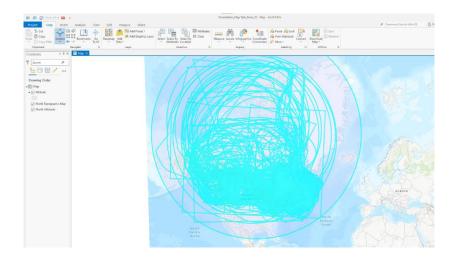
Figure C25. Adding Demographic Information Into the Attribute Table



Step 18 – Repeat steps 15-17 to trace all polygons for the JPEG map (you can leave the Attribute Table open to save time). Once you've completed tracing all of the polygons on the JPEG map, you can right-click the JPEG map on the 'Contents' toolbar and select 'Remove'.

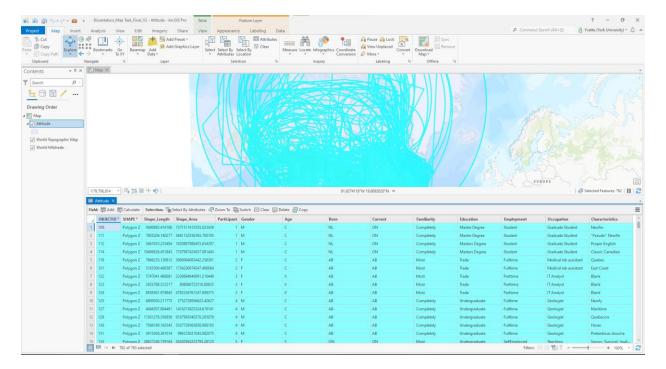
Step 19 – Add the next JPEG map by following steps 11 – 14 and trace all polygons and add attributes to those polygons following steps 15 – 17. Once completed, you will have a map that is similar to Figure 59 with many traced polygons showing on the base map.

Figure C26. Map With all Traced Polygons



Step 20 – Open the attribute table if it is not already open by right-clicking the database name on the 'Contents' toolbar and selecting 'Attribute Table'. Select all of the contents in the attribute table by selecting the top left square above row one with the diagonal arrow pointing down.

Figure C27. Filled Attribute Table



Step 21 – Open the 'Analysis' tab and select 'Tools'. This opens a toolbar called 'Geoprocessing' on the right of the screen. Type 'Union' into the search box and select the 'Union' tool.

Figure C28. Opening the Tools Menu

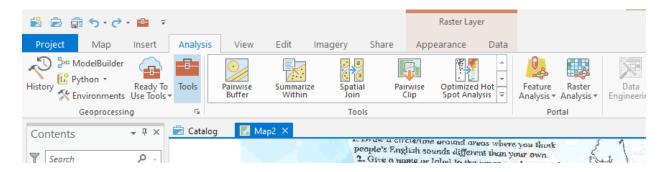
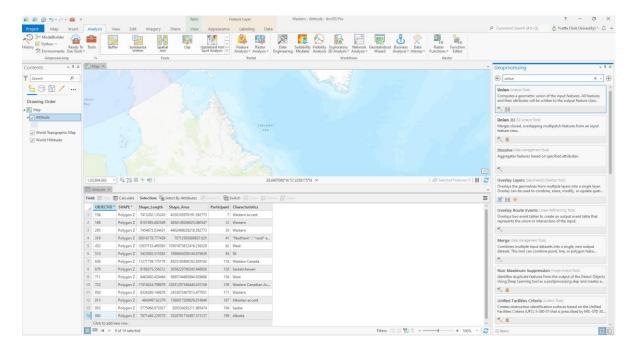
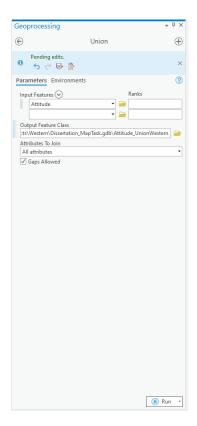


Figure C29. Opening the Union Tool



Step 22 – Select the database name for 'Input Features' and select 'Run'.

Figure C30. The Union Tool Menu



Step 23 – Once the Union process is complete, you will see a new layer appear under the 'Contents' menu. Right-click and select 'Attribute Table'.

Step 24 – Select 'Add' on the top menu bar of the Attribute Table. If this does not appear, save your file and try again. Add new rows: 'Longitude', 'Latitude', and 'Centroid' all with the Data Type set as 'Double'.

Figure C31. Opening the Add Menu in the Attribute Table

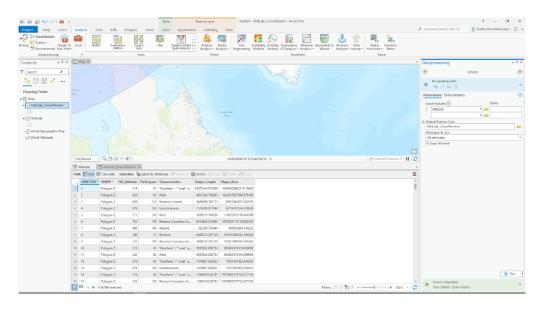
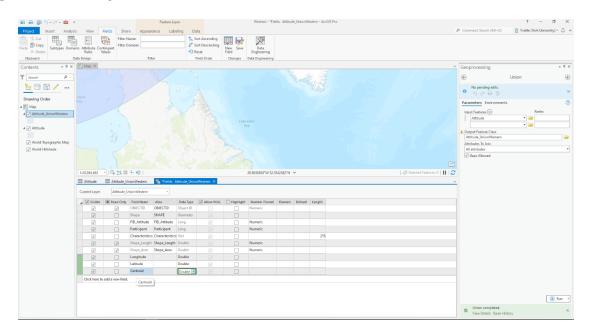
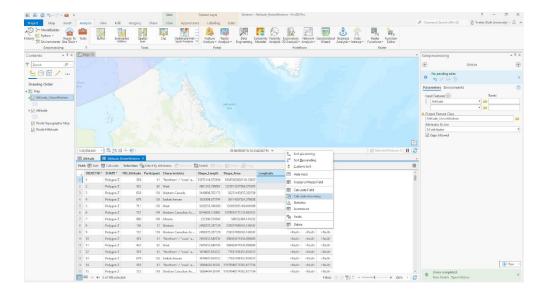


Figure C32. Adding New Fields to Attribute Table



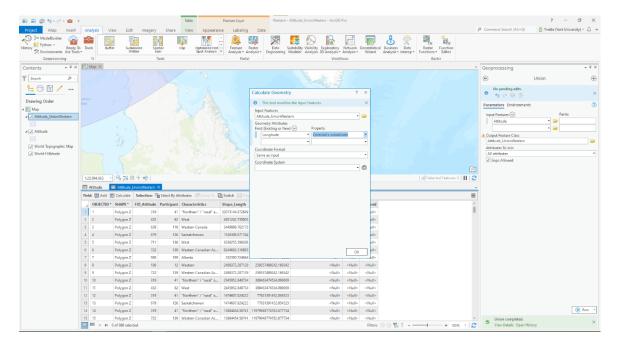
Step 25 – Exit by clicking 'x' on the Fields tab currently open, and select 'yes' when prompted to save.

Figure C33. Opening the Calculate Geometry Tool



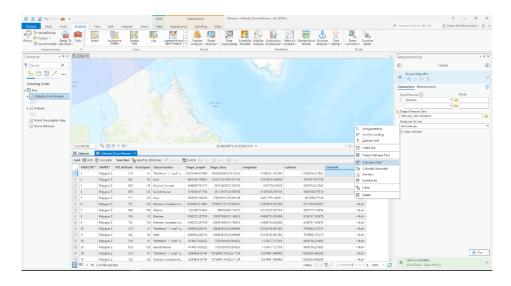
- Step 26 Right click the 'Longitude' column and select 'Calculate Geometry'.
- Step 27 Under 'Field' select 'Longitude' and for 'Property' select 'Centroid x-coordinate'. Select 'Ok'

Figure C34. Filling in the Calculate Geometry Fields



- Step 27 Similar to Step 26, right-click the 'Latitude' column and select 'Calculate Geometry'.
- Step 28 This time, select 'Latitude' for Field and 'Centroid y-coordinate' for 'Property' and select 'OK'.
- Step 29 Finally, right-click the 'Centroid' column and select 'Calculate Field'.

Figure C35. Opening the Calculate Field Tool



Step 30 – Select 'Centroid' for 'Field Name' and in the 'Fields', double click 'Longitude', then select + and double click 'Latitude' and select 'OK'.

Figure C36. *Filling in the Calculate Field Menu*

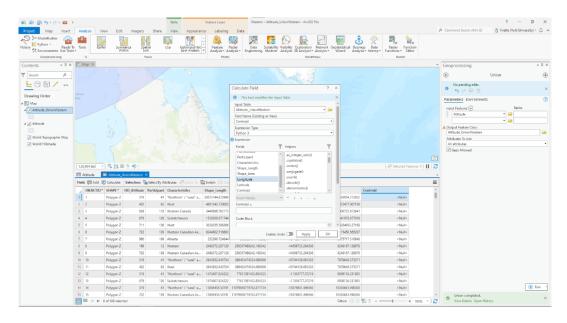
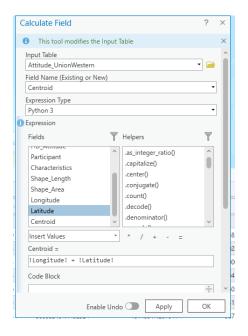
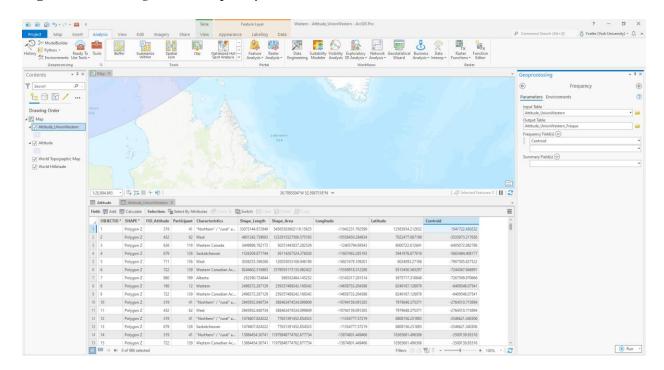


Figure C37. Final Input for Calculate Field



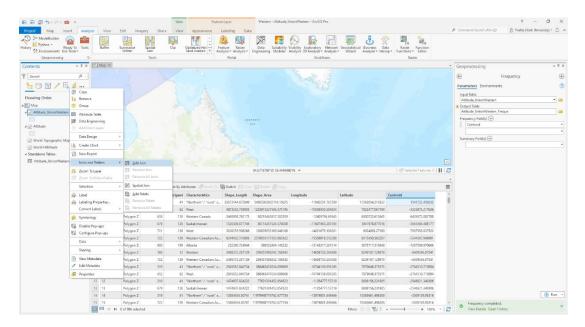
- Step 31 Open the 'Analysis' tab and select 'Tools'. Search for 'Frequency' and select it.
- Step 31 Only change 'Frequency Field(s)' to 'Centroid' and select 'Run'. A new attribute table will appear on the left under 'Contents'.

Figure C38. Filling in the Frequency Fields



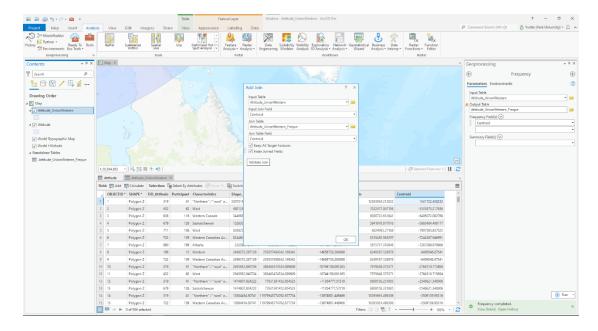
Step 32 – Right-click the union layer and select 'Joins and Relates' and 'Add Join'.

Figure C39. Opening the Add Join Menu



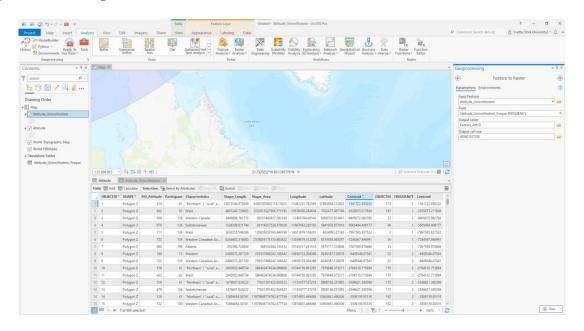
Step 33 – For the 'Input Table' select the Union layer. For 'Input Join Field', select 'Centroid'. For 'Join Table', select the frequency attribute table that was just created. Finally, select 'Centroid' for 'Join Table Field' and select 'OK'.

Figure C40. Filling in the Add Join Fields



- Step 34 Open the 'Tools' menu again and search 'Feature to Raster' and select it.
- Step 35 The 'Input Features' should be the union layer. The 'Field' should be the Frequency table and select 'Run'.

Figure C41. Filling in the Feature to Raster Fields



Step 36 – To adjust the heat map, you can right-click the new layer and select 'Symbology'. Adjust the symbology to best fit your needs.

Figure C42. Opening the Symbology Menu

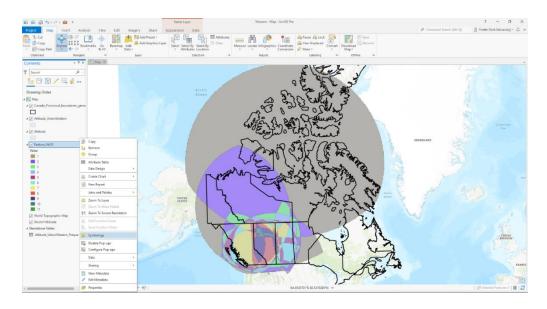
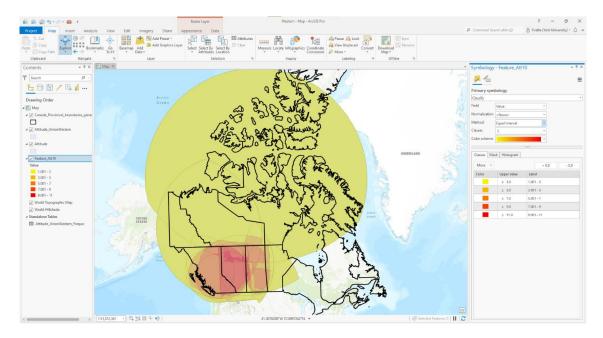


Figure C43. Changing the Primary Symbology



Step 37 – To clip the image to show only on a certain area, you will need a georeferenced map image that has been added to the document (by dragging into ArcGIS). Right click the 'Map' layer and select 'Properties'. Then select 'Clip Layers'.

Figure C44. Opening the Map Properties Menu

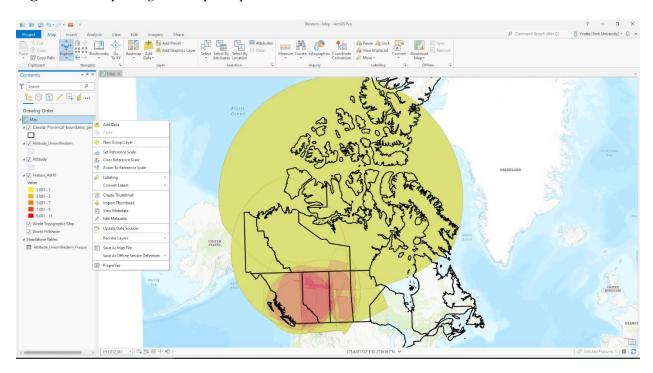
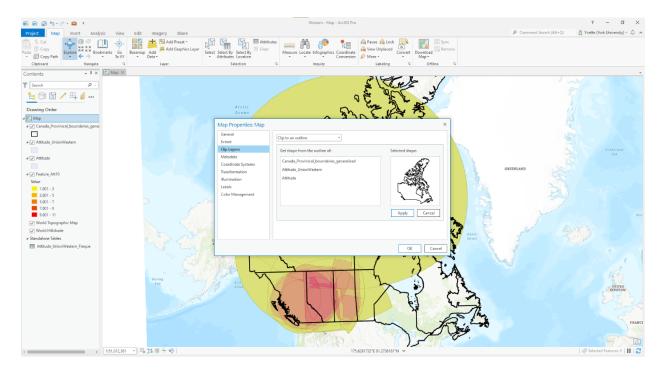
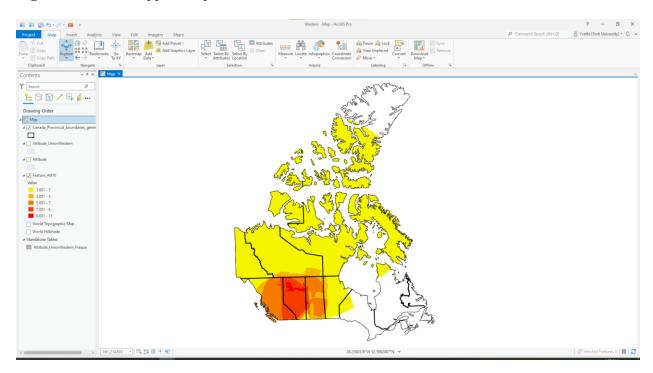


Figure C45. Opening the Clip Layers Tab and Selecting the Map Outline



Step 38 – Select the layer you would like to have the image clipped to and select 'Apply' and then 'OK'.

Figure C46. The Clipped Map



Appendix D: Content Analysis Labels

Labels	Comment			
BLANK (N=258)	Blank/no comments			
CANADIAN (N=17)	Classic Canadian; The Canadian accent people imitate; Heavy Canadian accent; "Canadian"; stereotypical "Canadian" accent; Warm, friendly, stereotypical Canadian accents, Irishish; General Canadian English; tend to have a more "Canadian accent"; Classic Canadian stereotype "Eh"; Stereotypical canadian; Western Canadian Accent/Stereotypical Canadian Lingo; Various forms of Canadian; "Canadian accent"; Canadian; Stereotypical Canadian			
EAST COAST/EASTERN (N=29)	East Coast; Atlantic (my own English); Atlantic; EC; East coast; East coast accent; East Caost; Atlantic Canada; East Coast; East Coast accent; East coast; East Coast dialect; East coast accent; East coast; East coast; East coast; East coast; East coast; East Coast; Accent Eastern; Eastern Canadian; Eastern; East; East; East Town; Eastern Canadian Accents/'Newfies'; East; East			
FRENCH (N=68)	Montreal English (Influenced by French and immigrant communities); French accented English; French; Maritime French; French accent; French; French Canadian Accent; French; French style English; French Canadian; French; French; French Canadian; French; French; French Canadian; French; French; French Canadian; French; French accent and lots of French-English word exchange; acadian french accent; french accent with some french words mixed; northern french accent; French Canadian; french accent; French-Canadian Accent; Fr; Thick French accent; Accent french; Francophones; Mainly French; Francaphone; French accent; French Accents; French accent; French English; French accent; French; Largely French/French influenced; Largely French/French influenced; French; English with French influence; French; French Canadian accent; French accent; French accent; French L1 Speakers; French influence; French; French Canadian; Distinctive French accent; French accent; French Canadian; French Canadi			

France; French-Canadian; French Canadian; Francophone; French; French accent; French accent; French Canadian

INDIGENOUS (N=30)

Snowy, Survival, Inuit English; Rhythmic like Cree; Inuit;
Native slang; Northern Inuit; Inuit influence; Inuit;
northern/Indigenous inflection; Inuit; Blackfoot indigenous;
Native accent; Northerners and Innuit; Inuit speakers; Accent influenced by first nations languages; First Nations Accent;
Combination of indigenous speech and slang; English influenced by Inuktitut etc.; Influenced by Inuit languages?;
Indiginous language influence; Far north, sort of an indigenous sounding accent; Native Canadian
Languages/Accent; The North -Indigenous languages influences; Indigenous dialects/languages; Indigenous;
Indigenous; Aboriginal Canadian; Native accent; Indigenous language influence; Inuit influenced; Aboriginal

LEXICAL VARIATION (N=15)

Detroit-influenced English with vocabulary like Fahrenheit;
"I's the b'y"; Maritime variation in word usage; Ontario
Variation in word usage/preference; "hetch"; Talk fast, words
are different, words seemed to be influenced by another
country; Broken English. They say things like. Ever good me;
Eh; Eh; Dialect Where ya to? Accent; say 'love' and 'dear' a
lot; 'youse guys' instead of you guys; Bunnyhop and coyote;
Bunny hug; Prairie variation in word usage/preferences

MARITIME (N=58)

Maritime; Maritimes; Acadian; Maritime; Maritimers; Maritime; Maritime; maritime; New Brunswich weird mix of English...; Mairitimes as a whole - strange old "UK"/appalachian accent; Maritime English; Maritime accent; Nova Scotia; New Brunswick; Maritime; Maritime accent; Maritime; Maritimes; Maritimes; Cape Breton; Maritime accent; maritimes; Maritime; Nova Scotia; Acadian; Maritime Canada English; Maritimes; Cape Breton; Maritime; Maritime; Cape Breton "Scottish"; PEI drawl; Halifax/Yarmouth /central to SW Nova Scotia; Miramichi; PEI; Cape Breton; Maritime dialects/accents; Marintimes; Maritimes; Maritime; Eastern Maritimes English; Maritime; Maritimes; Maritimes; Cape Breton; Up west PEI (Tignish's, O'Leary); Eastern PEI (souris, morell); Acadian; Maritimers; Maritime accents; Maritime; Maritimes?; Maritimes; Maritimers; Quebec and maritimes; Acadian accent

NEWFOUNDLAND (N=76)

Eastern Canadian Accents/'Newfies'; Newfie; "Pseudo" Newfie; Newfy; Slight NL ACCENT; Heavy NL accent + talk so fast; Newfoundlander; Newfie; NLF; Newfie; Newfoundland English; Newfie; Newfoundland-; Newfie; Newfie; Newfie; Newfoundland accent; Newfoundland English; Newfoundland; Newfie; Newfies; Nfld; Newfie; Newfoundland and Labrador; Newfies; Newfoundlanders; Newfoundland; Newfoundland; Newfoundland accent; NFLD Brougue. Irish. Old English; Newfie; Newfoundland/Labrador; Newfoundland and Labrador; Newfie; Newfy...; NF; New Foundland; Newfoundland; Newfie; Newfie; Nefoundland Maritime accent; Newfoundland English; Newfoundland and Labrador; Newfie; Nfld; Newfoundland and Labrador; Newfie; Newfoundland "Irish"; Newfoundland; Nfld – Irish influence (French on west coast); Newfoundland; Newfie- Very distinct. Almost Irish sounding; Nefoundland English; Newfoundland accent; Newfoundland; South Coast NL; Northern Peninsula Newfoundland; Newfy; Newfoundland; Newfie; NFL; Nfld; Newfoundland & Labrador; English dialect - Newfie; Newfie; Newfies; Newfoundlander; Newfoundland; Happy valley also Newfie/Newfie; Newfoundland English; Newfie; Newfoundland; Newfie; Newfie

NORTHERN/TERRITORIES (N=14)

Territories; North; Northern; Nunavut; The North; Nunavut; Northern Canada; Remote northern areas; North Terr; North; Northern Accent; Northern; Northern Territories; Nunavut

ONTARIO (N-17) Ontarian; Thunderbay; Sothern, ON; Northern Ontario English; Eastern Ontario English; Ottawa valley accent; Northern ontario accent; Northontario; Ont; southern Ontario accent; Northern ontario; Southern Ontario; Ontario accent British influences; Ontario - Subtle Canadian accent Especially noticeable are differences in the /o/ sounds.; Sotuhern Ontario; Ontarian; Ontario

OTHER LANGUAGE (N=11) Odd Mennonite low German accents; Asian English; Scottish influence; Different languages; Lunenburg Deutsch; Different languages; Variety of languages; Second language; English not first language; Irish; British/Asian

PRAIRIES (N=19)

Prairies; Prairie; Prairie English; Prairie accent; Praries; Prairies; Prairies; Prairies; Prairies; Prairie twang; southern praries; Prairie; flat Prairies; Prairie accent Influenced by Eastern Europeans; Prairies accents; Prairies accent; Prairie English/Ritual prairie/Urban prairie; Prairies; Prairies

PRONUNCIATION (N=38)

Can't say 'sh'; 'by' for boy'; aboot; More American sounding; accent; Identical to Californian/American, same accent; Hoser accents Longer A sounds, says "eh bud" a lot; Surfer accents, California inspired; Southerner (no accent); american accent, slurred words, skipping letters; Nasal; Long A; Mild accewwnt; strong accent; Mild accent; Strong Accent; Slow with heavy accent; Broken English; Same same for shame. Sock for shock.; Talk fast. Hard to understand; Long A sound like wa~ter(tilda over a); Their seperate words sound like one; Emphasis on the letter R; Softer tone when speaking; Twangy english; Garbled; Accent; softer vowels kind of; Weird fergus accent Guelph, too; scottish accent; Prairie - Canadian Raising - very "country"; Accent; Townie/can't read- Accent; Irish Sounding; Tunderbay; soft a; H, th; Hard a sounds

QUÉBEC (N=23) Quebec; Quebecois; Quebec and Maritimes; The Quebecois accent reminds me of Canada so much, lovely; The Quebecois accent reminds me of Canada so much, lovely; Quebec; Quebecois; Quebecois; Anglo-quebecker English (Eastern Townships); Quebec; Quebec and Maritimes

RURAL/COUNTRY (N=20)

Isolated, Relaxed, Fishing, and Wind-bitten English; Nature-inspired English; Farming and Weather English; Oil-industry, Rancher, and anti-Trudeau English Nature English; Cowboy accents; "Redneck" sounding and different expressions; Cowboy; Bayman; "Northern" / "rural" accent similar to the stereotypical Ontario accent in black below; Slow drawl; Country; Bayman-ish; Countryside; Small town rednecks (scattered throughout small towns); Farm English; Northern Ontario (Ottawa valley) Small Town English; Redneck; rural accent; Rural; Rural

SLANG (N=8)

Northern Ontario slang; Newfie/Eastern Slang; Slang; irish twang and own lingo; Unique dialect and slang; Different slang; Unique slang; Lots of slang

UNSURE/OTHER (N=32)

Proper English; Hoser; Pretentious douche; Relaxed,
"Hippie", First Nation, Tree-hugger, Logger and Chinglish;
English; Normal; American-ish; Hippie; coastal bro;
"Normal"; Islander; Oil baron; No idea; Generally slower
pace of; Just assuming; Melting pot of English; Dialectic
differences; Dialectic differences; Bilingual; I; Southern
Shore; FNMI accent; T; T; p; FC; Islander; Hipster;
Flat/Snooty; Central; Central Canada; Midwest; American

URBAN/CITY (N=10)

Multicultural, Multi-accented, Highly-educated, Urban English; Torontonians; Torona; Mountain/Vancouver English; Toronto English; Toronto; Toronto; New York ish; Toronto (urban slang); Montreal

WEST COAST (N=9)

West coast; BC; West coast english; West coast accent; BC; West coast; British Columbia; Vancouver/California slow; West coast accent – British influenced by Prairies accent?

WESTERN (N=14) Western accent; Western; Western; Stereotypical "rural"
Canadian accent "eh" "aboot" etc - basically an American
"midwestern" accent; West; SK; Western Canada;
Saskatchewan; West; Western; Albertan accent; Saskie;
Alberta; Western Canadian Accent/Stereotypical Canadian
Lingo

Appendix E: Raw Data

Table E1. Demographic questions 1 - 5.a)

Participant	1. What is your gender?	2. What is your age?	3. What is your ethnicity?	4. Are you a Canadian citizen?	5. Were you born in Canada?	5.a) What province were you born in?
1	Male	24	Canadian	yes	yes	Newfoundland and Labrador
2	Female	30	Canadian	yes	yes	Alberta
3	Female	57	Canadian	yes	yes	Alberta
4	Male	31	Canadian of European Descent	yes	yes	Alberta
5	Female	37	Canadian	yes	yes	Ontario
6	Female	25	Indigenous	yes	yes	Alberta
7	Female	26	Canadian	yes	yes	Ontario
8	Female	32	Canadian	yes	yes	Ontario
9	Female	33	American/ Canadian	no	no	
10	Female	28	French Canadian	yes	yes	Quebec
11	Transgender- Male	26	French-Canadian	yes	yes	Quebec
12	Male	25	Acadian & French Canadian	yes	yes	Quebec
13	Male	28	Canadian-European	yes	yes	Alberta
14	Female	27	Canadian-European	yes	yes	Quebec
15	Female	32	Icelandic/Sc- ottish/English Canadian	yes	no	
16	Female	25	French Canadian	yes	yes	Quebec
17	Female	38	French Canadian	yes	yes	Quebec
18	Female	25	Canadian	yes	yes	Quebec
19	Female	25	Canadian-European	yes	yes	Quebec
20	Female	25	Romanian	yes	no	
21	Female	31	Canadian-European	yes	yes	Quebec
22	Female	30	Canadian-European	yes	yes	Alberta
23	Male	32	Canadian-Chinese	yes	no	
24	Female	29	Canadian- Vietnamese	yes	yes	Alberta
25	Male	25	Canadian	yes	yes	Manitoba

						British
26	Female	41	Canadian-European	yes	yes	Columbia
27	Female	55	Canadian European	yes	yes	Alberta
28	Male	34	Canadian-European	yes	yes	Alberta
29	Female	29	Canadian	yes	yes	Ontario
30	Female	19	Canadian	yes	yes	Alberta
30	Temate	1)	Canadian	yes	yes	Prince Edward
31	Female	55	Scottish	yes	yes	Island
32	Female	25	Canadian	yes	yes	Ontario
33	Male	60	Canadian	yes	yes	Alberta
33	Iviaic	00	Canadian of	yes	yes	Hiocita
34	Male	57	European decent	yes	yes	Alberta
35	Female	30	Canadian	-		Nova Scotia
36	Female	34	Canadian	yes	yes	Ontario
30	Telliale	34	White Canadian	yes	yes	Ontario
			(Scottish, British,			
37	Female	30	Dutch descent)	yes	yes	Yukon
37	1 ciriare	50	English/French	yes	<i>yes</i>	TUROII
38	Female	28	white Canadian	yes	yes	Alberta
39	Female	37	Caucasian	yes	yes	Saskatchewan
	Prefer not to			<i>y</i> = 1.	J - · · ·	British
40	answer	28	White (Portuguese)	yes	yes	Columbia
			Canadian (W.	-	•	
41	Female	28	European descent)	yes	yes	Saskatchewan
			,	•	•	Newfoundland
42	Male	33	Canadian	yes	yes	and Labrador
43	Female	32	Canadian-European	yes	yes	Alberta
						Newfoundland
44	Female	53	English	yes	yes	and Labrador
45	Male	34	Canadian-European	yes	yes	Alberta
46	Male	25	Canadian-European	yes	yes	Ontario
47	Female	27	Canadian-European	yes	yes	Ontario
						Newfoundland
48	Male	31	Canadian-European	yes	yes	and Labrador
49	Female	29	Canadian-European	yes	yes	Nova Scotia
50	Female	60	Canadian	yes	yes	Alberta
51	Male	40	Filipino	yes	yes	Ontario
52	Female	28	Canadian-European	yes	yes	Ontario
53	Female	50	Canadian-European	yes	yes	Quebec
54	Female	56	Canadian-European	yes	yes	Ontario
						British
55	Female	44	Canadian-Filipino	yes	yes	Columbia
56	Female	55	Anglo Saxon	yes	yes	Ontario

			British/Mennonite			
57	Male	29	Canadian	yes	yes	Ontario
58	Male	27	Canadian-Italian	yes	yes	Ontario
59	Male	27	Egyptian	yes	yes	Ontario
60	Male	23	Scottish Canadian	yes	yes	Ontario
61	Male	18	Canadian-European	yes	yes	Ontario
62	Female	60	Canadian-British	yes	yes	Saskatchewan
63	Female	57	Canadian	yes	yes	Alberta
64	Female	39	Canadian	yes	yes	Ontario
65	Female	33	Caucasian	yes	yes	Saskatchewan
66	Female	26	Canadian	yes	yes	Saskatchewan
67	Male	33	Canadian-European	yes	yes	Ontario
68	Female	59	Canadian-European	yes	yes	Ontario
69	Female	22	Canadian	yes	yes	Ontario
70	Female	23	Caucasian	yes	yes	Alberta
71	Female	26	Canadian	yes	yes	Ontario
72	Female	55	Cree-Métis	yes	yes	Alberta
73	Male	60	Cree	yes	yes	Quebec
				•	•	British
74	Male	21	Canadian European	yes	yes	Columbia
			First Nations			
75	Female	39	Canadian	yes	yes	Manitoba
						British
76	Female	30	Canadian-European	yes	yes	Columbia
77	Male	28	Canadian	yes	yes	Ontario
						British
78	Female	43	Canadian	yes	yes	Columbia
70	Б 1	20	White			3.6 % 1
79	Female	28	(Jewish/Lithuanian)	yes	yes	Manitoba
80	Female	57	Canadian-European	yes	no	
	Gender variant non-					British
81	conforming	26	Italian-Canadian	VAC	MAG	Columbia
01	Comorning	20	Italiali-Callaulali	yes	yes	British
82	Female	42	Canadian	yes	yes	Columbia
02	Telliare	12	Cultulatur	yes	yes	New
83	Female	39	Canadian-European	yes	yes	Brunswick
			Canadian of			
84	Female	33	European heritage	yes	yes	Saskatchewan
				,	•	British
85	Female	50	Canadian European	yes	yes	Columbia
86	Male	33	Canadian	yes	yes	Ontario

			Canadian			
87	Female	69	(European)	yes	yes	Ontario
07	Gender	07	(Zuropeur)	<i>y</i> c s	y cs	Olitario
	Variant-					
	Non-		Scottish/			British
88	conforming	38	Welsh	yes	yes	Columbia
89	Female	28	Canadian-Irish	yes	yes	Ontario
90	Female	79	Canadian	yes	yes	Alberta
			Canadian	•	•	
91	Male	60	(Scot/Irish)	yes	yes	Ontario
			Irish, English and			
92	Female	52	German.	yes	yes	Alberta
						New
93	Female	36	Canadian-European	yes	yes	Brunswick
						Newfoundland
94	Female	26	Chinese	yes	yes	and Labrador
95	Female	18	Canadian	yes	yes	Alberta
96	Male	30	Canadian	yes	yes	Alberta
97	Male	31	Canadian European	yes	yes	Manitoba
			Canadian-			Northwest
98	Male	33	European, Métis	yes	yes	Territories
0.0			~			British
99	Male	64	English, German	yes	Yes	Columbia
100	Female	61	Canadian	yes	yes	Quebec
101	Female	28	Canadian-European	yes	yes	Alberta
102	Female	25	Canadian	yes	no	
100		20				British
103	Male	30	Canadian	yes	yes	Columbia
104	Female	50	African	yes	no	
105	Female	31	Canadian-Europe	yes	yes	Alberta
106		22	G 11			British
106	Female	22	Canadian	yes	yes	Columbia
107	Female	55	Canadian	yes	yes	Alberta
108	Female	57	Canadian-European	yes	yes	Alberta
109	Female	21	Canadian-European	yes	yes	Alberta
110	Female	64	Canadian	yes	yes	Saskatchewan
						British
111	Female	18	Canadian	yes	yes	Columbia
4.4		4.5				New
112	Female	41	Canadian-European	yes	yes	Brunswick
113	Female	40	Canadian-European	yes	yes	Ontario
114	Male	42	Canadian-European	yes	yes	Ontario
115	Male	30	Canadian	yes	yes	Ontario
110	M-1.	26	Canadi			Newfoundland
116	Male	26	Canadian	yes	yes	and Labrador

						Newfoundland
117	Male	32	Canadian	yes	yes	and Labrador
118	Female	37	Canadian-European	yes	yes	Ontario
119	Female	29	Chinese	yes	no	
120	Female	28	Canadian-European	yes	yes	Alberta
			•	•	•	Newfoundland
121	Female	61	Canadian	yes	yes	and Labrador
122	Male	37	Irish-Canadian	yes	no	
123	Female	20	Canadian	yes	yes	Manitoba
124	Female	31	Canadian European	yes	yes	Alberta
125	Female	33	European Canadian	yes	no	
						New
126	Female	18	French-Canadian	yes	yes	Brunswick
127	Female	30	Caucasian	yes	yes	Ontario
128	Male	35	Filipono	yes	no	
						Newfoundland
129	Male	47	Canadian	yes	yes	and Labrador
130	Female	19	Canadian	yes	yes	Manitoba
						Newfoundland
131	Female	30	Canadian	yes	yes	and Labrador
132	Female	19	African-Canadian	yes	no	
	Gender					
	Variant-					
133	Non- conforming	20	Chinese	yes	yes	Ontario
134	Female	22	White	•	•	Manitoba
135	Female	18	Arab-Canadian	yes	yes	Ontario
136	Male	32	Italian, Quebecois	yes	yes	Quebec
137	Female	27	Caucasian	yes	yes	Alberta
137	Female	34	Canadian-European	yes	yes	Ontario
	Female	26	Canadian Canadian	yes	yes	Ontario
137	Temale	20	Canadian very	yes	yes	Ontario
140	Female	68	mixed	yes	no	
141	Female	62	British Canadian	yes	no	
111	Temate	02	Canadian-European	<i>y</i> c s	110	Prince Edward
142	Female	47	(Scottish, English)	yes	yes	Island
143	Female	27	Canadian-European	yes	yes	Manitoba
144	Female	64	British	yes	no	
145	Female	72	British	no	no	
1.0		,		110	110	British
146	Female	51	Canadian British	yes	yes	Columbia
147	Female	42			Ontario	
						British
148	Female	44	Canadian-Dutch	yes	yes	Columbia

			3rd generation			British
149	Male	48	Canadian	yes	yes	Columbia
						British
150	Female	23	Canadian-European	yes	yes	Columbia
151	Male	35	Caucasian	yes	yes	Ontario
152	Female	25	Canadian	yes	yes	Ontario
153	Male	28	Metis	yes	yes	Saskatchewan
154	Male	51	Canadian-European	yes	yes	Saskatchewan
155	Female	40	Canadian	yes	yes	Manitoba
156	Female	28	Canadian	yes	yes	Alberta
157	Female	38	Canadian	yes	yes	Ontario
			Canadian (mixed			
			Northern European			British
158	Female	29	ancestry)	yes	yes	Columbia
159	Male	29	Canadian	yes	yes	Manitoba
160	Male	32	Canadian	yes	yes	Ontario
161	Female	42	Scottish Canadian	yes	yes	Ontario
162	Female	22	Canadian European	yes	yes	Ontario
						British
163	Male	63	Canadian Irish	yes	yes	Columbia
						British
164	Female	59	Canadian	yes	yes	Columbia
165	Female	25	Caucasian	yes	yes	Ontario
166	Female	26	Canadian	yes	yes	Alberta
167	Female	28	Ukrainian	yes	no	
168	Male	30	European	yes	yes	Ontario
1.60	3.6.1	27	G 1'			Newfoundland
169	Male	27	Canadian	yes	yes	and Labrador
			Annishanabe, Canadian-			
			Newfoundland-			
170	Female	26	European	yes	yes	Ontario
171	Female	28	Canadian	yes	yes	Ontario
1/1	1 cinaic	20	Canadian	yes	yes	Newfoundland
172	Male	18	Canadian	yes	yes	and Labrador
			Caucasian-	<i></i>	<i>J</i> - ~	
173	Male	30	Canadian	yes	yes	Alberta
			Canadian, Scottish,			
174	Male	22	Dutch, English	yes	yes	Manitoba
175	Male	30			Ontario	
176	Male	34	Canadian	yes	yes	Alberta
177	Female	26	Canadian	yes	yes	Saskatchewan
178	Male	48	Canadian-European	yes	yes	Ontario

						Prince Edward
179	Female	28	Caucasian	yes	yes	Island
180	Female	55	Canadian	yes	yes	Saskatchewan
						Newfoundland
181	Male	25	Canadian	yes	yes	and Labrador
			Canadian-European			
182	Female	36	(Italian-Canadian)	yes	yes	Ontario
183	Male	38	Canadian	yes	yes	Alberta
			Canadian-			
184	Female	27	American	yes	yes	Ontario
185	Male	30	Canadian European	yes	yes	Alberta
186	Male	24	Caucasian	yes	yes	Alberta
187	Female	33	Canadian-European	yes	yes	Ontario
188	Male	37	Canadian-European	yes	yes	Ontario
			Canadian-Irish and			
189	Female	23	German	yes	yes	Ontario
190	Female	32	Canadian	yes	yes	Alberta
191	Male	30	Canadian-European	yes	yes	Alberta
192	Female	30	Canadian-European	yes	yes	Alberta
193	Female	29	French Canadian	yes	yes	Quebec
194	Male	33	Canadian-Dutch	yes	yes	Alberta
			European			
195	Female	42	American	no	no	
196	Male	26	Canadian	yes	yes	Ontario
						Newfoundland
197	Female	61	Canadian - British	yes	yes	and Labrador
198	Female	29	Canadian	yes	yes	Ontario
199	Female	32	Canadian	yes	yes	Alberta
						British
200	Female	29	Canadian	yes	yes	Columbia
201	Female	29	Somali-Canadian	yes	yes	Ontario
			English,			
			Portuguese, South			
			East Asian (a big			
			mix, others in there			British
202	Female	29	as well)	yes	yes	Columbia

Table E2. Demographic questions 5b - 8

	T			T	
Participant	5.b. If you were not born in Canada, what country were you born in?	5.c. If you were not born in Canada, how old were you when you moved to Canada?	6. What city or town did you grow up in?	7. What city/town and province do you live in currently?	8. Have you lived in another province or territory for more than 1 year?
1			Charlottetown, Labrador	Mississauga, Ontario	yes
				Calgary	Ţ.
3			Red deer Delburne	Alberta Red Deer	no no
4 5			Red Deer Goderich	Calgary Alberta Mississauga	no no
6			Winnipeg, MB	Winnipeg, MB	yes
7			Kirkland Lake	Mississauga, ON	no
8			Kapuskasing	North Vancouver	no
9	USA	19	Leonardville, NB (4 years); Salisbury, NC (3 years); Cullowhee, NC (3 years)	Toronto, ON	yes
10			Warwick	Québec	no
11			St-Jean- Chrysostome (Lévis)	Québec (Québec)	no
12			Halifax, Nova- Scotia	Ottawa, Ontario	no
13			Airdrie	Calgary Alberta	no
14			Matane	Montreal, Quebec	no
15	United States	18	Quantico, Virginia	Montreal, Quebec	yes
16			Saguenay	Montreal	no
17			St-Mathieu-de- Beloeil	St-Alphonse- Rodriguez	no
18			Saint-Hyacinthe	Quebec city, Quebec	no
19			st-jean	gaspe qc	no

				Toronto,	
20	Romania	1	Toronto	Ontario	no
			10101110	Waterville-	
21			Breakeyville	Sunbury	no
22			Red Deer	Calgary	yes
				Brandon,	j
23	Hong Kong	11	Vancouver	Manitoba	yes
24			Calgary	Calgary, AB	no
25			Portage La Prairie	Toronto	yes
				Calgary,	
26			Surrey	Alberta	yes
27			Elnora	Red deer	no
28			Red Deer	Blackfalds	no
				St. John's,	
29			Pickering	Newfoundland	yes
30			Trochu	Edmonton, AB	no
31			Hunter River	Sydney, NS	yes
				Edmonton	· ·
32			Saskatoon	Alberta	yes
33			Trochu	Red Deer	no
				Lousana,	
34			Edmonton	Alberta	no
35			Truro	St. John's, NL	no
36			Calgary, AB	Calgary, AB	yes
37			Estevan SK	Toronto ON	no
38			fredericton, NB	toronto, ON	yes
39			Weyburn	Toronto	yes
40			Terrace, BC	Toronto, ON	yes
				United States	
41			Saskatoon	(California)	yes
			Charlottetown,	Labrador City,	
42			Labrador	NL	no
4.0			1 1 13	Lacombe,	
43			lacombe, Alberta	Alberta	no
4.4			C4 Tala:: 2:	Paradise,	
44			St. John's	Newfoundland	no
45			Red Deer	City of	no
				City of Kawartha	
46			Strathroy	Lakes, Ontario	no
47			Courtice	Sarnia	yes
т/			Charlottetown,	Surma	<i>y</i> 05
48			Labrador	Toronto	no
49			Trurp	Dartmouth, NS	yes

50		Picture butte	Rural	no
			Mississauga	
51		Brampton	Ontario	no
		•	Mississauga,	
52		Kirkland Lake	Ontario	no
53		Edmonton, AB	Red Deer, AB	yes
54		Charlton	Timmins, On	no
			Cambridge,	
55		Vancouver	ON	no
56		Etobicoke	Puslinch	no
			London	
57		London	Ontario	no
58		Hamilton	Hamilton	no
59		Toronto	Toronto	no
			Guelph,	
60		Milton	Ontario	no
61		Milton	Ancaster	no
		Glen	Winnipeg,	
62		Ewen, Saskatchewan	Manitoba	yes
			Red Deer,	·
63		Red Deer, Alberta	Alberta	no
			Mississauga	
64		Sarnia	ontario	no
65		Regina	Regina	yes
		_	Regina,	·
66		Balgonie	Saskatchewan	yes
			Mississauga	
67		Mississauga	Ontario	no
68		Kirkland Lake	Kirkland Lake	no
			Oshawa,	
69		Oshawa	Ontario	no
			Kamloops,	
			British	
70		Delburne	Columbia	yes
			Mississauga,	
71		Mississauga	Ontario	yes
		G10 T 1 1 1 1	Niverville,	
72		Gift Lake, Alberta	Manitoba	yes
7.0		Moose Factory,	Niverville,	
73		Ontario	Manitoba	yes
74		Vancouver	London, ON	yes
75		Dad Lalza Outania	Winnipeg	
75		Red Lake Ontario	Manitoba	no
76		Delta	Delta, BC	no
77		London	Kitchener	no

				Whitehorse,	
78			Vancouver, BC	Yukon	no
70			vancouver, BC	Winnipeg,	110
79			Winnipeg	Manitoba	yes
- 12			· · · · · · · · · · · · · · · · · · ·	Fredericton,	yes
				New	
80	Switzerland	1	Ottawa	Brunswick	no
81			Surrey	Surrey, BC	yes
				Port Moody,	<i>y</i>
82			Burnaby, BC	BC	no
			St. Stephen, New	Grande Cache,	
83			Brunswick	Alberta	yes
					Prefer not to
84			Regina	Winnipeg, MB	answer
85			montreal	victoria, bc	yes
				Beamsville,	•
86			Ancaster	ON	no
87			Toronto	Brantford ON	no
88			Mackenzie, BC	Edmonton, AB	no
89			barrie	kelowna bc	yes
90			Calgary	Lousana, alberta	no
			<i>U</i> ,	Qualicum	
91			Ottawa	beach BC	yes
				Campbell	·
92			Edmonton	River, BC	no
			Moncton &	,	
93			Winnipeg	Saskatoon, SK	yes
94			St. John's	St. John's, NL	yes
95			Red Deer	Calgary	no
, ,				Toronto	
96			Red Deer	Ontario	yes
				St. john's,	,
97			Flin Flon, Manitoba	newfoundland	yes
			North Battleford,	Calgary,	
98			Saskatchewan	Alberta	yes
				Red Deer,	
99			Lethbridge	Alberta	no
				Red Deer,	
100			Montreal, Quebec	Alberta	yes
101			Red Deer	Edmonton AB	no
102	USA	20	Arlington	Washington	no
103			Richmond	Richmond	no
104	Nigeria	5	Toronto	Brampton, ON	no

				Colcomy	
105			Colgony	Calgary Alberta	200
103			Calgary	Victoria,	no
				British	
106			Comov	Columbia	***
			Comox		no
107			Calgary	Calgary, AB	no
100			D 1	Red Deer,	
108			Ponoka	Alberta	no
100			D 1D	Edmonton,	
109			Red Deer	Alberta	no
110			Carlton,	Red Deer,	
110			Saskatchewan	alberta	no
111			Armstrong	Armstrong, BC	no
112			Plaster Rock	Perth Andover	no
113			Sudbury	Sudbury	no
			Scarborough,	North York,	
114			Ontario	Ontario	no
115			goulais river	blind river	no
116			St. John's	Calgary, AB	yes
				Goose Bay,	·
117			Charlottetown	Labrador	no
				London	
118			Sarnia	Ontario	no
				Calgary,	
119	China	6	Barrie, Ontario	Alberta	yes
120			Red Deer	Red Deer	no
			Conception Bay		
121			South	St. John's	no
122	UK	9	Deep River, ON	Toronto	no
123			Winnipeg	Winnipeg	no
			1.5	Calgary	
124			Red deer	Alberta	no
125	Germany	0	Red deer	Edmonton, AB	yes
				Saint John,	J 30
				New	
126			Saint John	Brunswick	yes
			Did not grow up in	Toronto,	<i>J</i> 22
127			Canada	Ontario	no
128	Philippines	28	Manila	Toronto	no
129	- mappines		St. John's	St. John's	no
12)			St. John S	Winnipeg,	110
130			Winnipeg	Manitoba	no
130			w minpeg	St. John's,	no
131			St. John's	Newfoundland	Vieg
	Hands	1			yes
132	Uganda	4	Winnipeg	Manitoba	no

133			Brampton	Brampton	no
134			Winnipeg	Winnipeg	no
				Mississauga,	
135			Toronto	Ontario	no
136			Burlington, ON	Toronto, ON	yes
137			Taber, AB	Lethbridge, AB	yes
			various, Kamloops,	<u> </u>	J
			BC and Fredericton,		
138			NB	Calgary	yes
139			Barrie	Barrie	no
	British				
	Controlled			Halifax, Nova	
140	China	1	Halifax	Scotia	no
	England/			Fredericton,	
	United		Fredericton, New	New	
141	Kingdom	7	Brunswick	Brunswick	yes
				Charlottetown,	
				Prince Edward	
142			Charlottetown	Island	yes
143			Minnedosa, MB	Winnipeg, MB	no
			Pointe Claire,	St-Lazare,	
144	England	1	Quebec	Quebec	no
				Stayner,	
145	England	6	Toronto	ontario	no
146			Kimberley BC	Nanaimo BC	yes
147			London	Toronto	no
148			Port Coquitlam	Port Coquitlam	no
				Port	
149			Vancouver	Coquitlam, BC	no
1.50			T7'	W D.C	
150			Victoria	Victoria, BC	no
151			London, Ontario	Lacombe, AB	yes
1.50			D 4 11	Kitchener,	
152			Bothwell	Ontario	no
152			Dad daan	Red deer	
153			Red deer	alberta	yes
154			Pad Dear	Red Deer,	***
154			Red Deer	Alberta	yes
155			Perdue	Alberta Red Deer	yes
156			Red Deer	Red Deer, Alberta	no
					no
157			Mount Forest	Mount Forest	yes
158			Fort St John, BC	Toronto, ON	no
150			Winnings	Toronto,	
159			Winnipeg	Ontario	no

				Toronto	
160			Acton Ontario	Ontario	no
100			New Glasgow Nova	Rural New	no
161			Scotia	Brunswick	yes
101			Scotta	regina,	yes
162			saskatoon	saskatchewan	yes
163			Penticton BC	Penticton BC	yes
103					yes
161			Saint John, New Brunswick	Mineville, Nova Scotia	****
164			Drunswick		yes
1.05			Tr. 4	Toronto,	
165			Toronto	Ontario	no
1.00			XX7:41	Red deer,	
166	T.11 .	12	Withrow	alberta	no
167	Ukraine	12	Odessa	Toronto	yes
1.60			77' 1 1 1 1 1	Sudbury	
168			Kirkland lake	ontario	no
			Grand Falls-	Grand Falls-	
169			Windsor	Windsor	no
			St.John's,		
			Newfoundland;		
			Sioux	St.John's,	
170			Lookout,Ontario	Newfoundland	yes
				Calgary,	
171			Mississauga	Alberta	yes
				St. John's	
172			St. John's	Newfoundland	no
				Red Deer,	
173			Red Deer	Alberta	no
			Portage la Prairie,	Portage la	
174			MB	Prairie, MB	no
175			Niagara Falls	Hamilton	no
				Red Deer,	
176			Red Deer	Alberta	no
				Ottawa,	
177			London, Ontario	Ontario	yes
178			Midland, Ontario	Surrey, BC	yes
179			Crapaud	United states	no
			•	Red Deer,	
180			Hudson Bay	Alberta	no
			Charlottetown,		
181			Labrador	Paradise, NL	no
				Woodbridge,	
182			Woodbridge	Ontario Ontario	no
183			Airdrie, AB	Calgary, AB	no
103			Till direction, Till	Suigury, MD	110

				Oil Springs,	
184			Oil Springs, ON	ON	yes
				Red deer	·
185			Red deer	alberta	no
186			Red Deer	Red Deer	no
187			Toronto	Victoria, BC	yes
				Hamilton,	
188			Bradford	Ontario	yes
189			Parry Sound	Cantley QC	no
				Red Deer	
190			Innisfail	Alberta	yes
191			Hanna, Alberta	Edmonton	yes
				Red Deer,	
192			Red Deer	Alberta	no
193			Gatineau, QC	Toronto, ON	no
194			Red Deer	Red Deer	no
			Rock springs,	Toronto,	
195	US	36	Wyoming US	Ontario	yes
196			Toronto	Toronto	no
197			Corner Brook	Mount Pearl	no
198			Charlton	Newmarket	no
199			Red Deer	Airdrie AB	yes
200			Hinton, AB	Calgary, AB	yes
201			Toronto	Etobicoke	no
				Red Deer	
202			Terrace	Alberta	no

Table E3. Demographic questions 8a - 13

Participant	8.a. Please specify which province(s)/territor y(ies) and length of time.	9. Have you visited other provinces or territories in Canada?	10. Where was your mother born?	11. Where was your father born?	12. How well would you rate your familiarity with the location of provinces/territorie s and/or cities of Canada?	13. What is your highest level of education?
	NII 6 4			Fogo	Commission	M 2
1	NL, for 4		Labuadan	Island,	Completely	Master's
1	years	yes	Labrador	NL	Familiar	Degree
						Trade/
2		yes	Alberta	Alberta	Most Locations	Certificate
						Trade/
3		yes	Alberta	Alberta	Most Locations	Certificate

					Completely	
4		yes	Italy	Alberta	Familiar	Undergrad
		yes	Clinton,	Goderich	1 amma	Ondergrad
5		yes	Ontario	, Ontario	Most Locations	Undergrad
	Newfoundlan	yes	Ontario	, Ontario	Wost Locations	Ondergrad
	d - 6 years,					
	Alberta - 3					
	years,					
	Northern					
	Ontario - 6			Northern	Completely	
6	years	yes	Alberta	Quebec	Familiar	Undergrad
	Julia	J = =		- Carret		Trade/
7		yes	Ontario	Ontario	Most Locations	Certificate
-		<i>y</i>				Trade/
8		yes	Ontario	Ontario	Most Locations	Certificate
	New					
	Brunswick -					
	4 years;					
	Quebec - 12		USA	USA		Master's
9	years	yes	(Florida)	(Florida)	Most Locations	Degree
					Completely	Trade/
10		yes	Quebec	Quebec	Familiar	Certificate
			Baie			
			Comeau	Lévis		
11		yes	(Québec)	(Québec)	Most Locations	Undergrad
			Saulniervil	St-		
			le, Nova-	Gervais,	Completely	Master's
12		yes	Scotia	Québec	Familiar	Degree
					Completely	
13		yes	Calgary	Regina	Familiar	Undergrad
14		yes	Quebec	Quebec	Most Locations	Undergrad
	Kingston,	<i>J</i> ==	2	2		Januargiaa
	Ontario (3					
	years; visit					
	regularly as		Halifax,	Copenha		
	my family		Nova	gen,	Completely	
15	lives there)	yes	Scotia	Denmark	Familiar	Undergrad
16		yes	Quebec	Quebec	Most Locations	Undergrad
17		yes	Quebec	Quebec	Most Locations	Undergrad
						Trade/
18		yes	quebec	quebec	Most Locations	Certificate
						Some
						college/
19		yes	quebec	quebec	Most Locations	university

					Completely	Master's
20		yes	Romania	Romania	Familiar	Degree
21		yes	Quebec	Quebec	Most Locations	Undergrad
21	Quebec, just	yes	Quesce	Canada,	Wost Eccurons	Master's
22	over 1 year	yes	Germany	Quebec	Most Locations	Degree
	Manitoba, 1	J - 2		- Constant	Completely	
23	year	yes	Taiwan	China	Familiar	Undergrad
					Completely	
24		yes	Vietnam	Vietnam	Familiar	Undergrad
	Ontario 7					
	years.					
	Manitoba 18			Manitob	Completely	
25	years	yes	Manitoba	a	Familiar	Undergrad
2.5	20 years in			Saskatch		
26	BC	yes	Ontario	ewan	Most Locations	Undergrad
27			A 11	A 11 .	Completely	Trade/
27		yes	Alberta	Alberta	Familiar	Certificate
28	D.	yes	Alberta	Alberta	Most Locations	Undergrad
	Prince					
	Edward Island, 8					HS
29	years	VIAC	Quebec	Quebec	Some Locations	Diploma
	years	yes	Quebec	Quebec	Some Locations	Some
						college/
30		yes	Alberta	Alberta	Most Locations	university
	NB, NFLD,) U.S.	11100100	1110 01100	TVIOSV EG GWIGHS	Trade/
31	QC, PE, NS	yes	PE	PE	Some Locations	Certificate
	Ontario for 8	<i>y</i>				
	years,					
	Saskatchewa					
	n for 11					
	years, Alberta					
32	for 7 years	yes	Alberta	Ontario	Most Locations	Undergrad
			Saskatche			Trade/
33		yes	wan	Alberta	Most Locations	Certificate
						Master's
34		yes	England	Alberta	Some Locations	Degree
35		yes	NS	NS	Some Locations	Undergrad
			St John,	Calgary,	Completely	
36	Ontario	yes	NB	AB	Familiar	Undergrad
27			A 11	Saskatch	Completely	PhD
37		yes	Alberta	ewan	Familiar	Degree
					C 1 . 1	
20	pei (6 years)		ND	NC	Completely	Master's
38	NS (8 years)	yes	NB	NS	Familiar	Degree

39	Weyburn, SK - 16 years; Regina, SK - 4 years; Winnipeg, MB - 5.5 years; South Korea - 3 years; Toronto, ON	Wos	Saskatche	Manitob	Most Locations	Master's Degree
39	- 8 years Alberta (2	yes	wan	a	Wiost Locations	Degree
	years),					
	Quebec (2			Canada,	Completely	Master's
40	years)	yes	Portugal	Quebec	Familiar	Degree
			Saskatche	Saskatch	Completely	Master's
41	Quebec	yes	wan	ewan	Familiar	Degree
						Trade/
42		yes	NL	NL	Most Locations	Certificate
						Some
43		MOS	Alberta	Alberta	Most Locations	college/ university
43		yes	Newfound	Newfoun	Completely	Trade/
44		yes	land	dland	Familiar	Certificate
					Completely	
45		yes	Italy	Alberta	Familiar	Undergrad
					Completely	
46		yes	Ontario	Ontario	Familiar	Undergrad
	Alberta, 3		Ontario,	Calabria,		
47	years	yes	Canada	Italy	Some Locations	Undergrad
10		****	NII	NII	Completely	I In domana d
48	Newfoundlan	yes	NL Nova	NL Nova	Familiar	Undergrad Master's
49	d, 11 years	yes	Scotia	Scotia	Most Locations	Degree
12	a, 11 years	yes	Beottu	Beotta	Wost Locations	Some
						college/
50		yes	England	Canada	Most Locations	university
			Philippine	Philippin		Trade/
51		yes	S	es	Some Locations	Certificate
52		yes	Ontario	Ontario	Most Locations	Undergrad
	Northern					
52	Ontario 12	****	A 1h auta	A 1h aut -	Most Losstinus	I Indones d
53	years	yes	Alberta	Alberta	Most Locations Completely	Undergrad Trade/
54		yes	Ontario	Ontario	Completely Familiar	Certificate

			Philippine	Philippin	Completely	
55		yes	S	es	Familiar	Undergrad
						Some
				Huntsvill		college/
56		yes	Toronto	e	Most Locations	university
						Some
					Completely	college/
57		yes	Ontario	Ontario	Familiar	university
					Completely	Master's
58		yes	Ontario	Ontario	Familiar	Degree
					Completely	Trade/
59		yes	Iraq	Egypt	Familiar	Certificate
				Saskatch		
60		yes	Manitoba	ewan	Most Locations	Undergrad
				Saskatch		HS
61		yes	Manitoba	ewan	Some Locations	Diploma
	Alberta for					Some
	about 30		Saskatche	Saskatch		college/
62	months	yes	wan	ewan	Most Locations	university
			Alberta,	Alberta,		Master's
63		yes	Canada	Canada	Most Locations	Degree
64		yes	Canada	Canada	Most Locations	Undergrad
			Saskatche	Saskatch	Completely	Trade/
65	Alberta	yes	wan	ewan	Familiar	Certificate
	Newfoundlan		Saskatche	Saskatch	Completely	
66	d 3 years	yes	wan	ewan	Familiar	Undergrad
			Yugoslavi		Completely	
67		yes	a	Ontario	Familiar	Undergrad
					3.5	Trade/
68		yes	Finland	Finland	Most Locations	Certificate
			Ontario,	Quebec,		
69		yes	Canada	Ontario	Most Locations	Undergrad
	D W. 1					Some
70	British		A 1h anta	A 11- and -	Most Losstinia	college/
70	Columbia	yes	Alberta	Alberta	Most Locations	university
	British				Completely	
71	Columbia, 2	VAC	Ontario	Alberta	Completely Familiar	Undergrad
/ 1	years	yes	Ontario		1 allillai	Officergrad
	Ontario 7		Cift Lalza	Gift Lake,	Completely	Moston's
72		VAC	Gift Lake, Alberta	Alberta	Completely Familiar	Master's Degree
12	years Saskatchewa	yes	Alberta	Aibella	1 allillai	Degree
	n - 4 years;		Waskagan	Waskaga		
	Alberta - 10		ish,	nish,		Master's
73	years;	yes	Quebec	Quebec	Most Locations	Degree
13	years,	yes	Quebec	Quebec	Wiost Locations	Degree

	Manitoba - 16 years; Ontario - 35 years; Quebec - 2 years					
74	Ontario, 4 years	yes	Toronto, ON	Vancouv er, BC	Some Locations	Some college/ university
75		yes	Ontario	Manitob a	Completely Familiar	Some college/ university
76		yes	British Columbia	British Columbi a	Most Locations	Some college/ university
77		yes	saskatche wan	saskatch ewan	Completely Familiar	Undergrad
78		yes	Ontario	ВС	Completely Familiar	Undergrad
79	Quebec, 1.5 years	yes	Manitoba	Manitob a	Completely Familiar	Master's Degree
80		yes	Ontario	Ontario	Completely Familiar	Some college/ university
81	Saskatchewa n	no	British Columbia	Ontario	Some Locations	Some college/ university
82		yes	Saskatche wan	Ontario	Completely Familiar	Master's Degree
83	Alberta - 6 years, Quebec - 1.5 years	yes	New Brunswick	Boston, Massach usetts	Completely Familiar	Trade/ Certificate
84		yes	Saskatche wan	Saskatch ewan	Completely Familiar	Undergrad
85	6 years in San Ramon, California	yes	ontario	bc	Completely Familiar	Undergrad
86		yes	Ontario	Ontario	Completely Familiar	Trade/ Certificate
87		yes	Ontario	Ontario	Completely Familiar	Undergrad
88		yes	Alberta	Manitob a	Most Locations	Trade/ Certificate

						Some
						college/
89	bc	yes	ontario	ontario	Most Locations	university
0)	l oc	yes	Ontario	Omario	Wiost Locations	Some
					Completely	college/
90		NOC	Alberta	B.C	Familiar	university
90	NWT 5yrs,	yes	Alberta	B.C	T'allillal	university
					Completely	Trade/
91	PQ 1 yr, PEI	Y/OC	ontario	ontario	Familiar	Certificate
91	1 yr	yes	Ontario	Omano	Ганша	Some
					Completely	
92		****	Ireland	England	Completely Familiar	college/
92	ND. O vicens	yes	Ireiand	England	raiiiiiai	university
	NB: 9 years					
	then 3 years.					
	MB: 7 years.					
	NS: 2 years. QB: 6 weeks				Completely	Master's
93	_	****	NS	NB	Completely Familiar	
93	(if applicable) Ontario, 3	yes		Hong	raiiiiiai	Degree
94	*	Y/OC	Hong		Some Locations	Undergrad
94	years	yes	Kong	Kong	Completely	HS
95		Y/OC	Alberta	Alberta	Familiar	Diploma
93	Nova Scotia	yes	Alberta	Nova	Completely	Dipionia
96	3 years	NOC	Manitoba	Scotia	Familiar	Undergrad
70	manitoba	yes	United	Manitob	Completely	Trade/
97	(20+ years)	yes	States	a	Familiar	Certificate
91	Alberta, 7	yes	States	a	1 aiiiiiai	Certificate
98	years	yes	Alberta	Alberta	Most Locations	Undergrad
90	years	yes	Alberta	Winnipe	Wiost Locations	Undergrad
				_		
			Idaho	g Manitob	Completely	
99		MAC	USA		Familiar	Undergrad
77	Quebec 38	yes	Newfound	a	1 dillilai	Officergrau
100	yrs	yes	land	Quebec	Most Locations	Undergrad
101	y13	yes	Alberta	Alberta	Most Locations Most Locations	Undergrad
101		yes	Mocita	Mocita	Wost Locations	Some
				Washing		college/
102		yes	BC	ton	Some Locations	university
102		303	D C	Chilliwa	Some Locations	Trade/
103		yes	Richmond	ck	Most Locations	Certificate
103		jes	Talimona	OR .	17105t Documents	HS
104		yes	Nigeria	Nigeria	Some Locations	Diploma
101		<i>J</i> C S	British	1,150114	Some Economis	2 I promu
			Coloumbi			Master's
105		yes	a	Ontario	Most Locations	Degree
105		303	u	Jitano	Wiost Locations	Degree

			Washingto	Halifax,		
			n State,	Nova	Completely	Trade/
106		yes	USA	Scotia	Familiar	Certificate
100		<i>y</i> es	CDII	Beotla	Tummu	Some
				Saskatch		college/
107		yes	Ontario	ewan	Most Locations	university
107		yes	Alberta	England	Most Locations Most Locations	Undergrad
100		yes	Anocita	Liigiand	Wost Locations	Some
						college/
109		NO.	Alberta	Alberta	Most Locations	_
109		yes	Alberta	Alberta	Wost Locations	university
			C1 4 -1	C14 -1-		Some
110			Saskatche	Saskatch	Mart I andiana	college/
110		yes	wan	ewan	Most Locations	university
111			Saskatche	D.C.	Completely	HS
111		yes	wan	BC	Familiar	Diploma
				New		
			New	Brunswi	Completely	Master's
112		yes	Brunswick	ck	Familiar	Degree
					Completely	
113		yes	Ontario	Ontario	Familiar	Undergrad
					Completely	
114		yes	Ontario	Ontario	Familiar	Undergrad
					Completely	HS
115		yes	ontario	ontario	Familiar	Diploma
	Newfoundlan					
	d 23 yr.					
	Ontario 8					
116	months.	yes	Ontario	Brazil	Most Locations	Undergrad
			Newfound	Newfoun	Completely	
117		yes	land	dland	Familiar	Undergrad
					Completely	
118		yes	Ontario	Ontario	Familiar	Undergrad
	Ontario - 16				Completely	6
119	years	yes	China	China	Familiar	Undergrad
120		yes	Alberta	Alberta	Most Locations	Undergrad
120) U.S.	Newfound	Newfoun		Master's
121		yes	land	dland	Most Locations	Degree
121			Derry,	Jimiid		208.00
			Northern	London,	Completely	PhD
122		yes	Ireland	UK	Familiar	Degree
		<i>y</i> 0.5	Totalla		- unimum	Some
				Saskatch	Completely	college/
123		yes	Manitoba	ewan	Familiar	university
123		yes	1viaiiitoua	Canada,	1 amma	Master's
124		VAC	Cormony		Most Locations	
124		yes	Germany	Quebec	IVIOSI LOCALIOIIS	Degree

	Quebec - 1.5				Completely	
125	years	yes	Germany	Quebec	Familiar	Undergrad
	Prince					
	Edward			New		Some
	Island for 5		New	Brunswi	Completely	college/
126	years	yes	Brunswick	ck	Familiar	university
127		yes	Ontario	Ontario	Most Locations	Undergrad
			Philippine	Philippin		Trade/
128		yes	S	es	Most Locations	Certificate
			Newfound	Newfoun		
129		yes	land	dland	Most Locations	Undergrad
				Winnipe		
				g,		Some
			Winnipeg,	Manitob		college/
130		yes	Manitoba	a	Most Locations	university
	Toronto; 3			Newfoun		Master's
131	years	yes	Ontario	dland	Some Locations	Degree
						Some
					Completely	college/
132		yes	Africa	Africa	Familiar	university
						Some
					Completely	college/
133		yes	China	Vietnam	Familiar	university
						Some
				Manitob		college/
134		yes	Ontario	a	Most Locations	university
						Some
						college/
135		yes	Lebanon	Lebanon	Most Locations	university
	Quebec, 10					Master's
136	years	yes	Quebec	Quebec	Most Locations	Degree
	British					
105	Colombia 4		4.11	A 44	Completely	
137	years	yes	Alberta	Alberta	Familiar	Undergrad
120	Manitoba (2		3.4	Manitob	Completely	PhD
138	years)	yes	Manitoba	a	Familiar	Degree
139		yes	Ontario	Ontario	Most Locations	Undergrad
1.40			TT 1:0	Hong	Completely	
140		yes	Halifax	Kong	Familiar	Undergrad
	0			Saint		
	Ontario 6			John,		
	years;		T 1	New		DI D
1.41	Saskatchewa		London,	Brunswi	No. 1	PhD
141	n 3 years	yes	England	ck	Most Locations	Degree

	Montreal,					
	Quebec - 4					
	years;					
	Ottawa,		Prince	Prince		
	Ontario - 2		Edward	Edward	Completely	Master's
142	years	yes	Island	Island	Familiar	Degree
			Cumbria	Cumbria,		
143		yes	UK	UK	Most Locations	Undergrad
						PhD
144		yes	Ireland	England	Most Locations	Degree
						HS
145		yes	England	England	Most Locations	Diploma
						Some
					Completely	college/
146	Alberts	yes	England	England	Familiar	university
				Nova	Completely	Trade/
147		yes	Ontario	Scotia	Familiar	Certificate
				British		
			Nova	Columbi		
148		yes	Scotia	a	Most Locations	Undergrad
						Trade/
149		yes	BC	BC	Most Locations	Certificate
			Vancouver		Completely	
150		yes	, BC	England	Familiar	Undergrad
	British					
	Columbia for					
151	6 years	yes	Ontario	Ontario	Most Locations	Undergrad
	-		Ontario,	Ontario,		
152		yes	Canada	Canada	Most Locations	Undergrad
	Saskatchewa		Saskatche	British	Completely	Trade/
153	n 5 years	yes	wab	columbia	Familiar	Certificate
	Saskatchewa		Saskatche	Saskatch		Trade/
154	n 6 years	yes	wan	ewan	Most Locations	Certificate
	Manitoba 13					
	years					
	Saskatchewa		Saskatche	Saskatch		HS
155	n 16 years	yes	wan	ewan	Some Locations	Diploma
				Saskatch		Trade/
156		yes	Alberta	ewan	Most Locations	Certificate
	Saskatchewa				Completely	
157	n/3 years	yes	Ontario	Holland	Familiar	Undergrad
						Master's
158		yes	BC	Alberta	Most Locations	Degree

			0.1.1	0.1.1		N
159		yes	Saskatche wan	Saskatch ewan	Some Locations	Master's Degree
						Some
160		yes	Quebec	Northern Ontario	Most Locations	college/ university
	Alberta (7 yrs) Ontario				Completely	Some college/
161	(9 yrs)	yes	Ont	NS	Familiar	university
	ontario (2 years) alberta				Completely	
162	(2 years)	yes	ontario	ontario	Familiar	Undergrad
163	Yukon 2 year , Alberta 2	VOC	BC	Alberta	Completely Familiar	Trade/ Certificate
103	year BC: 3yrs & 2	yes	DC	Alberta	raiiiiiai	Certificate
	yrs & 2 yrs;					
	Alberta: 3 yrs & 12 yrs;					
	Quebec: 4					
	yrs; NB: 9					
	yrs; Ont: 2 yrs; NS: 25				Completely	HS
164	yrs	yes	BC	BC	Familiar	Diploma
165		yes	Ontario	Ontario	Some Locations	Undergrad
				New york		HS
166		yes	Alberta	state, usa	Most Locations	Diploma
	Montreal,		Siberia,	Odessa,		
167	Quebec	no	Russian	Ukraine	Most Locations Completely	Undergrad
168		yes	Ontario	Ontario	Familiar	Undergrad
			Newfound	Newfoun dland		
			land and	and	Completely	
169		yes	Labrador	Labrador	Familiar	Undergrad
	Ontario/Mani		Newfound			Some college/
170	toba	yes	land	Ontario	Some Locations	university
	Alberta (8			British Columbi		
171	years)	yes	Ontario	a	Most Locations	Undergrad

			Newfound	Newfoun	Completely	HS
172		yes	land	dland	Familiar	Diploma
				Manitob	Completely	•
173		yes	Ontario	a	Familiar	Undergrad
				Manitob	Completely	Trade/
174		yes	Manitoba	a	Familiar	Certificate
						Master's
175		yes	Ontario	Ontario	Most Locations	Degree
						Some
			Saskatche		Completely	college/
176		yes	wan	Quebec	Familiar	university
	Saskatchewa	J 5.2		Q		
	n for 5 years					
	and then					
	again for 2		Saskatche	Manitob	Completely	Trade/
177	years	yes	wan	a	Familiar	Certificate
	Alberta, 5				Completely	
178	years	yes	Ontario	Ontario	Familiar	Undergrad
				Prince		S
				Edward		
179		yes	Manitoba	Island	Most Locations	Undergrad
			Saskatche	Saskatch		Trade/
180		yes	wan	ewan	Most Locations	Certificate
				Mary's		
			Forteau,	Harbour,	Completely	
181		yes	NL	NL	Familiar	Undergrad
			Buenos			
			Aires,			PhD
182		yes	Argentina	Toronto	Most Locations	Degree
				Manitob	Completely	Trade/
183		Yes	Alberta	a	Familiar	Certificate
	Newfoundlan					
	d and					
	Labrador for		Michigan,			Trade/
184	6 years	yes	USA	Ontario	Some Locations	Certificate
						Trade/
185		yes	Alberta	Alberta	Most Locations	Certificate
			Saskatche	Saskatch	Completely	Trade/
186		yes	wan	ewan	Familiar	Certificate
	British					
	Columbia, 3					
187	years	yes	Ontario	Ontario	Most Locations	Undergrad
	BC for 3				Completely	Master's
188	years	yes	Ontario	Ontario	Familiar	Degree
			London,O	Kitchene		
189		no	N	r ON	Most Locations	Undergrad

					Completely	Master's
190	BC 1.2 years	yes	Alberta	Alberta	Familiar	Degree
	Quebec- 3					
	years,					
404	Norway 2				Completely	Master's
191	years	yes	Alberta	Alberta	Familiar	Degree
			Innisfail,	Calgary,		
192		yes	Alberta	Alberta	Most Locations	Undergrad
						Master's
193		yes	Ontario	Ontario	Most Locations	Degree
						Trade/
194		yes	Alberta	Alberta	Most Locations	Certificate
			Kansas,	Wyomin		
195	Quebec 2 yrs	yes	US	g, US	Some Locations	Undergrad
					Completely	
196		yes	Ontario	Ontario	Familiar	Undergrad
			Canada,	Canada,		
			Newfound	Newfoun	Completely	Master's
197		yes	land	dland	Familiar	Degree
					Completely	
198		yes	Ontario	Ontario	Familiar	Undergrad
	Manitoba 2		Saskatche		Completely	
199	years	yes	wan	Quebec	Familiar	Undergrad
	New					
	Brunswick					Trade/
200	for 2.5 years	yes	BC	Quebec	Some Locations	Certificate
				Mogadis		
			Mogadish	hu,		Master's
201		yes	u, Somalia	Somalia	Most Locations	Degree
				Cape		
				Town		
			Toronto	South		Trade/
202		yes	ON	Africa	Some Locations	Certificate

Table E4. Demographic questions 14 – 16a

Participant	14. What is your employment status?	15. What is or was your occupation?	16. Have you taken any linguistic courses before?	16.a. How many linguistic courses have you taken? Which ones?
1	Student	Graduate Student	no	
2	Fulltime	Medical lab assistant	no	

3	Parttime	IT Analyst	no	
4	Fulltime	•	no	
4	Self-	Geologist	no	Once Introduction to Languages and
5		Tanahina	T/OC	One; Introduction to Languages and Linguistics
	Employed Fulltime	Teaching Social worker	yes	Linguistics
6			no	
7	Fulltime	Interior Decorator	no	
0	II	Medical laboratory		
8	Homemaker	technologist	no	DA 1MA in the second DhD in
				BA and MA in linguistics, PhD in
				linguistics (ongoing):
		Student/academia		phonetics/phonology, morphology,
		Student/academic,		lexicology, syntax, semantics,
0	Canalana	Student teacher,	****	sociolinguistics, discourse analysis,
9	Student	writing tutor/editor	yes	linguistic anthropology, etc.
10	E 11.1	TT: 1 1 1 1 1		2. introductions to linguistics both in
10	Fulltime	IT help desk agent	yes	english and french
		Master's Student and		
11	Student	research assistant	no	
				I've taken two undergraduate
				sociolinguistics classes at the
				University of Ottawa, LIN1740
				Language & Society, and LIN2700
				World Languages. My current thesis
				also has to do with linguistic
12	Parttime	Research Assistant	yes	representations.
13	Fulltime	Geologist	no	
				2, Introduction to Linguistic, and
		Student and working in		Linguistic of Aboriginal Languages of
14	Parttime	restauration	yes	North America
		My training is in		
		history, but have held		
		all sorts of jobs from		
		tour guide to		
4 =	**	administrative assistant		
15	Unemployed	to political candidate	no	
	Self-			
16	Employed	Photographer	no	
		Environmental		
17	Fulltime	engineer	yes	English, German, Georgian
				mostly basic linguistic courses like
10				introduction to linguistics,
18	Fulltime	translator	yes	morphology and syntax
19	Fulltime	human resources	yes	1 :French linguistics

				Introduction to Linguistics (in French)
				Semantics
				Discourse Analysis
				Discourse Analysis and Pragmatics
				Language, Gender, and Sexuality
				Languages in Contact
				Language and Law
				Written Discourse Analysis
				Pidgins and Creoles
				Phonology
20	Student	PhD Student	yes	Grammatical Analysis
21	Fulltime	public servant	no	
22	Fulltime	Accountant	no	
23	Student	Student	no	
24	Fulltime	Geologist	no	
				English literature during my
				undergraduate studies.
25	Student	Designer	yes	2 courses
26	Fulltime	Sales	no	
27	Fulltime	Manager	no	
		Pastor/ Christian		
28	Fulltime	Minister	yes	Only one and it was French.
29	Parttime	Warehouse associate	no	
30	Student	Full Time Student	no	
				1 Yr French Immersion post-
		Office		secondary
31	Fulltime	Administrator/Manager	yes	French during Secondary school
		Sales Account		
32	Fulltime	Manager	no	
33	Fulltime	Service manger	no	
34	Fulltime	Vice Principal	no	
35	Fulltime	Waitress	no	
36	Fulltime	Teacher	no	
37	Student	Graduate Student	no	
				Two: intro to linguistics and syntax
				(both one semester and taught in
38	Student	phd Student	yes	French)
39	Student	PhD Student/TA	no	
	Prefer not to			
40	answer	Non-profit	no	
				In my undergraduate degree I doble
				majored in French and something else.
41	Student	Student	yes	I have taken many classes on French.

		Heavy Equipment		
42	Parttime	Operator	no	
43	Homemaker	contract painter	no	
44	Homemaker	Office Administrator	no	
45	Fulltime	Marketing Manager	no	
13	1 diffile	Environmental	110	
46	Student	Technician	no	
		Business Analyst in the		
47	Fulltime	utilities industry	no	
48	Fulltime	Lawyer	no	
		Patient Support		
49	Fulltime	Specalist	no	
		Lab information		
50	Fulltime	analyst	no	
		Manager of Software		
51	Fulltime	Quality Assurance	no	
	Self-			
52	Employed	Graphic Desiger	no	
		Medical Laboratory		
53	Fulltime	Technologist	no	
54	Homemaker	Medical secretary	no	
55	Homemaker	School Principal	no	
56	Retired	Adminisrator	no	
57	Unemployed	Non profit	no	
		Teaching assistant,		
58	Student	research assistant	no	
59	Fulltime	Lighting Controls	no	
60	Student	Student	no	
61	Fulltime	Wendy's Employee	no	
62	Parttime	LPN	no	
		Director, Talent		
		Development, Alberta		
63	T 11/			
	Fulltime	Health Services	no	
64	Parttime	Teacher	no	
		Teacher Law enforcement		
64	Parttime Fulltime	Teacher Law enforcement Developmental support	no no	
64 65 66	Parttime Fulltime Parttime	Teacher Law enforcement Developmental support worker	no no	
64	Parttime Fulltime	Teacher Law enforcement Developmental support worker Research Analyst	no no	
64 65 66 67	Parttime Fulltime Parttime Student	Teacher Law enforcement Developmental support worker Research Analyst Distance Learning	no no no	
64 65 66	Parttime Fulltime Parttime	Teacher Law enforcement Developmental support worker Research Analyst	no no no no	
64 65 66 67	Parttime Fulltime Parttime Student	Teacher Law enforcement Developmental support worker Research Analyst Distance Learning Officer	no no no no Prefer	
64 65 66 67 68	Parttime Fulltime Parttime Student Parttime	Teacher Law enforcement Developmental support worker Research Analyst Distance Learning Officer Full-time Student, part-	no no no no Prefer not to	
64 65 66 67	Parttime Fulltime Parttime Student	Teacher Law enforcement Developmental support worker Research Analyst Distance Learning Officer	no no no no Prefer	

71	Student	Cabinetmaker	no	
				TESOL
		Director of Programing		Socio-linguistics
72	Fulltime	for a Non-profit	yes	
73	Fulltime	Clergy	yes	Hebrew and Greek - seminary courses
				Hebrew
				English
74	Student	Student	yes	French
75	Fulltime	Finance Administrator	no	
	7	Special education		
76	Fulltime	assistant	yes	One, intro to linguistics
77	Self-	M 1 4		1 " 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
77	Employed	Marketing	yes	1 - "Language and Politics"
				French Immersion
70	F-1145			ASL classes
78	Fulltime	registered nurse	yes	German in grade 10 highschool
79	Self-	Therenist	n 0	
	Employed Parttime	Therapist	no	Franch language Common language
80		contracting officer	yes	French language, German language
81	Unable	Social worker	no	
				3.
92	Fulltime	Too ah an (of English)		Intro to Linguistics, French Phonetics,
82		Teacher (of English) International Business	yes	History of English
83	Homemaker		no	
84	Student	Grad Student	no	
85	Fulltime	human resources advisor	NOC	1, I don't recall
0.5	Tunume		yes	1, I don't recan
86	Fulltime	Advertising Account Executive	MAG	French throughout high school
	Retired	Elementary teacher	yes	Trench throughout high school
0/	Remed	early childhood	no	
88	Fulltime	program assistant	no	
30	Self-	program appidant	no-	
89	Employed	auto tech	no	
90	Retired	Farmer	no	
91	Retired	wildland fire/forestry	no	
, <u>, , , , , , , , , , , , , , , , , , </u>	_1011100		110	American Sign Language
				American Sign Language 2 adults learning courses
				French
				grades 4-6 and 10-12
				Italian - Saturday mornings with the
92	Parttime	Safety/Retail	yes	Italian society. Dante Italian.
93	Fulltime	Consultant	yes	French university course

Work in the food industry no 96 Fulltime Musician no 97 Fulltime insurance broker yes 2-3, introductory mostly 98 Fulltime Registered Nurse no 99 Fulltime Pharmacist no 100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative Assistant no 104 Fulltime Research Fellow no	
96 Fulltime Musician no 97 Fulltime insurance broker yes 2-3, introductory mostly 98 Fulltime Registered Nurse no 99 Fulltime Pharmacist no 100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative 104 Fulltime Assistant no	
97 Fulltime insurance broker yes 2-3, introductory mostly 98 Fulltime Registered Nurse no 99 Fulltime Pharmacist no 100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative Assistant no	
98 Fulltime Registered Nurse no 99 Fulltime Pharmacist no 100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative 104 Fulltime Assistant no	
99 Fulltime Pharmacist no 100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative 104 Fulltime Assistant no	
100 Fulltime Office administrator no 101 Homemaker Teacher no 102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative Administrative 104 Fulltime Assistant no	
101HomemakerTeacherno102HomemakerOffice assistantno103FulltimeMaster electriciannoAdministrativeAssistantno	
102 Homemaker Office assistant no 103 Fulltime Master electrician no Administrative Assistant no	
103 Fulltime Master electrician no Administrative 104 Fulltime Assistant no	
Administrative 104 Fulltime Assistant no	
104 Fulltime Assistant no	
105 Fulltime Research Fellow no	
106 Fulltime Receptionist no	
Independant living	
107 Unemployed skills instructor, CNIB no	
108 Fulltime MLA no	
Skating Coach and	
109 Student Student no	
110 Fulltime Laboratory technology no	
111 Fulltime Lifeguard no	
112 Fulltime Teacher no	
one, and in French:) Introduction	
Customer Service Linguistics I believe it was called,	, was
113 Fulltime representative yes many years ago!	
Various introductory foreign/secon	ond
language classes and some more	
advanced language classes (post-	
secondary, community etc), course	ses
and tutoring, teacher training for ESL/language instruction, linguisti	tio
analysis, sociolinguistics, literature	
114 Fulltime elementary teacher yes etc.	٠٠,
115 Fulltime call center rep no	
116 Fulltime Engineer no	
Business Development	
117 Fulltime Manager no	
Healthy Watersheds	
118 Fulltime Technician no	
119 Fulltime Teacher no	
120 Parttime Teacher yes Two intro linguistic courses	
121 Retired University professor no	
122 Student PhD researcher no	

123	Student	Step Student	no	
124	Fulltime	Accountant	no	
125	Fulltime	Registered nurse	no	
126	Student	Student	no	
127	Fulltime	ESL Teacher	no	
		Stusenr/teaching		
128	Student	assistant	no	
		VP Sales and Business		
129	Fulltime	Development	yes	
130	Student	Na	no	
131	Parttime	Medical Doctor	no	
132	Parttime	Tims	no	
133	Parttime	Barista	no	
		Student and admissions		
		assistant at my		
134	Student	university	no	
			Prefer	
			not to	
135	Parttime	Deli Clerk	answer	
136	Student	Teaching Assistant	no	
137	Fulltime	Relationship Manager	no	
138	Fulltime	hospitality	no	
139	Fulltime	Relationship Manager	no	
	Self-			
140	Employed	mortgage broker	yes	French, German, ASL
141	Fulltime	IT project manager	no	
		Public Relations and		
		Communications		
1.40	F-1141	Officer;		
142	Fulltime	musician/educator	no	
143	Fulltime	Relationship Manager at CHN	V/OC	Languagasnin Anthoonalay
143	Fulltime	College teacher	yes	Languagesnin Antheopolgy
	Retired		no	
145	Reureu	Banker Customer service	no	
146	Fulltime	representative	no	
170	1 ununic	Child and Youth	по	
147	Fulltime	Worker	no	
148	Fulltime	Relationship Manager	no	
149	Fulltime	Distribution Manager	no	
177	1 diffille	Distribution Manager	110	I completed an Undergraduate Major
				in Applied Linguistics. This included,
		International Student		syntax, morphology, phonology,
150	Parttime	support services	yes	second language acquisition,
150	I al allille	support services	yes	become ranguage acquisition,

				psycholinguistics, teaching methods, sociolinguistics, and more.
151	Unemployed	Sales Management	no	
101		Registered	110	
152	Fulltime	Kinesiologist	no	
153	Parttime	Artist	yes	French
154	Fulltime	Gas Plant Operations	yes	High school French
155	Fulltime	Relationship manager	no	
	Self-			
156	Employed	Project Manager	no	
157	Fulltime	Host Concierge (CHN)	yes	Many related to TESL and TESOL
158	Student	Research administration	yes	Ling major BA and currently completing a Ling PhD. Wide variety of courses in theory, AL, socioling, psycholing, and anthling. >15 courses total
159	Student	Student	yes	Undergrad: 15 courses (many in phonetics/phonology, syntax, semantics, socio) MA: 12: socio, discourse, pragmatics, phonetics, forensic ling, lang & law, lang as evidence, corpus PhD: 5:discourse, variation & change, psycholing, lang & law, lang & gender
160	Student	Retail	yes	Essentially every Linguistic course offered at York up to and including the 3000 level.
161	Fulltime	Dining room manager	no	
162	Parttime	videographer	no	
163	Unemployed	Carpenter	no	
164	Fulltime	SECRETARY	no	
				French immersion and my
		Primary Care		undergraduate degree was in
165	Fulltime	Paramedic	yes	communication
166	Parttime	Barista	no	
167	Fulltime	Claims Manager	no	
168	Student	Engineer	no	
169	Fulltime	Geologist	no	
4=0		Behavioural Aid.		
170	Fulltime	Respite worker	no	
171	Fulltime	Registered Nurse	no	
172	Fulltime	Fast food employee	no	

173	Fulltime	Civil Engineer	no	
174	Parttime	Transport	no	
		Environmental		
175	Student	Consultant	no	
		Operations supervisor		
176	Fulltime	dow chemical	no	
177	Fulltime	Educational Assistant	no	
178	Fulltime	Management	no	
179	Fulltime	Registered Nurse	no	
180	Fulltime	College Instructor	no	
		Personal Trainer and		
181	Student	Teaching Assistant	no	
	Prefer not to			
182	answer	PhD Student and TA	no	
183	Fulltime	IT Sales	no	
184	Parttime	Paramedic	no	
185	Fulltime	Paramedic	no	
		Cardiology		
186	Parttime	Technologist	no	
187	Fulltime	Graphic Designer	no	
188	Student	PhD candidate	no	
		Communications		
189	Fulltime	dispatcher	no	
	Self-			
190	Employed	Psychologist	no	
191	Fulltime	Teacher	yes	I have an MA in applied linguistics
192	Fulltime	Registered Dietitian	no	
		Teaching		
100	D ''	Assistant/Labour union		
193	Parttime	executive	no	
194	Fulltime	Tradesman	no	
195	Fulltime	Program management	no	
196	Fulltime	Product Management	no	
		Public Servant,		
107	Datirad	Government of NL,	no	
197	Retired	Director of Policy	no	
198	Fulltime	Elementary teacher	no	
199	Homemaker	Nurse	no	T.1
200	Douttings	Licensed practical	****	I do not remember it was back in
200	Parttime	nurse	yes	2008 when I lived in New Brunswick
201	Parttime	Teacher Assistant	no	
202	Fulltime	Service Advisor	no	

 Table E5. Excluded participants from entire analysis

Participant	Reason for Exclusion
9	Critical age passed
11	Not enough data regarding
	gender variants
15	Critical age passed
40	Did not answer all the questions
81	Not enough data regarding
	gender variants
88	Not enough data regarding
	gender variants
102	Critical age passed
128	Critical age passed
133	Not enough data regarding
	gender variants
195	Critical age passed

Table E6. Excluded participants from map task analysis

Participant	Reason for Exclusion
63	Blank map or
	indecipherable
93	Blank map or
	indecipherable
96	Blank map or
	indecipherable
115	Blank map or
	indecipherable
124	Blank map or
	indecipherable
132	Blank map or
	indecipherable
144	Blank map or
	indecipherable
146	Blank map or
	indecipherable
161	Blank map or
	indecipherable
164	Blank map or
	indecipherable
170	Blank map or
	indecipherable
186	Blank map or
	indecipherable