

15. Canada

15.1. The English-speaking population of Canada

Canada has two official languages at the national level: English and French. This bilingual status reflects the country's history as a union of originally French and British colonies. French settlements were established in eastern Canada in the early seventeenth century, at about the same time as the British colonies in Massachusetts and Virginia and well before there was a significant British presence in Canada. However, when the competition between Britain and France for control of North America culminated in the Seven Years' War, France was defeated, and French possessions in Canada were ceded to Britain by the Treaty of Paris in 1763. Following the British victory, British settlement of Canada increased dramatically, first from the British colonies in what are today the United States, then directly from Britain, so that French speakers were already a minority when Canada became an independent country in 1867.

Today, less than a quarter of Canadians speak French, though this is about double the proportion of people who speak Spanish in the United States. Like American Spanish-speakers, Canadian French-speakers are not evenly distributed across the country. Most of them live in the province of Quebec, which is over 80 percent French-speaking, and in neighboring sections of Ontario and New Brunswick. The remainder of Canada is largely English-speaking. For example, in the two largest cities outside Quebec, Toronto and Vancouver, French-speakers account for only one per cent of the population. Nevertheless, only about 60 per cent of Torontonians and Vancouverites are native speakers of English. These cities, like their American counterparts, have attracted large numbers of new immigrants from all over the world. The remainder of their populations speaks languages other than English or French, such as Chinese, Italian, and Punjabi. Just as speakers of non-official languages outnumber French-speakers in English-speaking cities, they now also outnumber the half-million English-speakers in Montreal, Canada's largest French-speaking city. In 2001, of a population of almost 30 million Canadians, approximately 17 million (59%) claimed English as their mother tongue. Outside Quebec, this proportion rises to 76 per cent.¹

The Canadian population, English-speaking and otherwise, is heavily concentrated in a narrow band of territory along the northern border of the United States. Except for a scattering of small, isolated communities, the vast northern regions of the country are largely unpopulated and are therefore not included in the maps of Canada presented in ANAE. This permits a closer view of the major urban areas of southern Canada that are the focus of this Atlas.

In general, the English spoken in the Canadian North can be viewed as a dialect in formation, like that of Florida or some other parts of the American Sunbelt. The region's European population is too sparsely settled, too diverse in origin, and too recently arrived to have produced an identifiable, homogeneous dialect distinct from southern Canadian English, while its large Aboriginal population speaks a range of varieties influenced by non-English substrates that are beyond the scope of this Atlas. The speech of northern Canada will therefore be left as a subject for future research.

15.2. General features of Canadian English

Two general characteristics of Canadian English deserve special attention before proceeding to a more detailed analysis. The first is that Canadian English is an essentially North American variety, very similar to that spoken in the Midland and Western regions of the United States. While Canada had a longer and closer association with Britain than the United States, the linguistic effects of this association have been limited to relatively superficial levels of language, such as spelling (*centre* and *colour* for *center* and *color*) and phonemic incidence (/o/ not /ow/ in *shone*). The phonetics, phonology, morphology, syntax, and lexicon of Canadian English have much more in common with American varieties than with Standard Southern British English. For example, the vocalization of /r/ and the phonemic split of Middle English short-*a* into 'broad' and fronted classes were never adopted in Canada, while the American pattern of flapping intervocalic /t/ has become standard in Canadian English. In the realm of British-American vocabulary differences, Canadians use American words like *drugstore*, *elevator*, *flashlight*, *fries*, *gas*, and *truck*, rather than their British equivalents, *chemist*, *lift*, *torch*, *chips*, *petrol*, and *lorry*.

Avis (1954: 14) and Bloomfield (1948: 62) have argued that the North American character of Canadian English was established by the first major English-speaking settlements in Canada, which came from the United States. Nova Scotia was settled before the American Revolution by migrants from New England, while New Brunswick and Ontario were settled after it by royalist refugees, known in Canada as United Empire Loyalists, from New England and from the Mid-Atlantic colonies. This "Loyalist" theory of the origins of Canadian English is not universally accepted. Scargill (1957: 611–612) finds it hard to believe that English in Canada could have been unaffected by the much larger numbers of immigrants who came directly from Britain in the nineteenth century, and cautions against assuming that modern, Standard Southern British English is the relevant variety for comparison when classifying Canadian English as relatively more American or British. Most British immigrants to Canada would not have spoken this variety, and some features of Canadian English that seem to indicate affinity with American English may just as well have their origins in the regional dialects of northern or western Britain, or Ireland. Nevertheless, English-speaking Canada has experienced close relations with the United States from its earliest period. American influence was extended at the turn of the twentieth century by the large numbers of American pioneers who helped to settle the Canadian West, and has intensified at the turn of the twenty-first century as Canadians have experienced ever closer economic and cultural integration with the United States.

Given the North American character of Canadian English, it is reasonable to analyze dialect developments in Canada within the same phonological framework that is used for the United States. The phonological notation of Chapter 2

¹ All figures from the 2001 Census of Statistics Canada.

would not be suitable for many British dialects, where the distinction between short and long vowels is not based on the presence of final glides.²

The second general characteristic of Canadian English is its relative homogeneity. To a large extent, a single type of English is spoken across the 3,000 miles (4,500 km) from Vancouver, British Columbia, to Ottawa, Ontario. East of Ontario, in Montreal and in Atlantic Canada, greater regional differences can be heard. Notably distinct are Newfoundland, which was settled mainly from southwestern England and southeastern Ireland and remained a separate British colony until its confederation with Canada in 1949; and Cape Breton Island, the northern part of Nova Scotia, which was settled mostly by Scottish immigrants. In addition, this chapter will show geographic distinctions between an “Inland Canada” region centered on the Prairie Provinces, and areas with more variable patterns, including the larger metropolitan areas of Vancouver and Toronto. However, Canadian English displays nothing like the dialect diversity of the United States, let alone that of Great Britain. As in the West of the United States, this homogeneity results from relatively sparse and recent settlement by intermingled groups of immigrants from different regions.

The ANAE data to follow will show that Canadian English is marked by the low back merger of /o/ and /oh/, and the innovative Canadian Shift, triggered by that merger. Canadian raising of /ay/ and /aw/, though the best known feature of this region, is widespread but not quite as consistent a marker as the Canadian Shift. It will also appear that in other respects, the core areas of Canadian English are quite conservative: the preservation of peripheral, almost monophthongal /ey/ and /ow/, and the back position of /aw/, shared with the North of the United States.

15.3. Data for acoustic analysis

Telsur’s Canadian sample includes speakers from every major city in Canada (Vancouver, Calgary, Edmonton, Winnipeg, Toronto-Hamilton, Ottawa, Montreal, and Halifax), plus a number of smaller towns and cities that represent important border regions (e.g. Thunder Bay, Sault-Ste-Marie, and Windsor, ON) or traditional dialect enclaves (Arnprior, ON, Saint John, NB, Sydney, NS, and St. John’s, NL). The data to be presented in the following sections are based on a total of 41 Canadian speakers, of whom 33 have been analyzed acoustically. The number of speakers from each city or town is roughly proportional to its population, ranging from six from Canada’s largest city (four analyzed acoustically), Toronto, to one from some of the smaller centers.

15.4. Focus of this chapter

Chapter 11 undertook the task of identifying Canadian English as a whole, and distinguishing it from neighboring areas in the United States. This was done with reference to the ongoing Canadian Shift of the short front vowels, which characterized all of Canada except the Atlantic Provinces. 23 of the 25 Telsur speakers in this region displayed the Canadian Shift (Map 11.7). These sound changes differentiated Canada from neighboring Eastern New England, the North, and the West, though speakers with the same characteristics are found scattered throughout other areas of the West. For most phonological variables, Canada is sharply differentiated from the North, and particularly the Inland North, so that the small city of Windsor shows almost no features in common with neighboring Detroit (Boberg 2000). The long western border that Canada shares with the West does not show such sharp differentiation, and a complex definition of the West was

needed to distinguish it from Canada. This chapter will be concerned with mapping the internal structure of Canadian English, rather than differentiating it from the United States. The maps to follow will therefore show only the Telsur speakers from Canada, beginning with mergers and the phonemic inventory of Canadian English.

15.5. Mergers and the phonemic inventory of Canadian English

The first three maps in this chapter concern the phonemic inventory of Canadian English, based on the inquiry into minimal pairs and rhymes with 41 Telsur subjects. These data show that the low back merger of /o/ and /oh/ is generally characteristic of modern Canada as a whole. Real-time comparisons with data from earlier surveys of Canadian English suggest that it has been well established in Canada for several generations. In their nation-wide survey of over 14,000 Canadian schoolchildren and their parents, Scargill and Warkentyne (1972: 64) report an average of 85 percent of Canadians responding ‘yes’ when asked whether *cot* and *caught* rhyme. Allowing for a margin of error stemming from the influence of spelling on responses to written surveys, it can reasonably be assumed that the true rate of merger was very close to 100 percent at this time. The only exception to this high level of merger was Newfoundland, where the rate dropped to about 70 percent. However, Kirwin (1993: 74) says that the Anglo-Irish dialect of Newfoundland’s Avalon Peninsula, in and south of St. John’s, exhibits a full merger. In mainland Canada, Gregg (1957: 22) reported an invariant merger among Vancouver university students. A generation later, Woods (1993: 170) found the same to be true of Ottawa. Avis (1973: 64) and Labov (1991: 32) suggest a consistent merger across Canada. Chambers (1993: 11–12) presents literary evidence of the merger in Ontario speech in the mid-nineteenth century, and suggests that it may have been introduced by eighteenth-century Loyalist settlement from merged areas of Pennsylvania.

Map 15.1 shows the low back merger before /n/ as recorded in the minimal pair *Don* ~ *dawn* in the Telsur interviews. The merger before nasals is considerably more advanced than in other environments. It is almost uniform throughout Canada, including the Atlantic Provinces. Only one 42-year-old man in Vancouver thought that this pair sounded ‘close’. Although the *Don*–*dawn* merger occurs at a higher rate in all merged areas, Chapter 9 showed considerably more variation in the West and in Eastern New England.

Map 15.2 is the corresponding data for the low back merger before /t/, based on the rhyming of *hot* and *caught*. In this case, only 29 of the 39 subjects were sure that these words rhymed and pronounced them in a way that clearly rhymed to the analyst. Eight subjects were ‘close’ in either production or production, and two thought they did not rhyme even though they said them as rhymes. Again, the evidence for merger is quite general. The Maritime provinces and Alberta show the greatest consistency in this merger, while other regions display considerable variation. On a phonetic level, the merged vowels are produced further forward in Newfoundland than in the rest of Canada, sometimes approaching the low–central position of /o/ in the Northern Cities.

As in most of North America, intervocalic /ey/ and /e/ are merged before intervocalic /r/, so that *Mary* and *merry* are identical. In the case of /e/ and /æ/ in this environment, Canada shows greater variety. Though the majority of Cana-

² However, it will appear below that the area of Inland Canada is marked by tense peripheral long /ey/, which might well be written in broad phonetic notation as [e:].



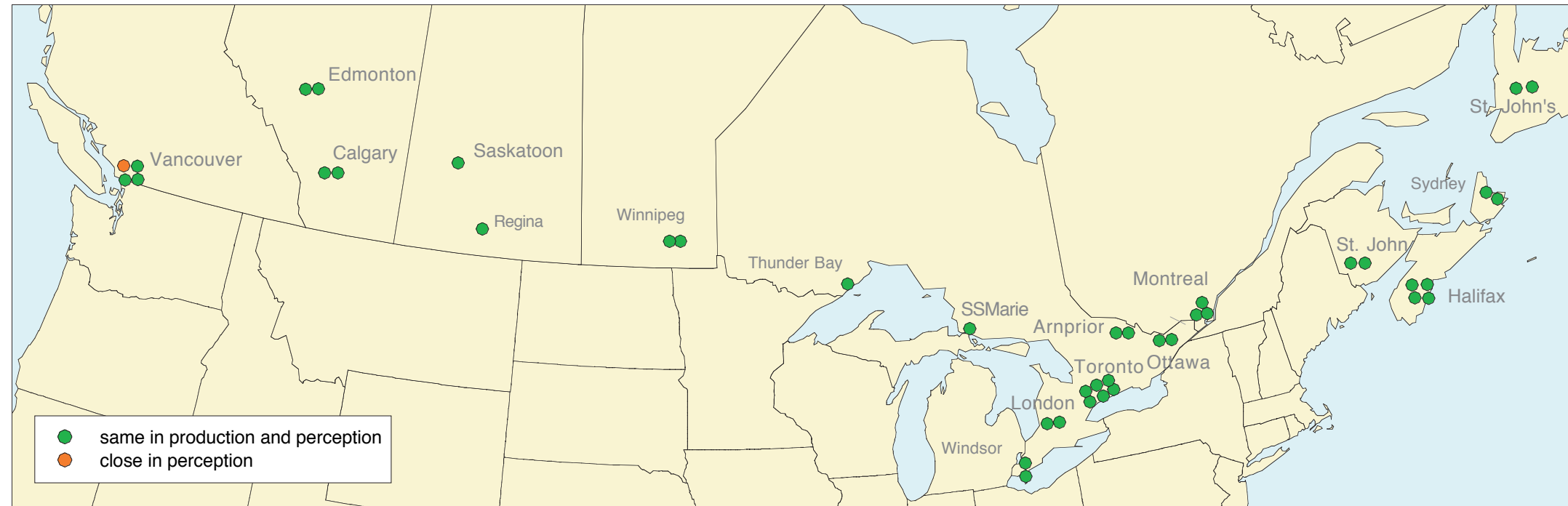
15.1



15.2

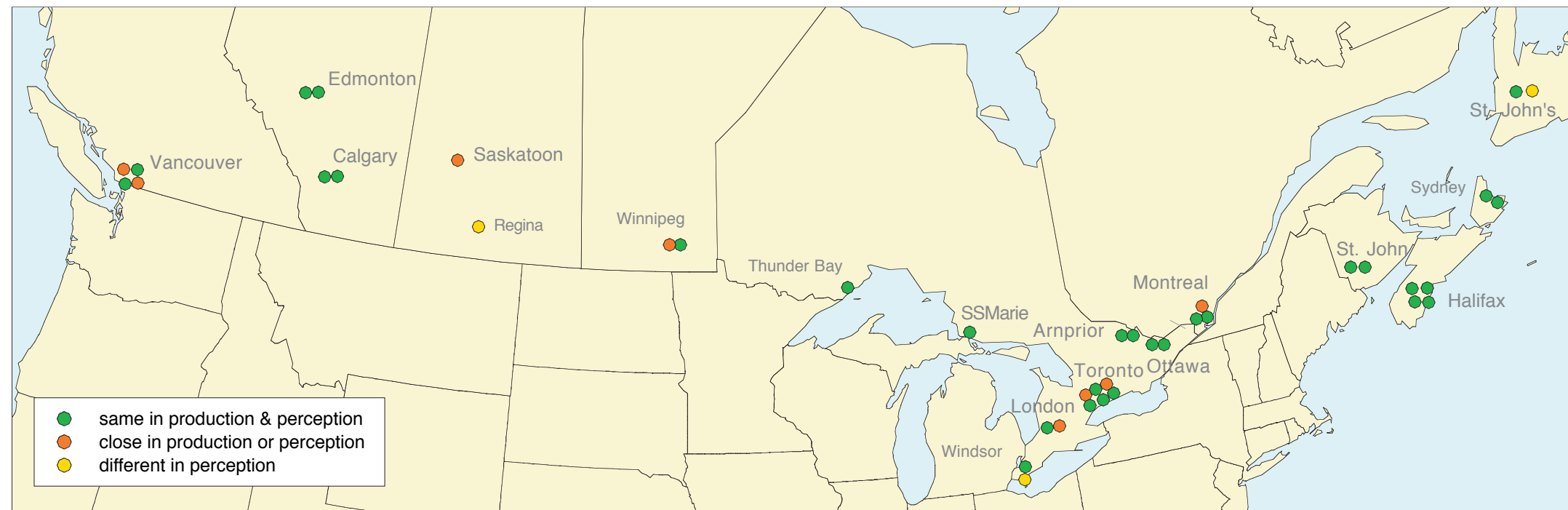


15.3



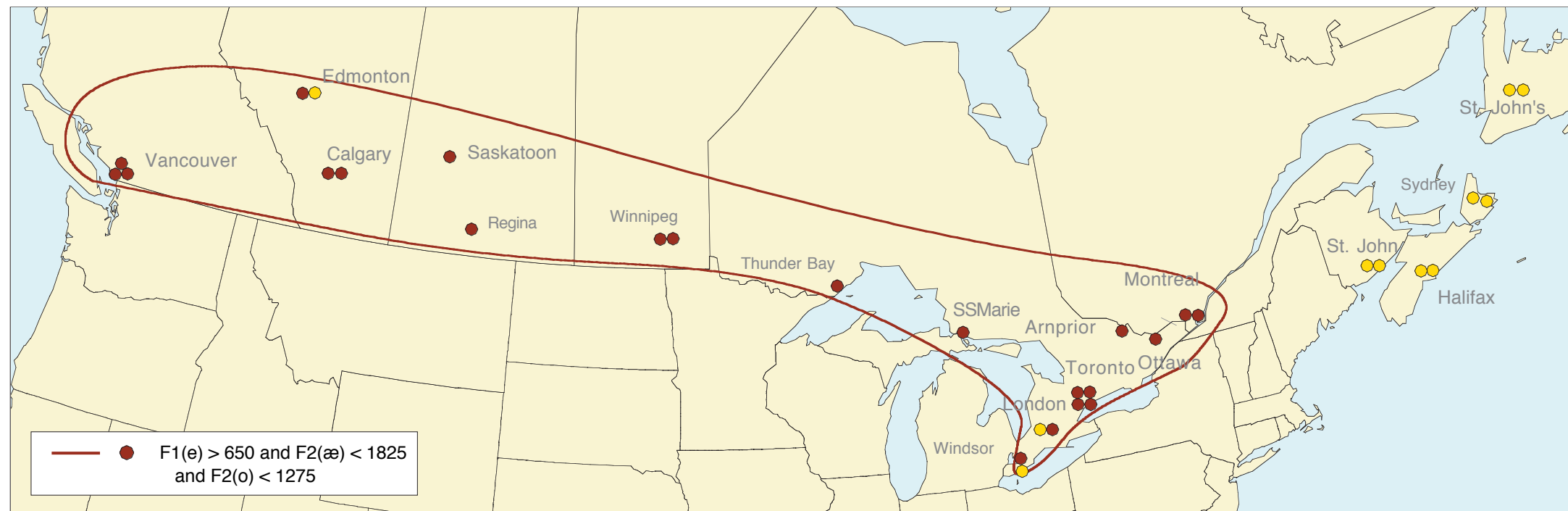
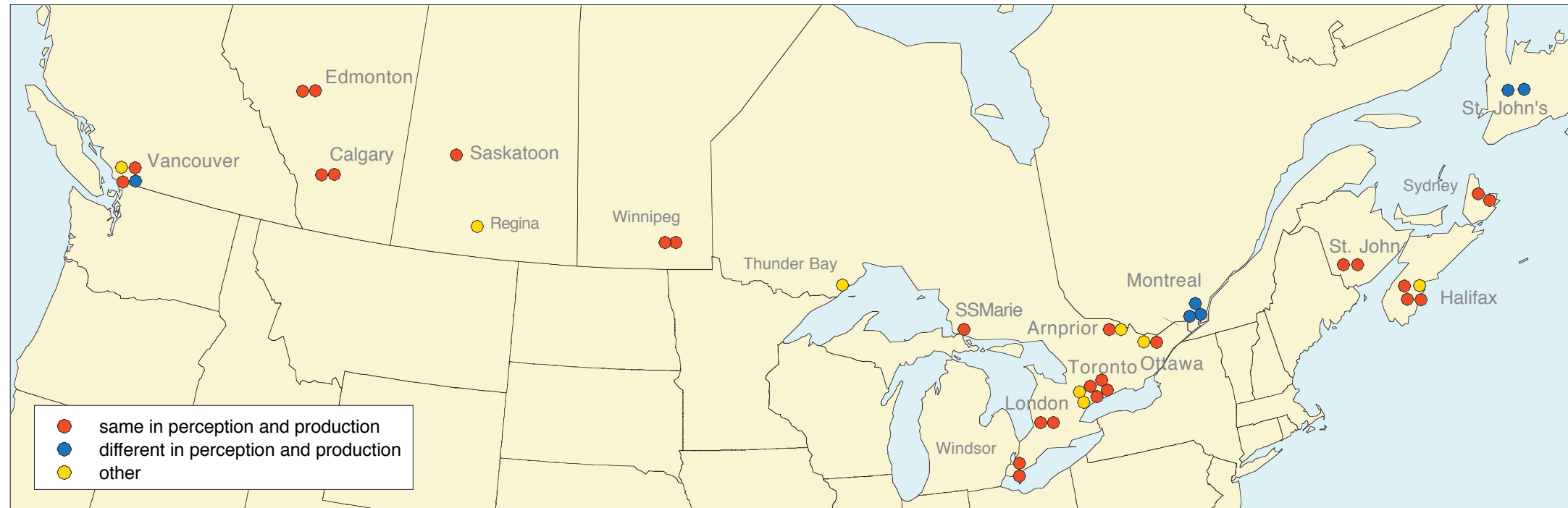
Map 15.1. above The low back merger before nasals in Canada

The merger of /o/ and /oh/ is most advanced before nasal consonants, as shown by responses to the minimal pair *Don* vs. *dawn* in the Telsur interview. In Canada, results are almost uniform: only the oldest speaker from Vancouver showed any variation, thinking that the two words sounded ‘close’.



Map 15.2. below The low back merger before /t/ in Canada

There is less uniformity in the merger before /t/, as shown by this map of the minimal pair *cot* ~ *caught*. The Maritimes and Alberta show the most consistent merger, with considerable variation in other regions.



Map 15.3. above The merger of /e/ and /æ/ before intervocalic /r/

Map 15.4. below The Canadian Shift

The minimal pair *merry* ~ *marry* is generally heard as “the same” in Canada, but Newfoundland and Montreal stand out as different from the rest of Canada.

The dialect of Canada is defined phonologically as the area shown here, excluding the Atlantic Provinces. It is characterized by the Canadian Shift, a downward and backward movement of /e/ and /æ/, triggered by the merger of /o/ and /oh/ in low back position.

dians have a three-way merger, in which *marry* is identical to *Mary* and *merry*, two cities, Montreal and St. John's (NL), appear to maintain a clear distinction between *marry*, with a low-front vowel, and *merry*, with a mid-front vowel. As in the United States, this distinction is restricted geographically to the eastern half of the country, uniting the speech of Montreal and St. John's with that of Boston, New York, and Philadelphia, at least in regard to this feature.

The new and incoming mergers of vowels before /l/ discussed in Chapter 9 do not occur in Canada. The on-going merger of /i/ and /e/ before nasals, spreading northward from the South, would not seem to have reached Canada by diffusion from that region. However, there is a cluster of three speakers in the Atlantic Provinces whose contrast of *pin* and *pen* was rated as 'close' by the analyst, in Saint John and Halifax. In other areas, deviations reflect subjects' uncertainty about the meanings of 'different' and 'close'.

The relics of older distinctions that have all but disappeared, reviewed in Chapter 8, show traces in the most conservative of the Canadian subjects. Here the speakers' judgments are not to be weighed as heavily as production, since spelling can lead them to assert a distinction that is not present. The Saskatchewan subjects are particularly subject to this effect. However, the distinction of /hw/ and /w/ in *whale* and *wail* is maintained by the oldest Vancouver speaker, a 73-year-old woman. She also preserves the distinction between /iw/ and /uw/ in *dew* and *do*, as does a 46-year-old woman from London, Ontario.

15.6. The geographic distribution of phonetic features of Canadian English

The maps and other materials to follow are concerned with rotations and shifts in phonetic space that are characteristic of Canada, with a focus on those features that show the greatest geographic differentiation. They are based upon the acoustic analysis of 33 of the 41 Telsur subjects in Canada.



Map 15.4 reproduces the view of the Canadian Shift first seen in Chapter 11. It is triggered by the merger of /o/ and /oh/ seen in Maps 15.1 and 15.2, which allows a backward shift of /æ/, followed by a downward and backward movement of /e/.

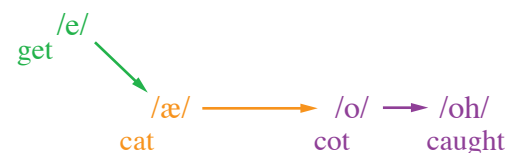


Figure 15.1. The Canadian Shift

The retraction of /æ/ was first observed in Vancouver English by Esling and Warkentyne (1993). The larger context of this development was first identified as the Canadian Shift by Clarke, Elms, and Youssef (1995), who found the phonetic effects reflected in that of Map 15.4 in word lists pronounced by young, mostly Ontarian subjects.³ Boberg (2005) has observed the Canadian Shift in progress in Montreal, though with more retraction than lowering of /e/.

Figure 15.2 is a Meanfile diagram of the vowels involved in the Canadian shift for all ANAE dialects, with the position of the Canada dialect indicated along with other relevant dialect positions. The most striking difference between Canada and the other regions is found for /æ/: F2 for Canadian /æ/ is at 1725 Hz, lower than all other dialects except Providence. The short /e/ mean for Canada

is among the two lowest of the dialect means. The merged /o ~ oh/ class is at the highest and backest level of the /o/ distribution. No shift of /i/ is indicated in the ANAE data for Canada. The contrast with the Atlantic Provinces is clear: the /i/, /e/, and /æ/ means for AP are much higher and fronter than those for the rest of Canada; confirming the fact that this areas does not participate in the Canadian Shift.

It can be observed that Canada and the Inland North are shifted in opposite directions. The red square representing the (non-nasal) means for Inland North /æ/ is higher and fronter than all other means, while Canada is lower and backer. The Inland Northern /o/ is well to the front of the /o/ distribution, while Canadian /o/ is at the back. The definition of Canada centered on the Canadian Shift is particularly apt for distinguishing it from the North.

Canada is most sharply separated from other North American dialects by the behavior of short-*a* before nasals. The highlighted square representing the Canadian mean is a good 100 Hz higher than any other, and quite outside of the range of other dialects. It is in fact located in the region of short-*a* in non-nasal environments for other dialects.

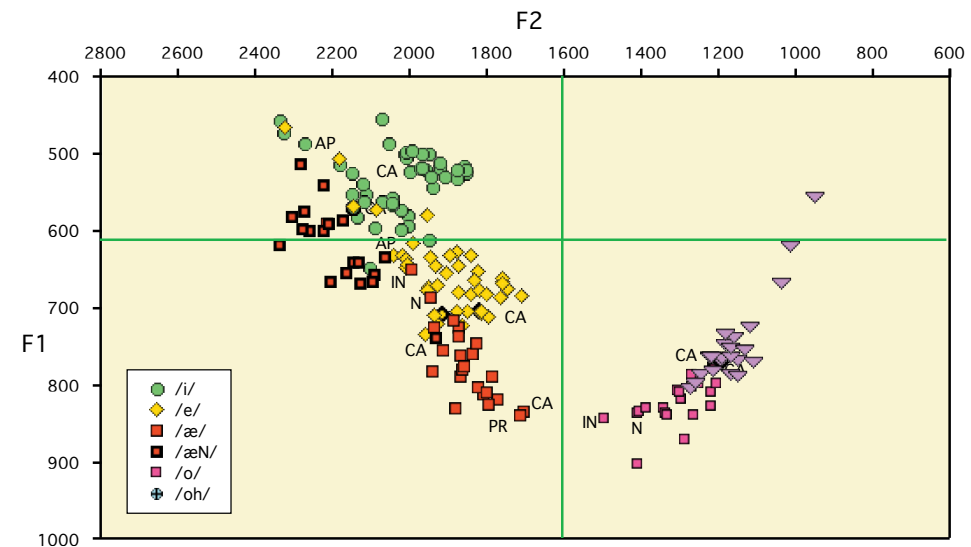


Figure 15.2. Distribution of F1/F2 means for ten regions. CA = Canada; N = North; IN = Inland North; PR = Providence; AP = Atlantic Provinces

Though the original study of the Canadian Shift did not establish an apparent time gradient that would indicate change in progress, such a gradient does appear in the ANAE data. The age coefficients in Table 15.1 are drawn from the tokens produced by the 33 Canadian Telsur participants who were analyzed acoustically. In addition to age, the analysis considered city size, education and gender among the social factors; place and manner of the following and preceding consonant; voicing of the following segment; and number of following syllables. These factors accounted for 30 to 50 percent of the variance for the sound changes in progress. It is evident that /e/ is moving backward and downward in apparent time, and /æ/ is moving backward.

³ In Clarke et al.'s version of the Canadian Shift (1995: 212), a lowering and/or centralization of wedge was also included, but ANAE data do not replicate this.

Table 15.1. Age coefficients for the vowels involved in the Canadian Shift

	Age coefficient	<i>p</i> <	N
F1(i)	1.18	.04	605
F2(i)		n.s.	
F1(e)	-0.82	.00001	949
F2(e)	2.28	.00001	949
F1(æ)		n.s.	
F2(æ)	1.85	.00001	1,467
F1(o)		n.s.	
F2(o)		n.s.	

Map 15.4 therefore defines the Canadian region in terms of this sound change – the Canadian Shift – that shows evidence of progress in apparent time. It shows a high degree of homogeneity within this region (.88), but low consistency (.39). While individual elements of the Canadian Shift can be seen to affect some speakers outside this area, no other region of North America shows a high concentration of the complete set of Canadian Shift features. The dark red isogloss for the Canadian Shift region does not cover Canada as a whole, however. The Atlantic Provinces are excluded from this definition of Canadian English: there are no Tel-sur speakers to the east of Montreal who show the Canadian Shift in progress.

The best-known characteristic of Canadian English is “Canadian raising”, the centralization of the nuclei of /ay/ and /aw/ before voiceless consonants. This produces higher nuclei in words like *right* and *out* than in words like *ride* and *loud*. Canadian Raising was first analyzed by Joos (1942), who showed that it interacts with flapping to produce apparent phonemic oppositions in some Canadian varieties contrasting raised and unraised vowels in pairs like *writer* ~ *rider*. The presence of these oppositions was re-analyzed in later, generative treatments to depend on the order of application of the raising and flapping rules to underlying forms (Chambers 1973). Canadian raising is not unique to Canada, even in a North American context: Kurath and McDavid (1961) show raising of /aw/ to be a feature of eastern Virginia; raising of both /aw/ and /ay/ was the basis of Labov’s study of Martha’s Vineyard, MA (1963); and studies of Philadelphia showed raising of /ay/ to be a change in progress in that city (Labov 1980, 2001; Conn 2005). Several recent studies have shown it to be at least a variable feature of Inland Northern speech, though generally affecting only /ay/, not /aw/ (Dai-ley-O’Cain 1997 in Ann Arbor, MI; Niedzielski 1999 in Detroit; Vance 1987 in Minnesota and western New York). Thomas (1991) demonstrated that raising has a long history in Canada, going back at least as far as the mid-nineteenth century, but recent research on urban Canadian English shows it to be recessive in major cities, particularly among young females (Chambers and Hardwick 1986). While Canadian Raising is neither a unique nor a completely consistent feature of Canadian English, it remains a common feature in most parts of Canada, and continues to be the basis of the most popular American stereotype of Canadian speech, at least as it applies to /aw/.

Map 15.5 shows the results of the acoustic analysis of /aw/ and /ay/ for 31 Canadian subjects. The blue circles represent those speakers who have distinct centralization for both /aw/ and /ay/: that is, a difference of more than 60 Hz between the mean F1 values of nuclei with voiced and voiceless codas. The light blue and green symbols are speakers who show raising for only /aw/ or /ay/, respectively. As usual, yellow circles are the residual class, with neither vowel showing raising.

The geographic configuration shown in Map 15.5 pre-figures a number of isoglosses to follow which are also centered around the prairie provinces. A split community in Alberta allows us to extend the isogloss to include Edmonton and

Calgary, since no extra nodes need be added to do this (though this cannot be done for Windsor). Similarly, the variation in Toronto can be included within the isogloss, but Vancouver and Arnprior are distinctly outside the isogloss.

Map 15.5 shows that Canadian raising is a widespread feature of Canadian English, extending variably to the Atlantic Provinces more than the Canadian Shift, but not uniform enough to serve as a defining feature of the dialect of Canada.

All of the Canadians studied showed some raising of /ahr/ to at least lower-mid position, but fronting of /ahr/ establishes an east–west divide in Canadian English, as indicated in Map 15.6. In the west, the F2 of /ahr/ is consistently less than 1450 (mean = 1315), indicating a fairly back pronunciation, whereas in Atlantic Canada, the F2 of /ahr/ is almost always greater than 1450 (mean = 1507), indicating a mid-central pronunciation.⁴ Central Canada shows medial values (mean = 1382), with considerable variability, though the traditional Ottawa Valley dialect region of eastern Ontario, represented here by the town of Arnprior, shows advanced fronting of /ahr/ similar to that of Atlantic Canada.

Figure 15.3 illustrates the mid-central position of /ahr/ in the vowel system of a Newfoundland speaker. Here /ahr/ is located directly below the vowel of *bird* (indicated as /*hr/). This centralization is accompanied by a strong constriction of /r/, with a shorter pre-rhotic nucleus than in other regions. A low central position of /o/ (merged with /oh/), much further forward than in most regions of Canada, can also be observed in this system.

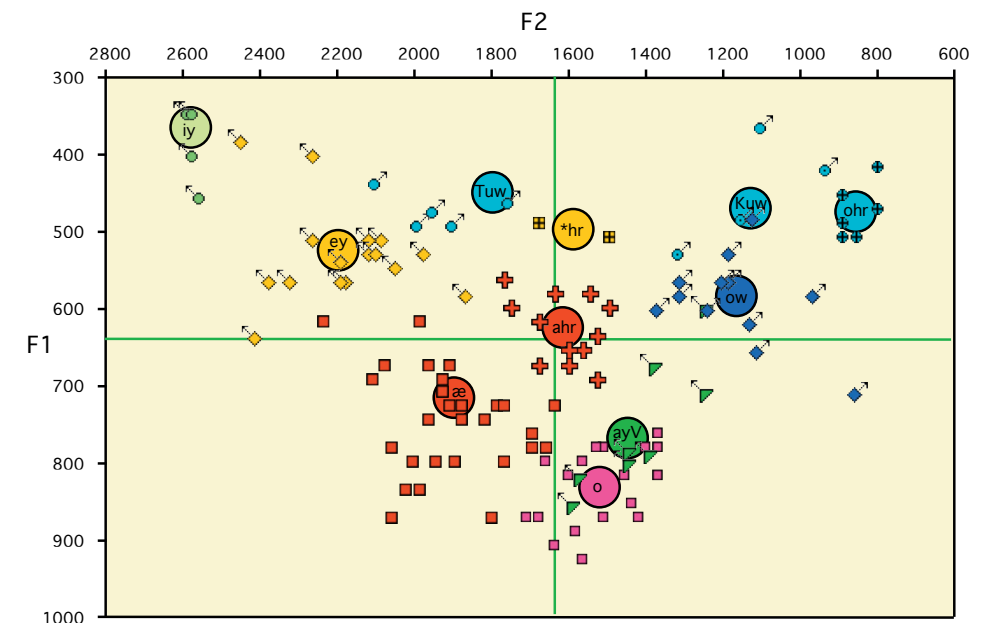
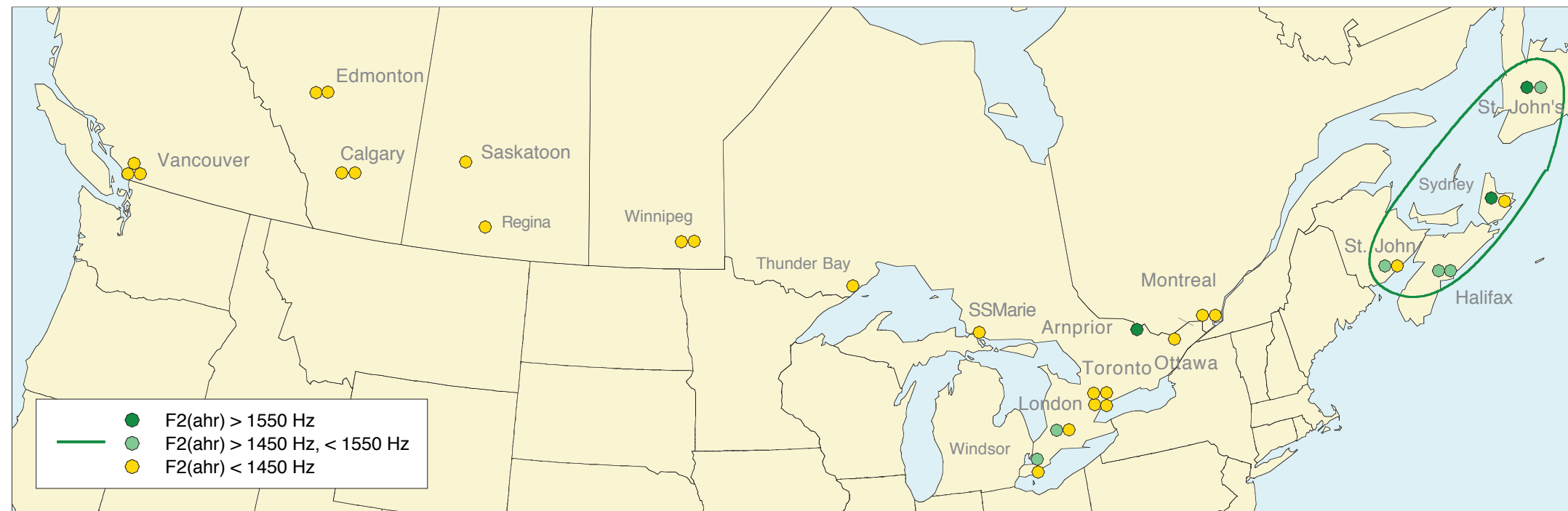


Figure 15.3. Central position of /ahr/ in system of David B., 35, St. John’s, Newfoundland, TS 662

15.7. Raising of /æ/ before nasals and /g/

The raising of /æ/ before nasals differentiates Canadians by region, as Chapter 13 has already indicated. Nasal and non-nasal /æ/ are generally not as distinct in Canada as in most American varieties, except in parts of Ontario and Nova

⁴ The second speaker in Sydney actually has an F2 mean of /ahr/ of 1448 Hz, but is shown as green despite this 2 Hz difference.

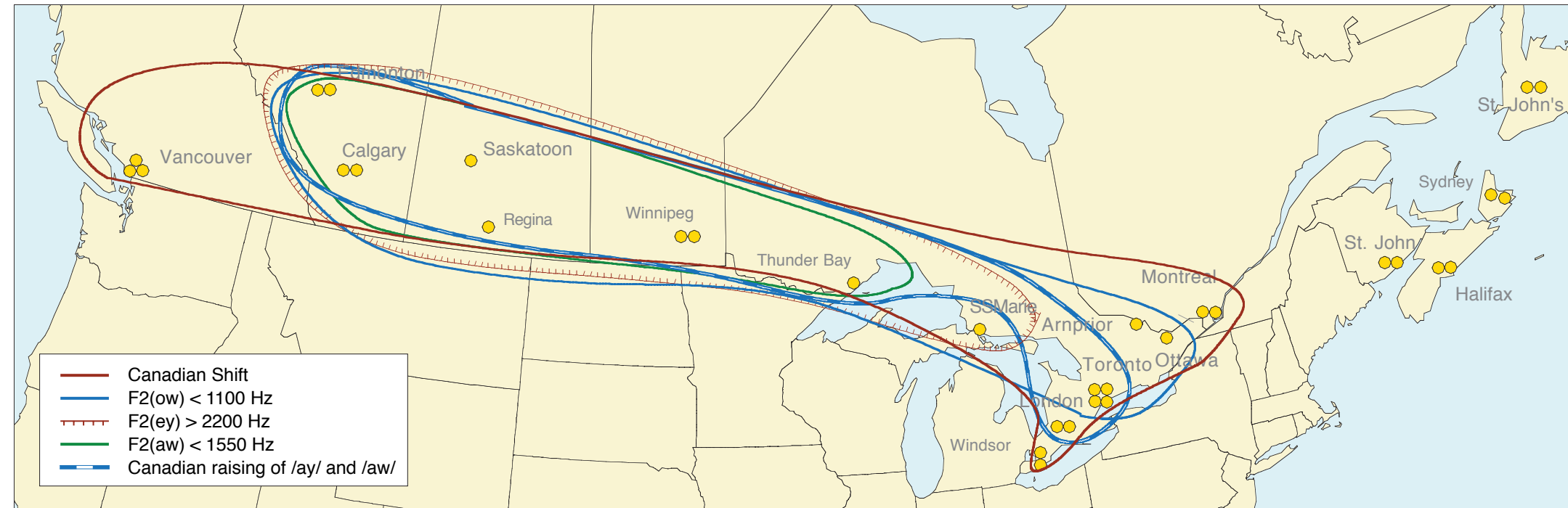


Map 15.5. above Canadian raising

Map 15.6. below Fronting of /ahr/ in the Atlantic Provinces

The best-known feature of the Canadian dialect is Canadian raising, the centralization of /ay/ and /aw/ before voiceless consonants, defined as a 60 Hz difference between the first formant of the two allophones. It appears here as a more limited area than that defined by the Canadian Shift. The dark blue circles are the speakers with the most consistent raising in both /ay/ and /aw/.

The Atlantic Provinces are distinct from the rest of Canada in the absence of the Canadian Shift. One feature that unites Atlantic Canada is the fronting of /ahr/ in *car*, *card*, *hard*, also found in the Ottawa Valley region of Ontario, represented here by Arnprior. In a few cities, this vowel is actually front of center (dark green symbols).



Map 15.7. Inland Canada

Within the Canada dialect area, there is a central or inland region that concentrates all of the features that define the dialect, and has in addition a conservative treatment of the upgliding vowels /ey/, /ow/ and /aw/. In these areas, /ow/ and /aw/ are back, and /ey/ is front with less of the nucleus–glide differentiation that we find in other areas.