PHONETIC INDICATORS OF ETHNICITY IN MONTREAL'S ENGLISH-SPEAKING COMMUNITY

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ABSTRACT

The history of immigration to Montreal has ensured the multi-ethnic character of its English-speaking community. The self-segregation of many large ethnic groups in separate neighborhoods, together with the local status of English as a minority language, have fostered greater ethnic diversity in the types of native English spoken in Montreal than in other Canadian cities. This paper reports on an acoustic study of ethno-phonetic differences in Montreal English, among speakers of British, Italian and Jewish ethnic origins. It identifies several phonetic indicators of ethnicity in Montreal. These are analyzed in terms of what they suggest about the varying degrees to which the ethnic groups have assimilated to common phonetic patterns of native Canadian English.

While many people think of Montreal as a French-speaking city, for two thirds of its history it has also harbored an important English-speaking community. During the mid-19th century, in fact, a majority of Montrealers spoke English. Though subsequent developments returned a French majority, Montreal today retains Canada's ninth largest urban concentration of native speakers of English (425,635 people, per the 2006 Census; about 12 percent of the population). These "Anglophones" speak a kind of English closely related to other types of Canadian English, sharing important structural features that distinguish all Canadians from speakers of other national or regional varieties (Boberg 2005a, 2008). Yet there are also ways in which Montreal's English-speaking community is both unique within Canada (Boberg 2005b, 2008, *In press*) and internally diverse (Boberg 2004, *In press*). This article will examine the most important basis for internal diversity: speakers' ethnic origins. The ethnic diversity of today's English-speaking community—a product of several decades of large-scale immigration—is reflected in several important phonetic variables. An acoustic phonetic and statistical analysis of correlations between ethnic origin and vowel pronunciation, presented below, demonstrates that even among Montrealers who are native speakers of English, ethnic diversity is reflected in speech. Unlike in most Canadian cities, in Montreal it is possible to guess people's ethnic origins, to some extent, by the way they speak English.

1. A BRIEF HISTORY OF MONTREAL'S ENGLISH-SPEAKING COMMUNITY

Whereas the English-speaking settlement of what is today Canada began in some places prior to the Treaty of Paris (1763), which transferred the Canadian territories of France to British control following the Seven Years' War, the effective establishment of Montreal's English-speaking community occurred directly as a result of the British Conquest, in the late 18th century: Provost (1984) reports over a thousand British residents of Montreal by the 1770s. This small group experienced a small addition after the American Revolutionary War, when thousands

of Loyalist "Tories" fled the American colonies to avoid reprisals by their former countrymen, though most of the Loyalists who came to Quebec were soon transferred to new townships in what was to be Ontario. The major expansion of Montreal's English-speaking population followed the end of the Napoleonic Wars, as a surplus British population, displaced by growing industrialization, was encouraged to emigrate to Canada, where it might serve to engender economic growth and reinforce British control in a territory threatened by American expansion. The construction of the Lachine Canal, in 1825, initiated the diversification of Montreal's economy beyond the fur trade: by the mid-19th century, the city had become the focal point of Canada's own industrial revolution. This status helped to make Montreal the major metropolis of Canada and a primary destination for British immigrants. Thousands of English, Irish and Scottish immigrants arrived, contributing to the establishment of an English-speaking majority in the city by as early as 1831 (by 1851, 55 percent of the population of 60,000 was of British ethnic origin, according to Levine 1990: 8).

In proportional terms, this turned out to be the highpoint of Montreal's English-speaking population: in response to greater opportunities elsewhere, English-speakers began to drift away by the later 19th century, and a high birth rate among French-speakers, together with the migration of many rural French into Montreal, re-established a French-speaking majority by the end of the century. Future growth of English-speaking Montreal was to come not from the arrival of new native-speakers from Britain but from the assimilation of non-English-speaking immigrants, or "allophones", to the city's still socially and economically dominant Anglophone community. The first large group were Ashkenazy Jews from Eastern Europe, native speakers of Yiddish and other European languages, whose arrivals peaked in the decades before World War II; by 1921 there were 43,000 Jews in Montreal. They settled primarily in a Jewish "ghetto" north of central Montreal along St-Laurent Boulevard, before dispersing after the War to a larger region in the city's west end (especially Côte-St-Luc, Hampstead and parts of St-Laurent and Dollard-des-Ormeaux), nearer but still separate from the main areas of British-origin settlement. By the 1950s and 60s, the major source of immigration to Canada was southern Europe. The largest south European group was the Italians, who settled mostly in the east end of Montreal (especially St-Léonard, later Rivière-des-Prairies), among largely French-speaking neighborhoods, well isolated from the main centers of Jewish and British-origin settlement. Today, 120,000 Italian-speakers are the largest linguistic group in Montreal after native-speakers of French and English.

Because these immigrants arrived in a city still dominated by an English-speaking administrative, economic and social elite, it was natural for them to aspire to membership in the English-speaking community by securing an English-language education for their children. This preference was reinforced by the hostility of the French school system, controlled by the Roman Catholic Church, to the inclusion of foreigners amongst its students. The children of Jewish and Italian immigrants thereby became, to a large extent, new native-speakers of English, joining the population of British ethnic origin. By 1976 the community had grown to over 600,000 people—22 percent of the population and one of the largest urban concentrations in Canada. Like the majority of the mid-19th century, however, this turned out to be another highpoint before a fall.

The fall, in this case, was brought about by the separatist Parti Québécois, elected to the provincial government in 1976 by a demand among French Canadians for an end to the English-speaking domination of Quebec and by a fear that French—no longer buttressed by a high birth rate because of social changes that accompanied the Quiet Revolution of the 1960s—would soon become a minority language in Quebec, threatened with gradual extinction by the superior economic and social status of English and its ability to attract immigrants, now the major source of growth in Quebec's population. The new government's first act was therefore to adopt Bill 101, the Charter of the French Language (1977), which took a

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four-pronged approach to ensuring the future dominance of French in Quebec: French would be Quebec's only official language; the language of external and internal communication in all businesses with over 50 employees, thereby removing barriers to the socio-economic advancement of French-speakers; the language of education for all children except those whose parents or siblings had been educated in English in Quebec (later Canada), thereby effectively ending further immigrant additions to the English-speaking population; and the language of all public signage (later the predominant language on public signs), visually reinforcing the conception of Quebec as a French-speaking society. Whereas most French-speaking voters—the large majority in the province—approved of this legislation, returning the Parti Québécois to power in the next election, most English-speakers disapproved strongly (Locher 1988: 83), many seeing it as a deliberate attack on their rights and a spiteful denial of their historic role as one of the founding peoples of modern Quebec.

Whatever its success as an instrument of language revitalization, the effect of the Charter on Quebec's English-speaking community was disastrous. Its adoption, together with related economic problems and political instability arising from the separatist movement, were the main factors in persuading well over 100,000 English-speakers to leave the province over the following decade, an exodus that continues today and that has reduced Montreal's Anglophone population by a third, hitting a low of just over 400,000 people by 2001 (Jedwab 2004: 7, 14). While the exodus has now slowed, the English-language school system has been decimated, losing two thirds of its enrollment (Jedwab 2004: 32), and young anglophone graduates looking for work and a place to raise their families continue to leave (Parenteau, Magnan and Thibault 2008: 26-27), while virtually all new immigrants are forced into the French school system, depriving the English community of its only source of growth.

2. THE CURRENT STATUS OF MONTREAL'S ENGLISH-SPEAKING COMMUNITY

The historical developments described in the preceding section have fostered the development of ethnic variation in Montreal English in several ways. First, the basic source of this variation lies in the pre-Charter regime, in which the majority of immigrants to Montreal supplemented its English-speaking community, while at the same time diversifying it ethnically and culturally. Early diversity might have been heard in 19th and early 20th century Montreal English, between the Irish-influenced speech of working class sectors like Griffintown and Pointe St-Charles and the more English- or Scottish-influenced varieties of the Golden Square Mile and the west end. By the mid-20th century the community included thousands of new native speakers who had learned English in largely Jewish neighborhoods and still spoke a variety influenced by the Yiddish of their parents; by the late-20th century it had absorbed thousands more whose speech reflected their Italian or Greek origins, not to speak of those who had African American or Caribbean or still other origins. The language situation in Montreal no longer represents an ethno-cultural duality of French versus British Canadians; on both sides of the linguistic divide Montreal's two main languages are now spoken by multi-ethnic populations.

The residential patterns referred to above, in which large segments of ethnic populations effectively segregated themselves in particular neighborhoods, interacting mostly with others of their own kind (see Lieberson 1981), served to reinforce any ethno-linguistic differences found in the first generation of new native speakers, by limiting the exposure of their children to Standard Canadian English, thereby preventing the pattern of rapid assimilation seen among immigrant ethnic groups in other cities. When the Charter altered the public status of English, this further isolated ethnic segments of the English-speaking community from one another and from native speakers of Standard Canadian English, by removing English from public use and greatly reducing its availability in schools. As a first hypothesis about the current status of Montreal English, then, we might expect to see more ethno-linguistic variation in Montreal English than in other regional varieties of native Canadian English, even those spoken in heavily multi-ethnic cities like Toronto and Vancouver.

The history of immigration to Montreal suggests that any differences that might once have existed between Irish and English or Scottish varieties have since been erased, as these populations, now over a century old, have blended through intermarriage and residential and occupational desegregation into an undifferentiated British-origin group. Beside the British, the largest ethnic groups in today's English-speaking population are Jews and Italians (who are also the two non-British groups examined in linguistic studies of New York City (Labov (1966) and Boston (Laferrière 1979)). Of these, we might hypothesize that the Jews, having come a generation earlier than the Italians and having settled closer to the main Anglophone region of Montreal, might be more Canadian and less distinctive in speech, while the Italians, still undergoing the process of assimilation and heritage language loss experienced by Jews in the 1950s and in far greater contact with French, both residentially and culturally, might be maximally distinct from local Canadian English.

3. THE *PHONETICS OF MONTREAL ENGLISH* (PME) PROJECT AT MCGILL UNIVERSITY

These hypotheses were investigated by the author in a project entitled *Phonetics of Montreal English* (PME), carried out at McGill University from 1999 to 2005 (funded by FQRSC Nouveaux Chercheurs Research Grant # 2003-NC-81927). The project involved tape-recorded interviews with 93 members of the three ethnic communities, all native speakers of English who had spent their whole lives in Montreal. The sample of participants is shown in Table 1.

TABLE 1. Sample of participants for *Phonetics of Montreal English* study

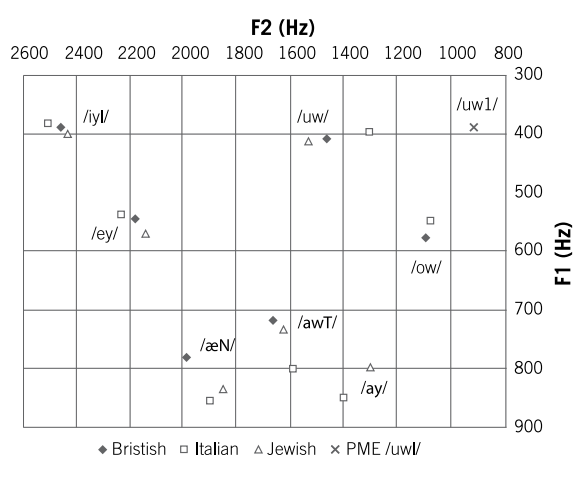
	BORN BEFORE 1946		BORN 1946-1965		BORN AFTER 1965		
Ethnicity	F	M	F	M	F	M	TOTAL
British	8	5	5	1	7	3	29
Italian	3	1	6	3	8	9	30
Jewish	8	8	5	3	5	5	34
TOTAL	33		23		37		93

Participants, interviewed by McGill students who were usually members of the same ethnic group, provided demographic information about themselves, read a word list designed to elicit pronunciations of all of the vowels of English, and conversed freely with interviewers. Their speech was digitized and subjected to computerized acoustic phonetic analysis, using the CSL 4400 system designed by Kay Elemetrics.

Concentrating on the uniform set of data from each participant generated by the word list reading, a spectrogram and set of linear predictive coding points was produced for each word and measurements were made of the frequency (in Hz) of the first and second formants of each vowel (F1 and F2). These are acoustic measures of vowel height (F1) and advancement (F2), which permit a precise representation of the relative position of the tongue in the mouth during the vowel's articulation. By normalizing each participant's formant data to account for frequency variation connected with vocal tract size, it is possible to make direct comparisons of vowel quality among participants, or groups of participants, and to conduct a quantitative analysis to reveal correlations between vowel position and a range of social factors, including, in this case, ethnic group membership. The resulting formant data were subjected to a multivariate analysis of covariance (MANCOVA) in SPSS, which isolated the effect of ethnicity from those of age and sex; tests of between-subjects effects and pairwise comparisons then determined which phonetic measures were significantly affected by ethnicity and which ethnic contrasts were significant for each measure. For a more methodological details and results, see Boberg (2004, *In press*).

4. PHONETIC INDICATORS OF ETHNIC IDENTITY IN MONTREAL ENGLISH

FIGURE 1. Statistically significant ($p < 0.05$) differences in mean phonetic measures among ethnic groups examined in the PME project.



Key to symbols (words exemplifying vowel sounds):

/iy/ *see, seed*	/uwl/ *tool, pool*
/ey/ *say, state*	/ow/ *toe, boat*
/ay/ *sigh, side*	/awT/ *shout, house*
/uw/ *too, boot*	/æN/ *can, damp*

Figure 1 shows the seven phonetic measures that displayed the greatest ethnic differences in the PME study, along with one other vowel, the /uwl/ of *tool*, that was not ethnically differentiated but helps to define the outline of the vowel space. As hypothesized, the Jews are the most Canadian of the two non-British groups. In particular, they join the British-origin group in two features found in other studies to be strongly characteristic of Canadian English (Labov, Ash and Boberg 2006; Boberg 2008, *In press*). One is the "Canadian Raising" of the vowel in words like *shout* and *house*, compared to that in words like *cow* and *loud*: Figure 1 shows that British- and Jewish-origin speakers share a higher vowel in these words (a lower F1 value), whereas Italians preserve a lower vowel (a higher F1 value), no different from that of the non-raising context. Another instance of Jewish adoption of Canadian features is the advancement of the vowel

/uw/, in words like *too* and *boot*: in Canadian English, this is strongly fronted, approaching the high-central region of the vowel space, sounding something like *tee-oo*. Jews, in fact, have an even more advanced vowel (a higher F2) than British-origin speakers, while Italians resist this development, retaining a back vowel (lower F2), like that of Italian /u/. Jews, for their part, have more open and diphthongal realizations of the vowels /iy/ *(see)*, /ey/ *(say)* and /ow/ *(toe)*, and a much more retracted vowel (lower F2, "darker" and more rounded) in /ay/ than the other groups, so that *sigh* sounds a little like *soy*. Finally, the British-origin group distinguishes itself from the more recently arrived groups by raising the vowel /æ/ (giving it a lower F1) when it occurs before the nasal consonants /n/ and /m/ (as in *can* and *damp*), a "native" Canadian feature also heard in Ontario and the Maritimes but not acquired by either "ethnic" group in Montreal. Taken together, these phonetic differences, along with other differences involving consonant articulation, intonation and even word choice, cause British, Jewish and Italian varieties of Montreal English to sound strikingly different from one another, a fact to which most speakers of Montreal English can attest.

5. THE OUTLOOK FOR ETHNIC VARIETIES OF MONTREAL ENGLISH

Ethnic differences in Montreal English like those reported above will likely survive as long as the social conditions that produced them: continued ethnic self-segregation and isolation from "native" Canadian English models will foster continued divergence in speech, even among successive generations born in Canada. Moreover, these differences should not be conceived of purely in negative terms: they may also represent a positive force of ethnic self-identification, as speakers seek to use language, among other forms of social behavior, to proclaim their membership in ethnic communities. Ethnic separatism, however, is not an easy goal to pursue in a democratic, pluralistic society, and it might be expected that even large, culturally distinct and well established groups like Jews and Italians will feel at least some pressure to tolerate increasing intermarriage and other forms of social contact with other groups, which can only weaken the ethno-linguistic patterns observable today.

Of course, the ultimate fate of all of these ethnic speech varieties is bound up with the larger fate of Montreal's English-speaking community as a whole. Since the mid-19th century, its proportion of Montreal's population has plummeted from over half to under ten percent, a loss of about 85 percent (for historical data on Quebec as a whole, see Rudin 1984: 28). If this trend continues, English Montreal is well over half of the way towards extinction. This would mean the end of a unique community, displaying a set of subtle and complex relations between language and ethnicity found nowhere else in Canada, at least the same extent or involving the same groups. Ironically, it is in some ways the demotion of English to non-official status in Quebec that has increased its value to students of language, by helping to preserve ethnic varieties of speech that might have disappeared in a more English-dominant context.

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