INFLUENCES ON ABORIGINAL AND IMMIGRANT LANGUAGE GROUPS IN CANADA: SOME SIMILARITIES AND DIFFERENCES

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ABSTRACT

This study provides a census-based data analysis of the demographic, family, household and community factors in relation to the growth, continuity and situation of Aboriginal and immigrant languages in Canada, over the 15-year census period of 1991 to 2006. This research follows the evolution of the three major Aboriginal languages (Cree, Inuktitut, Ojibway) and three major immigrant languages (Chinese, Italian, German) over the period 1991-2006 and discusses the factors associated with observed changes in their populations and selected language indicators. Language data on mother tongue, home language and knowledge are provided for these major languages from the past four censuses (1991, 1996, 2001 and 2006).

INTRODUCTION

Aboriginal and immigrant populations have very different characteristics in terms of their geographic location, demographic, social and economic characteristics, but both populations are affected by similar factors when we consider the growth and size of language groups. These factors can be broadly classified as demographic, family and household, community, and media factors.

Demographic factors are those that have an impact on the growth and size of a population. While Canada's Aboriginal and immigrant language groups are both subject to the influences of fertility and mortality, international migration is not a significant consideration in the Aboriginal case. However, international migration is particularly important for immigrant language groups, which can experience marked fluctuation over short periods of time, depending on immigration patterns.

The family and household factors directly influence the language situation and the possibility for maintenance and continuity of Aboriginal and immigrant languages. In two-parent families, the language knowledge of each person affects the home language and the parents' tendency to transmit a language to their children. For example, if one spouse speaks English and a non-official[1] language and the other speaks only English, then English generally becomes the language spoken at home. Even if one of the spouses has some knowledge of the non-official language, the couple generally chooses the language that facilitates and maximizes communication, and that is often an official language, be it English or French.

Children are likely to adopt the official language as their mother tongue when one of the parents' mother tongue is an official language and the other is not[2]. As Canada has

become more diverse, the tendency of people to choose marriage partners who differ from themselves across several social dimensions has increased and linguistic exogamy has increased in a similar fashion (Harrison, 1997). Internal migration, especially rural-urban (e.g., between Aboriginal communities or reserves and urban areas), can also increase the likelihood of linguistic exogamy, especially in urban areas where prospective partners whose mother tongue is an official language far out-number those with a traditional language (Norris, 2009).

Patterns of intermarriage have significant implications for intergenerational transmission of Aboriginal and immigrant languages. People whose mother tongue is a non-official language and who choose a mate with the same mother tongue are much more likely to transmit that mother tongue to their children.

Community factors reflect the possibilities for speaking the language outside the home. The number and concentration of those speaking the language in a particular area will influence the tendency for that language to be maintained. Further, the number of people in the community who can only speak the Aboriginal or immigrant language will have an influence, since any communication with these individuals is limited to one of these languages. Finally, the presence of institutions that foster the use of the language in the community will have an influence. Such institutions as churches and multicultural and Aboriginal centres (e.g. Friendship Centres) can provide opportunities for the use and maintenance of non-official languages.

The availability of broadcast and print media in Aboriginal or immigrant languages can also help to promote the maintenance of these languages. Television and radio broadcasts in Aboriginal languages[3] have been recognized as playing an important role in helping to maintain language and culture. Similarly, many immigrant languages are used by radio and television providers across Canada. Books, magazines and newspapers are also available in Aboriginal and immigrant languages.

EVOLUTION OF SELECTED ABORIGINAL AND IMMIGRANT LANGUAGES: DATA AND APPROACH

This study provides a census-based data analysis of the demographic, family, household and community factors in relation to the growth, continuity and situation of Aboriginal and immigrant languages in Canada, over the 15-year census period of 1991 to 2006. The study examines the evolution of selected languages, representing each of the three most frequently reported Aboriginal and immigrant languages in 2006. Census data on language - mother tongue, home language and knowledge - are provided from the past four censuses, (1991, 1996, 2001 and 2006), for the three major Aboriginal languages groups (Cree, Inuktitut, Ojibway) and the three major immigrant languages (Chinese, Italian, German). For immigrant languages, data on place of birth and period of immigration are also provided. The analysis also considers the comparability of language data across censuses.

ABORIGINAL LANGUAGE GROUPS

A multiplicity of factors - historical, societal, cultural, economic, geographic, and demographic - have contributed to the current states of close to ninety Aboriginal languages in Canada today (Norris, 2010). For example, historical factors include events associated with the forces of colonization and the legacy of the residential school system, which saw the prohibition of Indigenous language use among Aboriginal children. Today, the forces of larger mainstream languages, globalization, urban environments outside of Aboriginal communities, as well as the demand and need for mainstream language use in daily life in school, work, and the marketplace can present challenges for language maintenance and survival. As with other minority languages, individuals' continual exposure to more dominant languages, along with the need to use them in everyday life, can be a powerful catalyst in the decline of Aboriginal languages.

Demographic Factors and Language Learning Considerations: Population Size, Language Continuity, Second Language Acquisition and Age of Speakers

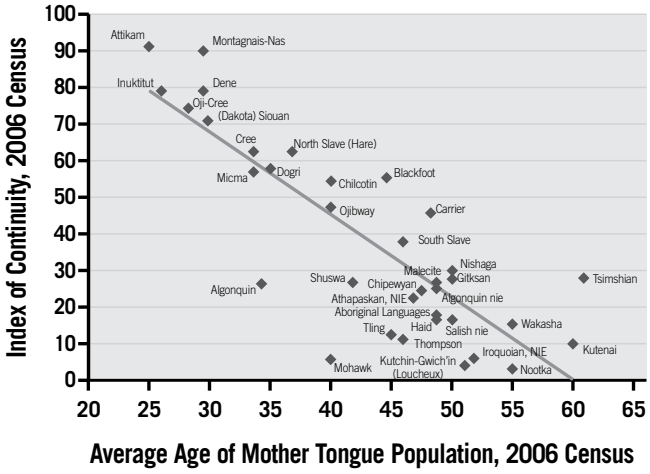
There are a number of demographic factors to consider in relation to the state of Aboriginal languages. First and foremost is the size of the population with an Aboriginal mother tongue or home language. Since a large base of speakers is essential to ensure long-term viability, the more speakers of a language, the better its chance of survival. In 2006, some 222,000 people reported having an Aboriginal language as a mother tongue. However, languages vary significantly in the size of their mother tongue populations. Each of the three largest groups of Aboriginal languages, have mother tongue populations of over 25,000 people; Cree at 85,000; Ojibway at 25,600; and Inuktitut at some 33,000. In contrast, endangered languages rarely have more than a few thousand speakers; often only a few hundred. For instance, the smallest mother tongue population recorded by the 2006 Census is Kutenai with just 100 speakers (Norris, 2011b).

Language continuity generally refers to the natural transmission of a mother tongue from generation to generation, parent to child, through language use in the home. Language use at home enables children to acquire an Aboriginal mother tongue, thereby contributing to

language's maintenance. Use of the language at home is vital to an assessment of a language's viability and can be established using a continuity index.[4] Generally, languages with high continuity are the large-population languages, such as Inuktitut and Cree, and some smaller, but still sizable languages (e.g. Attikamek and Dene); although some large population languages, such as Ojibway, have relatively low continuity. Endangered languages with populations under 1,000 (e.g. Nishga and Haida) tend to have the lowest continuity.

The average age of those who have an Aboriginal mother tongue or speak the language at home is also an important consideration, indicating the extent to which the language has been transmitted to the younger generation. Age is an important indicator of the state and viability or endangerment of any language; the younger the first-language speakers, the healthier the language. Figure 1 illustrates the strong inverse linear association between language continuity and average age of the mother tongue population. Viable languages, such as Inuktitut and Attikamek, are characterized by relatively young mother tongue populations (average age about 25) and corresponding high continuity. In contrast, endangered languages, such as Haida and Wakashan, typically have older mother tongue populations (average age around 50 or older) combined with very low continuity indexes (Norris, 2011 b).

Figure 1: Aboriginal Languages in Canada: Index of Continuity by Average Age of Mother Tongue Population, Canada, 2006



Source: 2006 Census, unadjusted data (Norris, 2011 b, Table 1, p.24)

Age and continuity factors do not tell the whole story however, since second language acquisition is especially prevalent among younger generations of endangered language speakers. The ability to speak, or knowledge of, a language provides some clues as to how speakers of different generations have learned their language, either at home as a mother tongue or later in life as a second language. For example, the Kutenai language family has one of the oldest mother tongue populations, with an average age of 60 years, and lowest continuity indexes, with 11 persons speaking Kutenai as a major language at home, for 100 persons with a Kutenai mother tongue. However, the index of ability[5] in 2006 indicates that there are almost two people (usually younger at an average age of 45) who speak the language to every one individual with the Kutenai mother-tongue, suggesting that younger generations are more likely to learn Kutenai as a second language (Norris, 2011b, Table 1, p. 24). Second language acquisition patterns are also more highly pronounced off-reserve, especially in urban areas and among youth (Norris & Jantzen, 2003).[6]

Passing on language to the next generation: critical for survival

Language transmission from one generation to another is the major factor in Aboriginal language survival and maintenance. The growth in Aboriginal mother tongue populations is attributable to the relatively high fertility rates of the Aboriginal population in combination with intergenerational transmission.[7]

Unlike other non-official or heritage[8] languages in Canada, Aboriginal languages are generally indigenous to the country and cannot rely on immigration to maintain or increase their populations of speakers, as observed in the growth of the Chinese mother tongue group. Thus, passing on the language from parents to children is critical for all Indigenous languages since Aboriginal children are their future speakers.

Many of the factors affecting the intergenerational transmission of an Aboriginal mother tongue are associated with its continued use as a major home language, especially on a daily basis —ideally, as one spoken most often in the home, as stressed in the recommendations by the Royal Commission on Aboriginal Peoples (RCAP, 1996). Yet there are various dynamics that can affect the use of traditional languages in the home:—for example, the life cycle and the transition from youth into adulthood; residence within or outside Aboriginal communities, on reserves, or in urban areas; migration to and from communities and urban areas; family formation and linguistic out-marriage (exogamy) or parenting; and entry into the labour force.

The low prospects of home language use of endangered languages are associated with a number of factors. Compared to speakers of viable languages, endangered language speakers are more likely to marry or parent with people who do not speak an Aboriginal language; to be more urbanized and to live outside Aboriginal communities; to be older first-language speakers; and, among younger generations, more likely to have learned their traditional language as a second language (Norris, 2003).

Research demonstrates that a home language "spoken most often" is most likely to become the mother tongue of the next generation. However, regular use of an Aboriginal language at home, even if not the major home language, may help first-language speakers maintain their mother tongue, and others to learn it as a second language. This could be particularly relevant to learning endangered languages, which, if spoken at home, tend not to be spoken "most often" but are at least spoken "regularly" (Norris & Jantzen, 2003; Norris, 2008, 2011). Within urban areas, especially in large cities, home language users are considerably more likely to speak their traditional languages on a regular basis, rather than on a most often basis, a pattern that contrasts most sharply with the situation on reserves (Norris, 2011b, 2011c, 2012).

Families and Communities: Language Continuity, Transmission and Exogamy

Both family and community are significant factors in the transmission from parent to child, affecting whether the child learns the Aboriginal language as a mother tongue or as a second language, or speaks it at home. The best conditions for a child to learn an Aboriginal language as a mother tongue and to speak it at home are found within families in which the language has a strong presence in the home, where the Aboriginal language is the mother tongue of both parents in two-parent families, or of the lone parent located in Aboriginal communities. However, many Aboriginal children do not live in such ideal learning conditions, let alone have one or both parents with an Aboriginal mother tongue. This is shown by the long-term declines in continuity, with children comprising a shrinking share of the population with an Aboriginal mother tongue and increasingly more likely to learn an Aboriginal language as a second language, especially for endangered languages and in urban areas (Norris, 2003; 2007; 2008).

In a two-parent family, the tendency to pass a language to the children is significantly lower when an Aboriginal language is the mother tongue of only one, as opposed to both parents (Norris, 2003). Exogamy generally reflects both the impacts of population size and integration. A high degree of linguistic out-marriage/parenting (exogamy) is associated with the diminished continuity of languages.

An analysis of 1996 Census data (Norris, 2003; Norris & MacCon, 2003) reveals a strong inverse linear association between language continuity and exogamy (% of children in mixed marriages) as they relate to the transmission of the different Aboriginal languages. These patterns are consistent with Harrison's (1997) 1991 Census-based study on immigrant languages. Viable languages are characterized by extremely high language continuity indexes (80 or more persons speaking a given Aboriginal language most often at home for every 100 persons with that Aboriginal language as a mother tongue) and low exogamy rates (<20% of children in mixed marriages). Inuktitut is such an example, with a continuity index of 86, and an exogamy rate of 19%. Conversely, endangered languages such as Kutenai tend to have extremely low continuity indexes, of 20 or less home language speakers per 100 persons with the given language as a mother tongue, and exogamy rates averaging some 90%. Corresponding continuity indexes and exogamy rates for the two largest First Nation language groups are: for Cree, 70 major home language speakers per 100 mother tongue population and 30% of children in mixed marriages; and for Ojibway, 55 and 47% respectively.

Aboriginal communities, including the First Nation reserves of Registered Indians and the northern communities of the Inuit, clearly support the maintenance and transmission of Aboriginal languages, as evidenced by sizable mother tongue populations and high continuity. First Nations, Métis, and Inuit differ significantly in their degree of urbanization (Norris & Clatworthy 2011) and language situations. In 2006, relatively high proportions of Inuit (63%) and Registered Indians residing on-reserve (46%) reported having an Aboriginal mother tongue, compared to the more urbanized non-Status Indian (2.4%) and Métis (2.6%) populations (Norris, 2011b). The same patterns were also observed in previous censuses (Norris 1998, 2003, 2007).

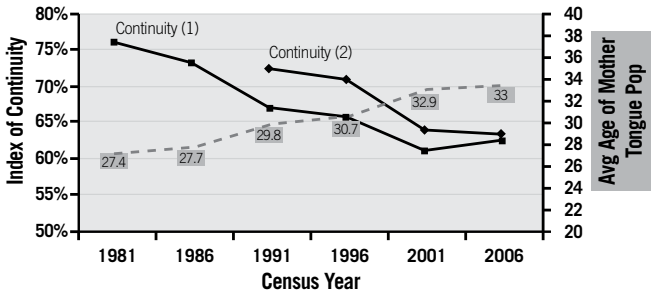
Major home use and transmission of a mother tongue or first language, which ideally yield the best prospects for Aboriginal languages, tend to be difficult within a city environment. The effect of the larger mainstream languages of English or French in daily life are evident in the patterns of Aboriginal language use in urban homes, where they are rarely spoken as a major language, and where prospects of intergenerational transmission of a mother tongue are consequently low. However there are signs that urban Aboriginal residents are finding other strategies for speaking and learning their traditional languages, in ways that are perhaps more feasible within urban environments. Instead of being achieved through major home use and

intergenerational mother tongue transmission, traditional languages are being learned with some regular home use as second languages (Norris, 2011b, 2011c, 2012).

Aboriginal Languages Trends in Population Growth, Continuity and Ageing

Long-term declines in major use of Aboriginal languages in the home effectively lower the chances of children acquiring their parent(s)' traditional language as a mother tongue, and thereby contributes to an ageing mother-tongue population. Over the 20 year period, from 1981 to 2001, for many Aboriginal languages, especially endangered ones, home language use shifted from traditional to non-Aboriginal. Overall, the continuous decline in the continuity index, from about 76 to 61 home language speakers per 100 mother tongue population, corresponded to an ageing mother tongue population, whose average age rose by five and a half years to 33 years in 2001. However, analysis of recent trends suggests some stabilization of these trends over the 2001-2006 period (Figure 2) (Norris and Snider, 2008, p.226).

Figure 2: Aboriginal Languages: Index of Continuity and Average Age of Mother Tongue Population, Canada, 1981 to 2006



Home language / Mother tongue Continuity:
(1) Single responses; (2) Single & Multiple
Source: 1991-2006 Census, data (Norris and Snider, 2008, Figure 1, p. 226)

The impact of the long-term erosion of Aboriginal languages in the home and declining intergenerational transmission is evident today. In 2006, out of Canada's 1.2 million people identified as Aboriginal (First Nation, Métis, or Inuit), 220,000, or about one in five (19 per cent), reported an Aboriginal language as their mother tongue. A greater number – 252,000, or 21 per cent of Aboriginal people – said they could converse in an Aboriginal language, implying that other speakers had learned their traditional language as a second language. However, fewer – just 17 per cent – reported speaking an Aboriginal language at home: 12 per cent said it was the language they used most often at home, and 5 per cent said it was a language they used on a regular basis at home.

Table 1 shows changes in the Cree, Ojibway and Inuktitut groups, as well as for Aboriginal languages overall, from 1991 to 2006[9], for the total population. Caution in interpreting these patterns and trends are stressed since data have not been adjusted for comparability across all three censuses.[10]

Overall, the total population reporting an Aboriginal mother tongue in Canada showed an increase of about 17%, from 190,200 in 1991 to 222,200 in 2006. Adjusted intercensal data (except 2001-2006) suggest some variations in growth patterns over the three census periods (though not directly comparable). Over the 1991-1996 period, the total Aboriginal mother tongue population grew by about 10%; then decreased some 3% between 1996 and 2001; and then increased again by 9% over 2001-2006 (Table 1).

Among the three Aboriginal languages, the Inuit language of Inuktitut experienced the greatest growth over the past 15 years, with an increase in its mother tongue population of almost 33%, from 25,000 in 1991 to 33,000 by 2006. All three intercensal periods show consistently positive and steady growth: 12% and 8% (adjusted) over the 1991-1996 and 1996-2001 periods, and 11% over 2001-2006.

In contrast to Inuktitut, the Cree and Ojibway language groups experienced considerably less growth over the same periods. The population with a Cree mother tongue increased overall by 3.5% (unadjusted) from 82,000 in 1991 to 85,000 in 2006. Adjusted data yield variations in intercensal growth patterns of the Cree mother tongue population, with an increase of 10.5% over the 1991-1996 period, then a decrease of 6% between 1996 and 2001, followed by an increase of 10% over 2001-2006.

Ojibway experienced the least growth of the three Aboriginal languages, with its mother tongue population increasing by only 1% over the past 15 years (unadjusted), from 25,300 in 1991 to 25,600 by 2006 (to some extent this growth reflects the effect of changes in reporting patterns of Oji-Cree and Ojibway). Adjusted intercensal data show an increase of 5% in the Ojibway mother tongue population over 1991-1996, followed by decreases over both 1996-2001 and 2001-2006 of 10% and 2%, respectively.

Even among the largest language groups of Cree, Ojibway and Inuktitut there are significant variations in their state and trends. In terms of continuity and aging, the Inuktitut language is clearly the most viable and youngest of the three, followed by Cree and then Ojibway. In addition to the high rates of intergenerational transmission of Inuktitut, Inuit fertility rates are among the highest of all Aboriginal groups.

Over the past 15 years, unadjusted census data show that the average age of the Inuktitut mother tongue population has increased relatively slightly from 23.8 in 1991 to 26 by 2006. Compared to Inuktitut, Cree speakers

Table 1: Mother Tongue, Home Language, Language Knowledge, and Selected Indices[1] for Cree, Ojibway and Inuktitut Languages, 1991 - 2006, Total (Aboriginal and non-Aboriginal) Population, Canada

LANGUAGES VARIABLES AND INDICES	MOTHER TONGUE	HOME LANGUAGE A	HOME LANGUAGE B	NO. OF SPEAKERS (KNOWLEDGE)	CONTINUITY INDEX	KNOWLEDGE / SECOND LANG INDEX	INTERCENSAL PERCENTAGE IN M.T. POPULATION	CHANGE	INTERCENSAL PERCENTAGE IN N. SPEAKERS OR KN POPULATION	CHANGE
Aboriginal Languages	**(M.T.)**	**Major - Most Frequent [2] (H.L.)**	**Regular [2] (H.L.)**	**Knowledge (N.S.)**	**H.L. / M.T. X 100**	**N.S. / M.T. X 100**	**Unadjusted Census data**	**Adjusted for incomplete enumeration [3]**	**Unadjusted Census data**	**Adjusted for incomplete enumeration [3]**
	Unadjusted Census Data						%	%	%	%
1991										
Cree	82,070	60,855	n/a	93,825	74	114	1986-1991 Not applicable here			
Ojibway	25,260	15,680	n/a	30,430	62	120				
Inuktitut	25,000	21,905	n/a	26,805	88	107				
Total Aboriginal Languages	190,165	138,110	n/a	217,885	73	115				
							1991-1996 MT		1991-1996 KN	
1996							**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
Cree [4]	87,555	62,605	n/a	102,215	72	117	6.7	10.5	8.9	*Adjusted Data not available*
Ojibway [4]	25,885	14,300	n/a	31,630	55	122	2.5	5.5	3.9	
Inuktitut	27,780	23,875		30,405	86	109	11.1	11.1	13.4	
Total Aboriginal Languages	208,610	146,105	n/a	243,790	70	117	9.7	12.1	11.9	
							1996-2001 MT		1996-2001 KN	
2001							**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
Cree [3]	80,070	49,755	22,200	97,230	62	121	-8.5	-6.2	-4.9	-3.1
Ojibway [3]	23,515	10,565	7,975	30,505	45	130	-9.2	-10.1	-3.6	-6.0
Inuktitut	29,690	24,350	5,255	32,775	82	110	6.9	7.5	7.8	*8.7*
Total Aboriginal Languages	203,285	129,340	52,055	239,620	64	118	-2.6	-3.3	-1.7	*Not available*
Sum of responses	203,290	129,340	52,055	244,400	64	120				
							2001-2006 MT		2001-2006 KN	
2006							**Unadjusted**	**Adjusted**	**Unadjusted**	**Adjusted**
Cree	84,910	52,650	21,360	99,945	62	118	6.0	10	2.8	7
Ojibway	25,575	11,905	9,260	32,465	47	127	8.8	-2	6.4	-2
Inuktitut	32,970	25,985	6,550	36,265	79	110	11.0	n/a	10.6	n/a
Total Aboriginal Languages	222,210	139,795	55,050	258,290	63	116	9.3	*Not available*	7.8	*Not available*
Sum of responses	222,235	139,805	55,045	261,925	63	118				

1991-2006	**1991-2006 % change**			
Cree	3.5	-13.5	n/a	6.5
Ojibway	1.2	-24.1	n/a	6.7
Inuktitut	31.9	18.6	n/a	35.3
Total	16.9	1.2	n/a	18.5

(1) Based on single and multiple responses of Aboriginal mother tongue, home language or language knowledge.

(2) Home language spoken on 'a regular basis' was first introduced in the 2001 Census; continuity index is calculated with home language spoken 'most often'.

(3) Data have been adjusted to account for adjusted differences in incompletely enumerated Indian reserves between Censuses.

(4) Four reserves in Manitoba had changes in reporting patterns for Cree, Ojibway and Oji-Cree between 1996 and 2001, that saw increases in Oji-Cree and corresponding decreases in Cree and Ojibway. Consequently, data for these reserves have been excluded in the adjusted percentage changes between 1996 and 2001. In addition, Oji-Cree was shown as a separate language from the 1996 Census on; it was not separately available in 1991, but instead was included in the language category of 'Algonquin, n.i.e.'

Sources: a) Unadjusted Census Counts: 1991 Census: Norris (1998), Statistics Canada, Catalogue nº 11–008 Aboriginal, Table, p. 13; 1996 Census: Norris and Jantzen (2003), Not Strangers in these Parts: Urban Aboriginal Peoples; Table 1, p. 96-97; 2001 Census: Norris (2007), Statistics Canada, Catalogue. nº 11–008 ; Table 2, p. 23; 2006 Census: Norris (2011b), Aboriginal Policy Studies Journal, Table 1, p. 24. *b) Intercensal percentage changes: 1991-1996 adjusted based on earlier (1998) calculations by Norris (available only for MT data, not KN); 1996-2001 adjusted from: Statistics Canada –Catalogue nº 96F0030XIE2001007: *Aboriginal Peoples in Canada, A Demographic Profile,* Table 4, p. 21; and 2001-2006 adjusted from Statistics Canada – Catalogue nº 97-558: *Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census,* Table 24, p. 50; and Norris 2007, Statistics Canada – Catalogue nº 11-008, Table 2, p. 23.

are older, with average ages increasing from 28.6 in 1991 to 33 by 2001, and remaining unchanged in 2006. In the case of Ojibway, its mother tongue population is oldest, rising from an average age of 35 in 1991 to aging by 2006; however, its population of all speakers, though aging, has consistently remained younger than that of its mother tongue, reaching on average the age of 39 in 2006, which is likely a reflection of the effects of younger second language learners (Table 2).

Trends in their aging speaker populations reflect the long-term decline in major home language use of Cree and Ojibway languages and consequently in their intergenerational transmission. While Cree continuity indexes declined from 74 in 1991 to 62 by 2001, with no change in 2006, Ojibway indexes saw sharper declines from 62 to 45 by 2001, increasing slightly to 47 in 2006. In contrast, the continuity of Inuktitut appears to be fairly strong and stable, with a relatively smaller decline, from 88 in 1991 to 79 by 2006.

These different trends in the growth and aging of the mother tongue populations of Inuktitut, Cree and Ojibway reflect the differing impacts of family, community and urbanization. An analysis of 2006 Census data (Norris, 2011b, 2012) shows that Inuktitut is the least urbanized of the three languages, with just 4% of the Inuktitut mother tongue population residing in cities, followed by 14.5% of Cree speakers, and 22% for Ojibway (the most urbanized). Furthermore, in terms of home language use, among those reporting Inuktitut as their home language, 80% use Inuktitut as their major home language, with the remaining 20% speaking it on a "regular basis". In sharp contrast, 44% of Ojibway home language users speak their traditional language on a "regular" rather than a "most frequent" basis. In the case of Cree, about 30% of home language speakers are "regular" rather than "most frequent" users. These three languages also differ with respect to family and exogamy characteristics. The 1996 exogamy rates were lowest among Inuktitut, with 19% of children with Inuktitut mother tongue parents in mixed marriages, compared to 31% and 47% of children of Cree and Ojibway linguistic parentage respectively (Norris, 2003; Norris & McCon, 2003).

Finally, for all three languages, as well as Aboriginal languages in general, the population with the ability to speak an Aboriginal language experienced the greatest growth, while the population speaking a major home language posted the least growth. Overall, between 1991 and 2006, the number of Aboriginal language speakers increased by 18.5% compared to 17% for the mother tongue population, while the numbers of major home language speakers increased minimally, by only 1%. Rates and patterns vary across the three languages. Ojibway saw relatively greater increases in its population able to speak the language, compared to its mother tongue population, so that by 2006 there were 32,500 people able to speak Ojibway, compared with 25,600 who have an Ojibway mother tongue. This yields a "knowledge" or second language index of 127, implying that for every 100 people with an Ojibway mother tongue there are an additional 27 who have learned it as a second language. The fact that Ojibway has the highest knowledge or second language index of all three languages is consistent with the fact that it is the most urbanized one, and points to the pattern of second language learning in urban areas.

IMMIGRANT LANGUAGE GROUPS

Table 3 shows changes in the Chinese, Italian and German language groups. These three language groups were chosen because they are the three most frequently occurring non-official languages reported in the 2006 Census.

There was a remarkable change in the Chinese mother tongue group as their numbers almost doubled from just over one half million in 1991 to more than a million in 2006.

Table 2: Average Age of Population with an Aboriginal Mother Tongue or Language Knowledge, for Cree, Ojibway and Inuktitut Languages, Total (Aboriginal and non-Aboriginal) Population, Canada, 1991 – 2006

	AVERAGE AGE OF POPULATION WITH							
ABORIGINAL LANGUAGES	AN ABORIGINAL MOTHER TONGUE [1]				KNOWLEDGE OF / ABILITY TO SPEAK ABORIGINAL LANGUAGE [1]			
	Average Age in Years – Unadjusted Census Data [2]							
Census Years	**1991**	**1996**	**2001**	**2006**	**1991**	**1996**	**2001**	**2006**
Cree	28.6	30.2	33.0	33.0	28.7	29.9	32.4	33.0
Ojibway	35.2	36.2	40.1	40.0	33.8	34.9	38.0	39.0
Inuktitut	23.8	23.9	25.1	26.0	23.6	23.9	25.0	26.0
All Aboriginal Languages	29.8	31.0	32.9	34.0	29.7	30.4	32.1	33.0

Notes: (1) Average ages are derived for populations based on single and multiple responses of an Aboriginal mother tongue or Aboriginal language knowledge. (2) Some caution is required in intercensal comparisons of unadjusted Census data of Aboriginal language data, given intercensal differences in coverage, that is, incomplete enumeration of reserves, reporting, content, and questions.

Sources: Unadjusted Census Data on Average Age: 1991 Census: Norris (1998), Statistics Canada, Catalogue. nº 11–008 Aboriginal, Table, p. 13; 1996 Census: Norris & Jantzen (2003), Not Strangers in these Parts: Urban Aboriginal Peoples; Table 1, p. 96-97; 2001 Census: Norris (2008), Hope or Heartbreak: Aboriginal Youth and Canada's Future, special issue, Horizons 10 (1), Table 1, p. 65; 2006 Census: Norris (2011), Aboriginal Policy Studies Journal, Table 1, p. 24.

This increase was largely fuelled by immigration. The 2006 Census collected information on place of birth and period of immigration. These data show that in 2006 there were 441,000 immigrants from the People's Republic of China or from Hong Kong (administrative region) who came to Canada between 1991 and 2006. A further 53,000 people coming to Canada during this period were born in Taiwan.

The number of people with Chinese home language grew at a somewhat slower pace than the mother tongue population. Approximately 800,000 people reported Chinese as their home language in 2006. The population able to speak Chinese more than doubled over the fifteen-year period between 1991 and 2006, while the index of continuity for Chinese was much higher (77%) than either Italian or German language groups.

One factor that fosters the maintenance and growth of the Chinese language group in Canada is the large number of speakers that are found in particular Census Metropolitan Areas (CMA). In 2006, there were 411,000 people in the Toronto CMA with Chinese mother tongue, and 325,000 in the Vancouver CMA.

The other two major non-official language groups shown in Table 3 experienced a decline in their mother tongue numbers between 1991 and 2006. The number of people with Italian as a mother tongue declined in each census over the fifteen year period, with an overall decline from 539,000 to 477,000. While those with Italian as a home language declined markedly from 288,000 to 170,000, the number of speakers showed a moderate decline, from 702,000 to 661,000. The substantial difference between the mother tongue and home language numbers meant that the continuity index was only 36 in 2006, declining from 54 fifteen years earlier. The knowledge index is quite high (139), indicating that many people are still able to speak the language even though it is not the one that they use most often at home.

Italy was the source country of many immigrants to Canada during the post-war period prior to 1971, but relatively few immigrants from Italy came between 1991 and 2006. In fact, the 2006 Census counts only about 7,000 people who were born in Italy that came to Canada during the fifteen years under review here. Consequently, unlike the Chinese language group, immigration did not have much effect on the Italian group. However, like the Chinese group, there are concentrations that foster maintenance and use of the language. Approximately 186,000 people with Italian as a mother tongue were living in the Toronto CMA in 2006, while 120,000 were living in the Montreal CMA.

The decline in the number of people reporting German as a mother tongue was less substantial than those with Italian. The German mother tongue group declined from 491,000 in 1991 to 467,000 in 2006. While those reporting German home language declined slightly from 134,000 to 128,000, the index of language continuity was the lowest of all three groups for each of the census years. However, a fairly significant number of people were still able to speak German (623,000).

Table 3: Mother Tongue, Home Language, Language Knowledge and Selected Indices for Chinese, Italian and German Languages, 1991-2006

	MOTHER TONGUE	HOME LANGUAGE	NO. OF SPEAKERS	CONTINUITY INDEX	KNOWLEDGE INDEX
	(M.T.)	(H.L.)	(N.S.)	H.L. / M.T. X 100	N.S. / M.T. X 100
1991					
Chinese languages	516,870	430,090	557,300	83	108
Italian	538,685	288,290	701,910	54	130
German	490,635	134,460	684,950	27	140
Total Non-official	4,099,890	2,463,435	4,981,600	60	122
1996					
Chinese languages	736,015	630,520	791,160	86	107
Italian	514,410	258,050	694,125	50	135
German	470,505	134,615	654,260	29	139
Total Non-official	4,598,290	2,556,830	6,564,305	56	143
2001					
Chinese languages	872,400	724,105	1,028,440	83	118
Italian	493,985	217,065	680,970	44	138
German	455,540	122,435	635,520	27	140
Total Non-official	5,202,240	3,308,980	7,508,840	64	144
2006					
Chinese languages	1,034,090	796,145	1,202,705	77	116
Italian	476,905	170,330	660,945	36	139
German	466,650	128,345	622,650	28	133
Total Non-official	6,147,840	3,472,130	8,570,785	56	139

Note: Chinese, Italian and German were the three most frequently occurring non-official languages reported in the 2006 Census. Chinese includes Mandarin, Cantenese, Hakka, Taiwanese, Chaochow (Teochow), Fukian and Shanghainese, as well as a residual category (Chinese languages not otherwise specified). All of the mother tongue and home language data include both single and multiple responses.

Sources: Statistics Canada, Censuses of 1991, 1996, 2001 and 2006

In 2006, unlike the Chinese and Italian groups, large proportions of the German mother tongue population were not living in specific CMAs. However, the number of people born in Germany who immigrated during the 1991-2006 period, (22,000), was more than three times the population from Italy.

While we do not have the most recent data to analyse the tendency of people with Chinese, Italian or German mother tongues to marry outside their language groups, earlier studies (Harrison, 1997) clearly demonstrated that those with Chinese as a mother tongue were much more likely to have a spouse with the same mother tongue. When both spouses have the same non-official language as a mother tongue, they are much more likely to transmit that language to their children as a mother tongue than couples whose mother tongue differs.

CONCLUSION

The main purpose of this research was to follow the evolution of the three major Aboriginal languages (Cree, Inuktitut, Ojibway) and three major immigrant languages (Chinese, Italian, German) from 1991 to 2006 and to discuss the factors associated with the changes observed. All three Aboriginal language groups experienced an increase over this period, with the largest increase taking place for Inuktitut (approximately 33%). Among immigrant languages, the Chinese mother tongue group increased considerably, by just over 100%, doubling from a population of some 517,000 in 1991, to more than a million, while the Italian and German groups declined.

Size is one factor that differs considerably between Aboriginal and immigrant language groups. While German, the smallest of the immigrant language groups studied, had

a mother tongue population of 467,000 in 2006, Cree, the largest Aboriginal language group, had a mother tongue population of 85,000.

Concentration of the language group is another factor that differs considerably when we compare the Aboriginal and immigrant languages. There are large concentrations of immigrant language groups (Chinese, Italian) in some Census Metropolitan Areas (CMA), which fosters continuity and knowledge of these languages. In contrast, concentrations of Aboriginal language groups tend to occur in smaller Aboriginal communities, reserves or settlements, where the majority of people speak Aboriginal languages, thus contributing to the maintenance of these languages.

Obviously, the role of immigration has been more significant in the evolution of Chinese, Italian and German language groups, than for Aboriginal languages. Immigration was a very large contributor to the exceptional growth of the Chinese mother tongue group between 1991 and 2006, in a manner similar to other non-official languages in earlier decades.

Our index of continuity, which shows the relationship between mother tongue and home language, showed a high level of continuity for Inuktitut, Cree and Chinese language groups, and much lower levels for Ojibway, Italian and German. Studies have shown that linguistic exogamy is a major factor that can lead to the decline of use of both Aboriginal and immigrant languages at home.

In all cases, the knowledge index, which is the relationship between the population able to speak a language and the mother tongue population, showed that the languages studied are learned as second languages. The language groups that experienced the greatest growth, for both Aboriginal and immigrant languages during the fifteen-year period, had the lowest indices of knowledge. Thus, the Chinese language group had a knowledge index of 116 in 2006, while Inuktitut had a knowledge index of 110. These high-continuity languages have a greater tendency to be learned as a first language (mother tongue), than the other languages studied.

Finally, the fact that Aboriginal languages, unlike immigrant languages, are indigenous to Canada, and cannot rely on immigration to maintain their numbers has important implications for the role of second language learning in their survival. Learning to speak endangered languages as a second language among new generations of Aboriginal people "… could have a significant impact in helping to keep their Aboriginal languages alive, even as the few remaining elderly first language speakers die off. […] Current trends in revitalization and second language learning suggest that they may not necessarily become 'extinct' since younger generations of second language speakers could ensure their continuation as 'secondarily surviving' languages" (Norris, 2011a; Moseley, 2007).

NOTES

[1] In both Nunavut and Northwest Territories, Aboriginal languages have 'official' status. However, in the context of this article, official languages refer to English and French.

[2] In the more specific case of husband-wife families, gender differences exist, such that the tendency for parents to pass a non-official language to children is greater if it is the mother, rather than the father, with the non-official language (Norris, 2009).

[3] Broadcast media expand the awareness and learning of Aboriginal languages across Canada, including northern communities. The Aboriginal Peoples Television Network (APTN) is broadcast nationally with programming by, for and about Aboriginal peoples, with almost 30% of the programming in Aboriginal languages (Norris, 2010).

[4] Index of Continuity (HL/MT) measures language continuity, or vitality, by comparing the number of those who speak a given language at home to the number of those who learned that language as their mother tongue. A ratio less than 100 indicates some decline in the strength of the language (i.e., for every 100 people with an Aboriginal mother tongue, there are fewer than 100 in the overall population who use it at home). The lower the score, the greater is the decline.

[5] Index of Ability (KN/MT) compares the number of people who report being able to speak the language with the number who have that Aboriginal language as a mother tongue. If for every 100 people with a specific Aboriginal mother tongue, more than 100 persons in the overall population are able to speak that language, then some learned it as a second language either in school or later in life. This may suggest some degree of language revival.

[6] It should be noted, though, that with respect to second-language acquisition, varying degrees of fluency could be represented among census respondents reporting knowledge of the language, suggesting some caution in considering the implications of second language acquisition for transmission and continuity.

[7] To a lesser extent, adults relearning their mother tongue and more people reporting their Aboriginal mother tongue may also have contributed to the growth.

[8] "[A] heritage language [is] a language other than English or French. … Except for Aboriginal languages, the heritage languages are an imported phenomenon. Immigrants and their countries of origin changed considerably throughout the last century, contributing to a major transformation in the language composition of the nation." (Harrison, 2000, p. 14-15).

[9] Comparability between the 1996 and 2006 Censuses is limited to some extent given that data in this study have not been adjusted for intercensal differentials in under-coverage of the Aboriginal population, including incomplete enumeration of reserves, which can result in under/overestimates of residential distributions of Aboriginal populations by on and off-reserve, in rural and urban areas (Norris and Clatworthy 2011). See Norris, 2011b for further details. Despite their limitations, unadjusted census data nevertheless provide an overall picture of Aboriginal language trends.

[10] Data have not been adjusted for complete intercensal comparability between the 2001 and 2006 Censuses, or for comparability across all three of the 1996, 2001 and 2006 Censuses. However, where feasible, data have been adjusted for five-year intercensal periods with respect to differences in incomplete enumeration of reserves between two censuses, and changes in reporting patterns. In the case of the latter, four reserves in Manitoba had changes in reporting patterns for Cree, Ojibway and Oji-Cree between 1996 and 2001, that saw increases in Oji-Cree and corresponding decreases in Cree and Ojibway. Consequently, data for these reserves have been excluded in the adjusted percentage changes between 1996 and 2001.

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