University of Alberta

First Language Maintenance and Attrition among Young Chinese Adult Immigrants: A Multi-Case Study

by

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A DEDICATION

In loving memory of

my parents

who gave me their unconditional love and
taught me how to love life.

ABSTRACT

The role of the first language (L1) has been generally acknowledged as having important implications for young immigrants' linguistic, educational, socio-cultural, intellectual, career, and identity development (e.g., Cummins, 2001; Guardado, 2002; Kim 2006; Kouritzin, 1999). In this case study I investigated the first language maintenance and attrition of three young adults who had immigrated to Canada as children from mainland China and Taiwan. Two questions were addressed: (a) What linguistic elements were maintained and eroded in the participants' heritage language? and (b) What social and psychological factors contributed to the participants' L1 maintenance and attrition?

The data were collected through self-evaluation questionnaires, translation tasks and open-ended interviews both in English and Mandarin. Using a combination of life stories describing the participants' personal linguistic and social experiences in Canada and the results of linguistic assessments through different tasks, the study provides a detailed examination of the phenomenon of L1 maintenance and attrition among young adult immigrants from China.

The findings of this study indicate that the three participants took distinct routes resulting in differential outcomes in their first language maintenance and attrition. Ethnic and cultural identity, and language attitudes and beliefs were identified as important internal factors. School discourse including teachers' attitudes towards immigrants' L1, peer influences and access to planned L1

educational activities both at home and in the school system were important external factors affecting the participants' L1 maintenance and attrition. The results provide support for the view that a collaborative, inclusive approach to education that involves not only immigrant students, but also their families, educational systems, and society in general facilitates young immigrants' bilingualism and acculturation.

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INTRODUCTION

Children's ability to speak a language other than English when they enter English-speaking countries, if properly nurtured, can benefit them throughout their lives (Banks, 2006; Cummins, 1993; Kouritzin, 1999; Samway & McKeon, 2007; Tse, 2001; Wong-Fillmore, 2000; Yukawa, 1998). It is also generally acknowledged that the role of the first language (L1) has important implications for students' linguistic, educational, cultural, intellectual, economic and identity development (Cummins, 2001; Guardado, 2002; Kim, 2006; Kondo-Brown, 2006; Kouritzin, 1999; Krashen, 2000; Man, 2006; Mollica, 1998; Soltero, 2004; Wiley, 2005). However, unless parents, teachers, and communities actively encourage maintenance of the L1, children are in danger of losing it. If they lose their L1 and become monolingual in a second language (L2), they also lose all the benefits of being bilingual. It also can be very costly to their families and society (Baker, 2000; Freeman, 1998; Hinton, 1999; Tse, 2001; Wong-Fillmore, 1991a, 1991b).[1] Thus, the issue of maintaining the L1 in a L2 environment among immigrant families has become an increasingly salient one for immigrant parents, educators and researchers (Chinen & Tucker, 2006; Guardado, 2002; Kondo-Brown, 2006; Kouritzin, 1999; Li, 2006).

The present study is on L1 maintenance and attrition in the process of acquiring a L2 for young adults who came to Canada as child immigrants from China.

Background of the study

This study was prompted by many years of both my excitement and frustration in seeing so many Chinese immigrant children quickly acquiring English as a L2, and at the same time quickly losing Chinese as a L1. As a Mandarin classroom teacher and researcher, I have seen many parents, especially

[1] For more information on the consequences of L1 language loss, please refer to the section *Consequences of L1 language loss* in chapter 2.

parents from China, putting great effort into encouraging their children to learn English while putting very little or no effort toward helping their children maintain their Mandarin and concomitantly avoiding the consequences of L1 loss. Many parents (including myself) do not consider the possibility that their children might lose their mother tongue; they are excited to see the achievement of their children's language shifting—i.e., acquiring English, assimilating well into the mainstream educational system, and preparing themselves to integrate into a new society. Yet many parents concentrate very little, if at all, on the development of their children's *bilingual* abilities.

I still remember several years ago when I asked one of my friends how his son was doing at school. He was very excited and proud to tell me, "He is doing so good at school! He doesn't even speak any Chinese at home now!" When I heard this, I had mixed feelings. On the one hand, I shared the happiness of my friend in seeing the great progress his son had made in English at school. On the other hand, I felt sad to hear that the boy had stopped speaking Mandarin at home to his parents.

However, I did not ponder this seriously. As described by Wong-Fillmore (2000):

> Few of those who are involved in the process of language loss realize the consequences it can have on their family or children until it is too late. It is difficult for people to believe that children can actually lose a language. (p. 208)

I never seriously thought that children from Mandarin-speaking families could actually lose their mother tongue, until the day I interviewed a young adult woman named Yan who came to Canada at the age of 10. She was my participant in a case study assignment for one of the courses of my doctoral program at the University of Alberta.

"L1 loss" was not the theme of that assignment. I planned to do a case study on L2 acquisition. However, right after the start of the first interview with Yan, I found myself involved in an obvious L1 language loss situation and the

consequences of such a loss. A desire to explore "L1 maintenance/attrition" topic developed and was cultivated almost immediately.

As I noted before, many parents pay great attention to their children's English learning, their functioning in the mainstream educational system, and their integration into a new society, but pay little attention to fostering their L1 maintenance and development. This happens very often in families from China, as many parents think the first language is "immune to loss" (de Bot & Hulsen, 2002, p. 253).

Of course, there are other parents who "may seek to safe-guard the development of that language by creating a geographical boundary and avoiding the use of the majority language in their home" (Baker, 2000, p. 44). However, when I interviewed Yan, I found that although some Chinese immigrant parents might think they were providing sufficient L1 support, exerting an "effective" influence on their child/children's first language and culture maintenance, the result of this practice might not be as effective as they believed.

> Yan: *In my house, most of the time is Mandarin with my parents but some times, it's in English. But most of the time it's a mix. Mostly because I forgot some essential words in Mandarin. So I need to fill it in with English. Most times my parents understand me. (Laugh). And if not, I have to explain it a little bit, but doesn't take too long.* (English interview transcript, 2003)

While many parents think that they are speaking 100% Mandarin at home to their children,[1] children such as Yan may think that their parents are making compromises in understanding their language at home.

Because I knew Yan all the time she was growing up, I was even more shocked by the response that she gave when answering one of my interview questions:

R**:** *What do you regard as your native language? English or Chinese?*
Y: *English.*
R: *English?*

[1] According to the results of an internet survey, 84.62% of Chinese immigrant parents thought that they spoke 100% Chinese at home to their children (retrieved January 29, 2007, from http://www.edmontonchina.cn/viewthread.php?tid=77023&extra=page%3D1).

Y: *Yeah.*
R: *English you think is your native language?*
Y: *It is my primary language.* (English interview transcript, 2003)

As a researcher, I asked this question simply on a routine basis. It was taken from the "Questionnaire for Interviews with Adult Second Language Learners" (Naiman, Frohlich, Stern & Todesco, 1996, p. 229). I had even wanted to skip this question because I was so sure that Yan would give "Chinese" as the answer. I included it only because I thought answering the question would not take very long. From Yan's response, I realized that there may be some other unanticipated differences between the perspectives of young adult immigrants like Yan and my perspective as a teacher and a researcher. I felt a strong need to explore these differences! This was the spark and impetus that made me come to the realization that I should do a research project on L1 maintenance and attrition among Chinese immigrants. From there, and from the subsequent literature review I conducted on this topic, I found that L1 attrition or loss, compared to L2 acquisition, is an under-researched area. Even though language loss/attrition has attracted the interest of some researchers (Dorian, 1982; Emiko, 1998; Kouritzin, 1999; Seliger & Vago, 1991; Wong-Fillmore, 2000; etc.), until recently, very little attention was paid to L1 attrition among new Mandarin-speaking immigrants in non-Mandarin-speaking countries.

To me, that first interview with Yan was the start of a new journey as a heritage-language teacher and researcher. I wanted to further explore the world, culture, and perspectives of these young immigrants from China, which I used to assume were the same as mine. I wanted to listen to their voices to gain an understanding of what made young Chinese adults maintain and/or lose their first language in a second language and second culture environment. From there I wanted to seek out the possibilities of what we could do as educators in the public education system, in my ethnic community, and in society as a whole to enhance the retention of the L1.

Purpose and significance of the study

By conducting three case studies, I will gain a better understanding of the experiences of young Chinese immigrants during the process of L1 maintenance and attrition while acquiring English.

Although language maintenance and loss has been a subject of linguistic research for some, until recently, students' L1 loss has not been greatly emphasized in North American research because English acquisition and study has been the primary focus (de Bot & Hulsen, 2002; Guardado, 2002). Since 1978, and particularly in the last ten years, there has been an increasing flow of Chinese immigration to North America: Newcomers' predominant countries of origin have shifted from northern European countries to Asian and African countries (Carlton, 2006). According to Statistics Canada (2001) and Citizenship and Immigration Canada (2006), immigrants from China have become the largest immigration source to Canada since 1998. Chinese is now the third-most spoken language in Canada, after English and French (Carlton, 2006). Based on Statistics Canada 2002, 2005a and 2005b census data, Duff (2008b) gives a concrete description of the linguistic profile in Canada:

Table 1 Canadian Language Groups Described as "Mother Tongue Other than Official Language" (Allophones) (Duff, 2008b, p.75)

Rank	1971	1991	2001
1	German	Italian	Chinese (all)
2	Italian	Chinese (all)	Italian
3	Ukrainian	German	German
4	Dutch	Portuguese	Punjabi
5	Polish	Ukrainian	Spanish
6	Greek	Polish	Portuguese
7	Chinese (all)	Spanish	Arabic
8	Hungarian	Punjabi	Polish
9	Portuguese	Dutch	Tagalog
10	Yiddish, Croatian,etc.	Greek	Ukrainian

Source: Statistics Canada 2002, 2005a, 2005b census data

With this demographic change, more and more children from China are entering Canadian schools, bringing with them the potential of a major linguistic resource for Canadian society.

The phenomenon of L1 attrition raises numerous concerns among immigrants: on individual, familial, community levels, as well as at a society level.

> There are clear and powerful incentives for learning French, Spanish, Japanese, Chinese, or other languages that are linked to economic hot spots around the world…. Increasingly, business, cultural, political, and social activities around the world call for people with different language and cultural background. (Cloud, Genesee & Hamayan, 2000, p. 4)

L1 and heritage-culture (C1) skills are "an important linguistic resource that can contribute to the nation's future success" and are "demanded in the global marketplace" (Cloud, Genesee & Hamayan, 2000, pp. 4–5).

To avoid losing these benefits through L1 loss, it is important to seek an understanding of the immigrant adolescents' lived experiences of L1 maintenance/attrition in the process of L2 acquisition. It is also important to identify some of the "*what"* in addition to the "*how"* and the "*why"* of their L1 maintenance/ attrition. In this study, I chose to describe and understand the lived experiences of three young Chinese adults who immigrated from China to Canada. Of the three participants, I will focus more on Yan, the participant of the initial study, since she has provided me more opportunities and a longer time to investigate her social and linguistic life in the host society. In order to help identify holistic characteristics of L1 maintenance/attrition among the young Chinese adults, I also walked into the lives of my other two participants: Jinhong and Datong.

It is hoped that the results of this study may influence awareness, concern, attitudes and pedagogy toward preserving heritage languages for teachers, researchers and policy makers, recognizing that language attrition is a common phenomenon. The study is also intended to advance an understanding of the role of parents in new Chinese immigrant families in producing bilingual children; i.e.,

children who are acquiring English while maintaining their heritage language of Chinese.

Research questions

In this study the L1 maintenance/attrition of young Chinese adults to Canada is investigated from both a linguistic perspective and a social perspective. Two sets of research questions on L1 maintenance/attrition will guide the present study.

1. Which linguistic elements were maintained and which were lost in the participants' heritage language (HL)? What is the relationship between the HL self-assessment and actual HL performance? What are effective linguistic practices for maintaining and developing L1?
2. What are the perceptions of the internal and external reasons behind the participants' current proficiency in their heritage language? What are the possible relationships between the attitudes towards HL use and the extent of HL maintenance and attrition of the young Chinese immigrants? What are the links between identity formation and HL maintenance and attrition? What impact do the practices of teachers and schools have on the participants' L1 maintenance/attrition?

Organization

What follows is an explanation of the organization of this thesis with a brief summary of each chapter.

Chapter 1 gives a brief introduction of the background and the significance of the study. Research questions and definitions of certain terms are presented.

Chapter 2 presents the review of literature. After a historical overview of bilingualism and studies on language attrition, descriptions of linguistic, cognitive and social perspectives are discussed respectively. This framework comes from my understanding of L1 maintenance/attrition being a multifaceted and multidimensional phenomenon. After this I discuss the research literature on bilingual programs in Canada with an emphasis on the historical development of

bilingual programs in Edmonton. I then discuss recent studies on L1 maintenance/attrition among Chinese immigrants in North America.

In Chapter 3, I detail the research methods used this study. To answer the "what" and "why" dimensions of HL maintenance/ attrition among young adult Chinese immigrants, two methods are used: For the linguistic component of the study, I gathered data through interviews in Mandarin for spontaneous speech data, self-rating scales, a formal translation task, and informal observations. With regard to the social components, in order to get at the complexity of the L1 maintenance/attrition issue, phenomenological interviews were carried out. Participants' other forms of expression such as diaries, journals, and letters to friends and family members are also used. At the end of this chapter, four important parameters for guiding the participant selection, and brief introductions of the three selected participants are presented.

Chapter 4 provides the results of the Chinese language measures. These include the analyses of the oral proficiency interviews and the translation task, self-rating scales results and the researcher's observations. Having examined each participant's L1 competence in detail, I conducted a cross-case analysis among the three participants to build a composite picture of all three participants in terms of their L1 maintenance/attrition data.

In Chapter 5, I first describe the research context of the case of Yan, a Chinese girl who came to Canada from Beijing. I then present the lived experience of Yan in her own voice from the day she landed in Canada to the time when she started practicing as an articling lawyer.

In Chapter 6, I first describe how I came into contact with the other female participant, Jinhong, a Chinese girl from Taiwan who immigrated to Canada with her father and brother. Then I let Jinhong lead the readers to walk into her inner world with her perspectives on "east" and "west" and her lived stories behind these perspectives.

In Chapter 7, I first describe the research context and setting of the case of Datong, a Chinese male who came to Canada with his parents. I then let Datong

tell his stories as a student in the Edmonton English-Mandarin bilingual program and as a student majoring in education at university.

In Chapter 8, findings of a comparative cross-case analysis (e.g. Duff, 2008; Stake, 2006) are reported for understanding the similarities and differences of single cases "as a set" (Duff, 2008a, p.164) in terms of participants' experiences in L1 maintenance/attrition.

In the concluding chapter, further comments and discussions of the findings are presented, followed by the implications of this study for immigrant parents, Chinese language teachers, educational administrators, language teachers' trainers and policy makers. Finally, suggestions for further research are addressed.

Definitions

Bilingualism— Bilingualism here refers to "psychological and social states of individuals or groups of people that result from interactions via language in which two or more linguistic codes are used for communication." (Butler & Hakuta, 2004, p.115). Hamers and Blanc (2000) defined bilingualism as "the state of an individual or a community characterised by the simultaneous presence of two languages (p. 368).

Bilingual education—Bilingual education here refers to enrichment of additive bilingual programs employed in Canada which emphasizes that heritage languages are both an individual and a national resource. These programs target language majority and /or language minority students (Freeman, 1998). Two languages are used for instruction in these programs to facilitate students' academic, linguistic, and literacy development. The programs also aim for strong bilingual proficiency.

First language—Many terms have been used to describe the language which occupies the most significant place in a child's early language development. These terms include dominant language, first language, home language, mother tongue, native language, preferred language and prime language (Sears, 1998). There are other terms indicating the language(s) which occupies the

most significant place in early language development of children from a minority culture, including heritage language, minority language, and original language. In this study, I have chosen the term *first language* (L1) in contrast to *second language* (L2) for the most part. However, the terms *primary language*, *native language*, *heritage language* and *mother tongue* are also used to describe the language that was dominant for my participants before they immigrated to Canada, namely Mandarin.

Heritage language—In Canada, the term "heritage language" often refers to languages other than the two official languages: English and French for speakers of those languages (Cummins, 1992; Duff, 2008). In this study, I also refer to immigrants' first language (L1).

Language attrition—Language attrition here refers to a decrease in the level of language proficiency (Oxford, 1982). It also refers to the loss of either language skills or any portion of a language within an individual or a speech community over time. It is a "gradual and much less spectacular process than abrupt complete language loss" (Herdina & Jessner, 2002, p. 96). The term "language attriter (LA)" has been used by researchers on language attrition (e.g. Andersen, 1982; Schmid, 2002) referring those who have a decrease in their level of language proficiency.

Language shift—By language shift, I refer to Weinreich's definition which many studies of minority language are based upon: "the change from the habitual use of one language to that of another" (Weinreich, 1952, p. 68, cited in de Vries, 1992, p. 213) "either by a language community or an individual" (Kouritzin, 1999, p. 13). It can also be defined as a "gradual displacement of one language by another in the lives of community members" (Dorian, 1982, p. 44). This might happen voluntarily or involuntarily (Fase, Jaspaert & Kroon, 1992; de Vries, 1992).

Language loss—By language loss I mean the "lack of first language development, delayed first language development, or a progressive loss of previously-acquired language ability" (Verhoeven & Beschoten, 1986, cited in Kouritzin, 1999, p. 11) and "arrested development of the L1" (Schiff-Myers,

1992, cited in Guardado, 2002). It also refers to "the declining use of mother tongue skills by those in bilingual situations or among ethnic minorities in language contact situations where one language… comes to replace another" (Freed, 1982, p. 1). In this study, I use the terms (language attrition & language loss) interchangeably with language loss as the last stage on the continuum of L1 attrition.

Language maintenance and language retention—In contrast with language attrition, language retention and language maintenance in this context refers to the preservation of one's native language "following the acquisition of a second language, and to the inclusion in an environment where the opportunity (or social acceptance) for using the first language is severely reduced" (Gardner, 1982, p. 35).

CHAPTER TWO

REVIEW OF LITERATURE ON LANGUAGE MAINTENANCE AND ATTRITION

> Language attrition is a special case of variation in the acquisition and use of a language or languages and can best be studied, described, documented, explained and understood within a framework that includes all other phenomena of language acquisition and use. (Andersen, 1982, p.86)

This chapter will introduce the theoretical frameworks used in this study which address the relationships between L1 maintenance/attrition and the social factors behind them. After a historical overview of bilingualism and studies on language attrition, a description of linguistically oriented research on language attrition, social factors affecting L1 maintenance/attrition and some literature on cognitive perspectives are discussed respectively. This framework comes from my understanding of L1 maintenance/attrition being a multifaceted and multidimensional phenomenon.

Attrition is now recognized as a subfield of language acquisition and use of languages (Appel & Muysken, 2005; Prescher, 2007; Schmid, 2002, 2004). Although research on this phenomenon began as early as the 1960s, it wasn't until the 1980s that pivotal development began in a broader framework (Appel & Muysken, 2005; Toth, 2007). Since L1 maintenance and attrition are closely related to the perceived consequence of bilingualism (Baker, 2002; Gardner, 1982; Ferguson, 2006; Li, 2007; Wong-Fillmore, 1991a, 2000), this chapter will first review literature on L1 maintenance and attrition within the broader theme of bilingualism.

Historical overview

Attitudes towards bilingualism

From the early nineteenth century to about the 1960s, there was a widespread belief that bilingualism had "a detrimental effect on a human beings

intellectual and spiritual growth" (Li, 2007, p.16). It was considered to be a disadvantage rather than an advantage for one's intellectual development. Bilingual individuals were commonly considered as having thinking, personality, and identity problems (Appel & Muysken, 2005; Baker, 2000; Li, 2007; Tokuhama-Espinosa, 2001). In the early part of this century (1920s), bilingualism acquired a less than positive reputation among educators (Baker, 2000; Cummins, 1993; Mouw & Xie, 1999). Early findings in linguistic and sociological research such as Darcy, 1953; Sears, 1922, 1923; Smith, 1923 reported that bilingualism caused language handicaps and cognitive confusion in children, and that bilingual children suffered emotional conflicts, intellectual burdens, and "mental confusion" more frequently than monolingual children (Appel & Muysken, 2005; Cummins, 1993; Mouw & Xie, 1999;). It was believed that two languages inside an individual's thinking "quarters" left less space to store other knowledge. Therefore, "brain overload" was posited along with the notion that "the ability to speak two languages diminishes mental efficiency" (Baker, 2000, p. 66). As a result of these studies, many schools redoubled their efforts to eradicate minority children's first languages (Cummins, 1993).

However, as Baker (2000) points out, in the late 1950s and 1960s, a series of studies on bilingualism and intelligence reported "no difference" between bilinguals and monolinguals:

> In the United States, where comparing Yiddish/English bilinguals with English monolinguals, IQ scores were comparable. In Wales, in the 1950s, research found that there was no difference on non-verbal IQ once the socioeconomic class of bilinguals and monolinguals was taken into account. (p. 68)

Researchers have suggested that the reason for the seemingly conflicting results of earlier studies and later ones is "serious methodological flaws" (Li, 2007, p.18). These include: inadequate control for the social class of bilingual students, testing of children in their L2 instead of their L1; educational tests being insensitive to the qualitative aspects of languages, etc. (Li, 2007; Mouw & Xie, 1999). The 1960's was the period in the history of bilingual education in which bilingualism was no longer seen as cerebral confusion or an intellectual

disadvantage to the cognitive development and intelligent behaviour of individuals (Baker, 2000). Bilingualism became a major focus of scientific research in the 1960s, which marked a turning point. This period is called "the period of positive effects" (Baker, 2000). Researchers began to recognize the advantages of being bilingual. Peal and Lambert's (1962) study on the relationship between bilingualism and intelligence is considered to be the first to demonstrate positive effects of bilingualism. They found that bilingual children who were equally proficient in both their languages, showed better performance on all sorts of measures of intelligence, when compared with a similar group of monolingual children. Since this study was published, a large number of studies have been conducted with bilingual children in various parts of the world using a variety of tasks of mental performance. The results generally support Peal and Lambert's conclusion of the superiority of bilinguals (Hakuta, 1985).

Numerous studies have indicated that bilingual children demonstrate a greater awareness of linguistic meanings and seem to be more flexible in their thinking than monolingual children (Cummins, 2000b).

For example, Hakuta and Diaz (1985) studied the relationship between degree of bilingualism and cognitive ability by following a group of Spanish-English speaking children over time. Their results indicated a significant positive relationship between degree of bilingualism and non-verbal cognitive skill (Appel & Muysken, 2005). French linguist Hagege (1996), who speaks several languages himself, believes that "overloading" the brain should not be a concern (Tokuhama-Espinosa, 2001). Baker (2006) also reports that none of modern research studies "suggest that bilinguals have a mental overload, process inefficiently or in everyday thinking have weaknesses compared with monolinguals" (Baker, 2006, p.147). People who know more than one language use more of their right brain hemisphere than monolinguals, who generally have their language centred in the left hemisphere. Rather than "overloading" the brain, "the multilingual is using parts that would otherwise go unemployed" (Tokuhama-Espinosa, 2001, p.156). Kessler and Quinn (1980) investigated the cognitive consequences of bilingualism in a study on problem-solving abilities in

science. They found that bilinguals outperformed monolinguals. Bialystok (2007) found that bilingual children develop control of executive processing (controlling attention, planning and categorising, and knowing how to avoid responding inappropriately) earlier than monolinguals, show superior control in adulthood, and lose control later than monolinguals as they age. In addition, bilinguals have been shown to perform better than monolinguals on spatial tasks (McLeay, 2003), and have better metalinguistic knowledge (Ransdell, Barbier & Niit, 2006). They have the potential for increased communication and greater problem solving than monolingual students on tasks that call for divergent thinking, pattern recognition and problem solving (Fradd, 1982). Cummins (1977) found that balanced bilinguals were superior to "matched" non-balanced bilinguals on the fluency and flexibility scales of verbal divergence, and marginally on originality. Tse (2001) points out that for children, a bilingual ability may improve school performance:

> Some psychologists have found evidence that bilinguals have more creativity and better problem-solving skills than monolinguals. These researchers suggest that bilinguals have an advantage because they have more than one way of thinking about a given concept, making them more 'divergent' thinkers and more effective problem solvers. (p. 48)

Cloud, Genesee and Hamayan (2000) mentioned educational, cognitive, socio-cultural, and economic benefits of knowing two languages for both individuals and for society at large. Knowing other languages can be beneficial socially because it can lead to greater intercultural understanding and tolerance, and even appreciation and respect: "The global village is here…. Proficiency in other languages is one step in understanding and enjoying difference" (Cloud, Genesee & Hamayan, 2000, p. 4).

As for economic benefits, these researchers claim that language-minority students who come to school proficient in other languages are an important linguistic resource who can contribute to a nation's future success because they already know major world languages.

> If these students are given opportunities to develop their existing language skills while they learn English as a second language, they will have an advantage that will benefit themselves

> personally and their communities because they will have language and culture skills that will be demanded in the global marketplace. (Cloud, Genesee & Hamayan, 2000, pp. 4–5)

With this change in attitude, proposals for incorporating minority students' languages and cultures into school curricula began to be articulated. Researchers argued that this approach to education leads to a stronger cognitive and academic foundation for language-minority students. At the same time, minority cultures and languages are viewed as advantages that enrich not only the lives and opportunities of the minority group but also broaden the awareness and understanding of the majority group (e.g., Krashen, 2000; Soltero, 2004; Tse, 2001). The general trend in the research literature is that bilingualism has positive outcomes in all areas for children from linguistic minority groups: first and second language skills, other subjects, and social and emotional development (Appel & Muysken, 1987, 2005; Cho, Shi & Krashen, 2004; Cummins, 1993; Kondo-Brown, 2006; Tse, 2001). It is also striking that research shows that the use of the minority language as the medium of instruction "does not seem to hamper or hinder second language acquisition" (Appel & Muysken, 2005, p.71).

Despite the development of research on bilingualism, however, in many countries being bilingual is still considered a disadvantage. Skutnabb-Kangas (1995) points out, "Being bilingual has in several countries, especially the United States, been used almost as a synonym for being poor, stupid and uneducated" (p. 42). Krashen (2000) notes that "The contrast between media reports and academic reports has been confirmed by McQuillan and Tse (1996) who reported that 87% of academic publications on bilingual education between 1984 and 1994 had conclusions favourable to bilingual education. During this same time span, media reports were only 45% favourable" (p.432). In many places, as Crawford (2000) states that society's message to immigrants is implicit but unmistakable: knowing one language is better than knowing two.

The definition of bilingualism, like the attitudes towards bilingualism, has also gone through changes. Traditionally, only full fluency in two languages was accepted as bilingualism. This narrow definition influenced the study of

bilingualism (Brisk, 2006; Li, 2007). A more dynamic view of bilingualism has developed over the years. Current research on bilingualism has developed a wide range of types of bilinguals, the most important types for our present discussion is additive vs subtractive bilingualism. The term additive bilingualism, coined by Lambert in 1974, is used to describe a positive outcome to the process of acquiring two languages. It is the addition of a second language "to their [students'] repertory of skills at no cost to the development of their first language" (Cummins, 1993, p. 17). In other words, additive bilingualism is "the learning of a second language without losing the first" (Tse, 2001, p. 43), or learning a second language while maintaining or developing the first (Lambert, 1975). This leads to children becoming competent users of two languages while living at ease in both cultures. This kind of bilingual education is also labelled by Garcia (1997) as a "strong form" of bilingual education. Baker (2000) further explains:

> Strong forms of bilingual education generally attempt to make children **bilingual and biliterate**, while also maintaining the language minority and creating cultural pluralism and multiculturalism within the child and the society. (p. 94)

Subtractive bilingualism, on the other hand, describes a linguistic-transformation instruction whose aim is "to produce monolingualism or limited, rather than full, bilingualism" (Baker, 2000, p. 93). Here, the native language stops developing as English is learned. This happens when the exposure of children to their own culture stops and their language is diminished as a result of contact with the dominant culture and language (Sears, 1998). Garcia (1997) describes this as one of the "weak forms" of bilingual education.

The study of language attrition

Language attrition refers to a decrease in the level of language proficiency (Oxford, 1982). It also refers to the loss of either language skills or any portion of a language within an individual or a speech community over time. It is a "gradual and much less spectacular process than abrupt complete language loss" (Herdina & Jessner, 2002, p. 96).

Since the 1980s, L1 attrition has also been considered within the broader framework of social, political, and ideological factors, in addition to the linguistic perspective, particularly when analyzing the situation of culturally diverse students in schools (Corson, 1993, 1994, 1995; Cummins, 1995, 2000a; Kondo-Brown, 2006; Köpke, 2007; Li & Moyer, 2008; Macedo, 1997; Nieto, 1996, 1999)[1]. Attrition has a multifaceted character (Kondo-Brown, 2006; Köpke & Schmid, 2004; Krashen, 2000; Krashen, Tse & McQuillan, 1998; Toth, 2007, etc.). As Köpke (2007) stated, even if some factors have a strong effect a great deal on L1 attrition, there is no one individual factor that can be considered to be as *the* dominant one.

Linguistically oriented research on language attrition

According to Li (2008) "Research on bilingualism and multilingualism is central to the contemporary linguistics agenda" (p.5). Linguists mainly ask about how different systems of language knowledge coexist and interact, how they are acquired, and how the knowledge of two languages is used in bilinguals' minds (Cook, 1993). As for language maintenance and attrition, research focuses on describing the lowering of overall proficiency level including word recognition, writing, and fluency of sentence production, as well as the language loss process, which includes aspects of hesitation frequency and weakening of particular skills (Oxford, 1982; Pan & Berko-Gleason, 1986). In the past, most of the research on language attrition has concentrated on the nature and outcome of these linguistic changes.

[1] Several major international conferences held on the topic of language maintenance and attrition (Yagmur, 2004) marked the development of the study of this topic. A conference held at the University of Pennsylvania in 1980 reviewed what knowledge existed in the small literature on attrition, identified useful hypotheses and methods from relevant subfields of linguistics and language pedagogy, determined what kinds of research needed to be undertaken, and considered what policy decisions might be affected (Lambert & Freed, 1982). As a result of this conference, the book "The loss of language skills" (Lambert & Freed, 1982), is considered to be "a benchmark publication that, two decades later, has lost none of its importance and relevance to current research" (Köpke & Schmid, 2004, p.3). The first (1988) and second (1992) Noordwijkerhout conferences concentrated mainly on issues of language loss as well as on the sociological and social-psychological explanatory factors of language loss. In 1998, the third conference in Veldhoven focused on the social background of "why" languages are lost and "how" a language is lost (Yagmur, 2004).

Schmid (2004) gives an overview of the studies of both L1 and L2 attrition with a short summary sentence in each case. Of the total 242 titles on language attrition, nine linguistic dimensions in attrition studies are listed: 1) Phonology, 2) Morphology, 3) Semantics, 4) Syntax, 5) Lexicon, 6) Code-switching, 7) Attitudes & use, 8) Overall, 9) Other. In these studies, participants from 19 different L1s languages were involved: Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Morrocan Arabic, Polish, Portuguese, Russian, Spanish, Swedish, Turkish and Yiddish. Twelve different languages constituted the L2s being learned: English, French, Hebrew, Indonesian, Portuguese, Dutch, Italian, Spanish, Russian/Estonian and Finnish. Chinese (Mandarin or Cantonese) is not listed here as either L1 or L2. I will review the limited body of work in this aspect in chapter 2.

At a time when language attrition was considered to be subfield of linguistic research, Andersen (1982) outlined a blueprint in the form of a series of hypotheses about the linguistic outcomes of language attrition. Andersen's definitions of the linguistic attributes of attrition are recognized as important contributions to the study of language attrition (Toth, 2007).

One of the assumptions is as follows:

> When a person's use of a language diminishes in such a way as to cause a break in that person's participation in the linguistic tradition that he (sic) previously had full participation in, he is thus removed from the type and quantity of linguistic input and linguistic interaction necessary to maintain the full lexical, phonological, morphological, and syntactic distinctions that are made by fluent competent speakers of this language…there will be a continuum or hierarchy of linguistically marked distinctions ranging from early erosion of these distinctions to full maintenance in spite of the change in input and interaction (Andersen, 1982, pp.91-92).

Another assumption Andersen made is that linguistic features may occur categorically or variably, and that when the amount and type of linguistic input and linguistic interaction become inadequate for a person to maintain all the lexical, phonological, morphological, and syntactic distinctions in that language, not all linguistically marked distinctions will be affected equally.

With respect to the lexicon, Andersen argued that a language user's store of lexical items, as well as their utility and adequacy, depends more on linguistic experience than do the other areas of phonology, morphology, and syntax. Over the years, researchers have found support for this assumptions, since bilingual speakers who are fluent in a second language that dominates a given cultural context have been reported to experience frequent word-finding problems in their first or heritage language (Appel, 2005; Schmid 2002; Silva-Corvalan 1991). Word production failures are among the first and most obvious indicators of language attrition (Kaufman 1998, 2001; Weltens & Grendel 1993; Yagmur, 2004). The loss in lexical richness has often been hypothesized as "one of the most prominent characteristics of an attriter's speech" (Schmid, 2002, p.33).

Based on anecdotal evidence, personal subjective experience, and a study on the loss/maintenance of Spanish by his two children and several other subjects in an English-speaking environment, Andersen (1982) claimed that the first area is the loss of "quick retrieval of appropriate vocabulary and idiomatic phrasing in on-going speech production" (p.113). In addition, morphosyntactic transfer and innovation from the dominant language to the L1 were hypothesized.

To what extent do Andersen's assumptions fit the data on actual language attrition gathered by researchers? Yukawa (1998) argues that most of the available studies on attrition have yielded results consistent with Andersen's hypotheses arguments. And language attrition and maintenance have also been studied at various linguistic levels. The general tendencies within the literature on the language attrition phenomenon is that receptive skills and productive phonology tend to be retained, or, at least, it tends to be more difficult to detect loss in these areas, and that language attriters easily become aware of their loss in oral fluency and productive vocabulary (Yukawa, 1998). A full description of the vast literature on L1 attrition is beyond the scope of this chapter—for overviews see Dorian (1989), Fase, Jaspaert, & Kroon, (1992), Yukawa (1998), Seliger & Vago (1991) and Schmid (2002 , 2004).

Cognitive consequences of bilingualism

The threshold theory concerns the relationship between cognition and the degree of bilingualism. This was first postulated by Cummins (1977) and by Toukomaa and Skutnabb-Kangas (1977). They suggest that research on cognition and bilingualism is best explained by the idea of two thresholds. The first is the level that a child must reach in order to avoid negative consequences of bilingualism. The second threshold is the level required to experience the possible positive benefits of bilingualism. This hypothesis claims that once children have obtained a certain level of competence in their second language, positive cognitive consequences can result (Baker, 2002). In other words, bilingual children must achieve threshold levels of bilingual proficiency to avoid detrimental effects on cognition and to allow potentially positive effects (Appel & Muysken, 2005; Ferguson, 2006; O'Shannessy, 2008).

In the evolution of the threshold hypothesis, Cummins (1978) proposed the *developmental interdependence hypothesis,* which suggests that a child's second-language competence is partly dependent on the level of competence already achieved in the first language. Related to this hypothesis, Cummins (1984) mentioned that a distinction between surface fluency—or simple communication skills—and more evolved language skills, required to meet the cognitive and academic demands of the educational process. Cummins (2000b) explains this distinction in terms of *basic interpersonal communicative skills* (BICS) and *cognitive/academic language proficiency* (CALP). BICS concerns everyday communication skills that are helped by contextual supports, while CALP is the level of language required to understand academically demanding subject matter in educational settings, which is often abstract and without any contextual supports. This model might be applicable in L1 maintenance and attrition since it helps to draw attention to the differences between basic interpersonal communicative skills and cognitive academic language proficiency in the L1 of the potential attriters.

In the L1 attrition studies, the word "threshold" is also used with a different meaning. This concerns residency of language to loss. Based on two studies of Dutch and German immigrants to Australia, one from the 1970s with 200 participants, and the other fifteen years later on 40 of the same 200 participants, De Bot and Clyne (1989) concluded that once immigrants attain a certain threshold level of L1 proficiency, they are able to retain their home language no matter how many years have passed (Yukawa, 1998). Schmid (2007), based on her research among three groups of L1 speakers of German in Canada, in a Dutch-speaking context and in Germany, also suggests the possibility that once a threshold has been reached, frequent activation is no longer necessary to maintain accessibility. Similarly, L2 loss is affected by the degree of proficiency in the L2.

Some researchers think that the development and maintenance of a heritage language is positively related to the development of proficiency in the dominant language (English in most of the studies) and overall academic success (Fernandez & Nielsen, 1986; Krashen, 2000; Shibata, 2000). Based on studies done by Cummins and Mulcahy in 1978 in an English-Ukrainian bilingual program in Edmonton, by Bhatnagar in 1980 in Montreal among children of Italian background, Dolson in 1985 among Hispanic students in the U.S. and others, Cummins (1993) concludes that the use of a minority language in the home is not in itself a handicap to children's academic progress. On the contrary, the extent to which adults interact with their children and extend and develop the topics initiated by the children is a highly significant factor in their children's acquisition of academic skills in school.

> The data on bilingualism show that it does not matter whether this interaction is in English or in the child's mother tongue because there is considerable transfer of conceptual and academic skills across languages…. Children who come to school with this type of experience have an advantage in that they have been exposed to, and thought about, realities that are removed from the immediate here-and-now. They have also learned to process the language that is necessary to describe and manipulate abstract ideas, a crucial aspect of success in school. (p. 4)

Therefore, Cummins highly recommends that parents "strongly promote children's conceptual development in their mother tongue by reading to them, telling stories, singing songs, and so on" (p. 5). Trueba (1991) also contends that the use of a home language helps children develop critical thinking abilities and cognitive skill, because cognitive structuring is shaped not only by linguistic knowledge but also by cultural knowledge and the context in which that knowledge is obtained. "When parents and children speak the language they know best, they are working at their highest level of cognitive maturity and are continuing cognitive development" (Ovando, Combs & Collier, 2006, p.144). At the same time, if the home language is used as a medium of instruction in school, this can give it a status of importance and value that enhances the minority child's self-respect and self-confidence. A very important aspect is the child's acceptance of self, combined with acceptance of his/her minority group membership, without which he or she may develop a strongly negative self-image and will reject identification with his or her own ethnic group (Lee, 1984). However, as Ferguson (2006) points out:

> As commonly recognised, there is an unfortunate disjunction between the economic and social value attached to the development of the schooled bilingualism of majority pupils on the one hand, and the neglect of the home-based language skills of linguistic minorities on the other. (p.57)

From the cognitive perspective, several linguistic factors have been found to play an important role in bilingualism and language development (acquisition or attrition). Different cognitive strategies are needed for languages with very different systems. Among the factors there are language relatedness, sentence structure, similarities or differences between writing systems, syllabic system, etc. (Brisk, 2006). One example Brisk gives is the logographic system in Chinese, which differs from the alphabetic system in English, and which requires a large number of symbols because each character represents a word or morpheme. Characters combine to represent additional words, Chinese requires learning between 3,500 and 4,000 characters for basic reading (Liu, 1978; Brisk, 2006). "Bilinguals can

learn more than one writing system, but depending on the nature of the system and the similarities and differences, they pose different challenges" (Brisk, 2006, p.61).

Most recently, applications of nonlinear dynamical systems theory to psychology have also led to recent advances in understanding language development (including language acquisition and attrition) and theories of cognitive development (de Bot, 2007). The argument is that different variables and factors do not have a fixed effect, but "they interact" and "this interaction itself changes over time" (de Bot, 2007, p.59).

Social factors in language attrition

Internal and external factors affecting L1 maintenance and attrition

It is generally accepted that language attrition is determined by both internal factors and external factors (Köpke & Schmid, 2004; Li, 2008; Moyer, 2008; Schmid, 2002; Yagmur, 1997, 1998). In the following sections, some research on individual internal factors such as attitude and motivation, ethnic and cultural identity; and external factors such as school context, peer influence, family relations that affecting L1 maintenance /attrition will be discussed.

Attitude and motivation

Two individual differences variables that have been prominent research topics in applied linguistics are attitude and motivation. Their importance in L2 learning has been reviewed by various researchers, furthermore, language attrition researchers have been interested in determining whether they are related to language attrition. (Baker, 2002; Ben-Rafael & Schmid, 2007; Gardner, 1982; Kim, 2006; Waas, 1996). Ben-Rafael and Schmid, (2007) point out:

> As motivation has a demonstrated impact on the development of one of a bilinguals' language system, language attrition research has long been fascinated with the idea that the converse might also be true: if wanting to learn something (or wanting to be part of a community of speakers) can help with acquisition, can wanting to forget something (or want to no longer be part of a speech community) help forget it? (p.208)

Reasons for learning a second language tend to fall into two general orientations: (1) integrative motivation indicating a wish to identify with or join another language group, and (2) instrumental motivation indicating the learning of a language for useful purposes (Baker, 2002).

Gardner and Lambert (1972) originally considered that integrative motivation was more powerful in language learning than instrumental motivation. In discussing participation in language-related situations, Gardner (1982) claimed:

> Attitudinal/motivational variables are related to whether or not individuals will enter into situations where they might develop skill in the language…. Attitudinal/motivational variables influence the extent to which individuals take advantage of opportunities to develop language proficiency. (p. 32)

Another motivation model is presented by Noels and her colleagues (e.g., Noels, 2001a; Noels, 2009; Noels, Pelletier, Clement, & Vallerand, 2000) based on Deci and Ryan's self-determination theory (2000) which maintains that "motivation can be broadly categorized in terms of two orientations: intrinsic and extrinsic motivation" (Goldberg & Noels, 2006, p. 424). *Intrinsic motivation* refers to the desire to perform an activity because it is enjoyable and personally satisfying to do so while *extrinsic motivation* contains identified regulation, *introjected regulation* and *external regulation* (Noels, 2001a). According to Goldberg and Noels (2006), consistent with Deci and Ryan (2000)'s argument that there is an innate tendency for humans to perform activities that they enjoy and to integrate these activities into their self-concepts,

> This process of performing an activity and incorporating it into one's identity is a cyclical process; the more one enjoys an activity, the more one will perform it, and the more one performs an activity, given a self-determined orientation, the more it will be enjoyed. (p. 425)

According to dynamic systems theory (de Bot, 2007), attitudes do not remain constant. As addressed by Li (2007):

> At a personal level, changes in attitudes may occur when there is some personal reward involved. Speakers of minority languages will be more motivated to maintain and use their languages if the languages prove to be useful in increasing their employability or social mobility. (p. 19)

Ethnic and cultural identity

Another internal factor that has been a prominent research topic in recent years is ethnic and cultural identity (Schmid, 2002). Li (2008) points out: "Through language choice, we maintain and change ethnic group boundaries and personal relationships, and construct and define 'self' and 'other' within a broader political economy and historical context (p. 13). It is a well-accepted notion among sociolinguists that language is not just an instrument of communication, but at the same time it is also "a symbol of social or group identity, an emblem of group membership and solidarity" (Grosjean, 1982, p. 117). In short, languages express identity (Crystal, 2000), and heritage language ability and cultural identity are inextricably linked (Kouritzin, 1999). The literature shows that there is a close and significant relationship between an individual's language learning and, in this case, his/her language attrition and individual ethnic and cultural identity (Chinen & Tucker, 2006; Guardado, 2002; Hinton, 1999, 2009; Kouritzin, 1999, 2000; Li, 2006; Prescher, 2007; Tse, 1998; Wong-Fillmore, 1991).

What is identity? Chinen and Tucker (2006) indicate that ethnic identity has been defined in various ways and that it is a complex and abstract concept: "In a number of reviews, ethnic identity is defined as the ethnic component of social identity" (p. 90). Norton (2000) defines social identity as "how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future" (p. 5). Wallace's citing Phinney's defines ethnic identity as "dimension of a person's overall self-concept, or sense of self, that develops out of an understanding of one's membership within a particular ethnic group, and the meaning that this membership conveys" (Wallace, 2001, p. 31). Ballarini (1993) suggests that identity is considered to be "the central theme of adolescence" (p. 26), because this is the stage during which "the developing organism's newly-developed integrative abilities are used to synthesize all the things learned about the Self in childhood into a concept that is continuous with the post while allowing for the future" (p. 26).

In her qualitative research on language loss, Kouritzin (1999) states, "Perhaps the most complex issues raised in this research concerned self-image and cultural identity" (p. 177). A negative self-image is highlighted in almost every aspect of her study because of the different reasons for language attrition: not having been able "to receive positive reinforcement from their families" (p. 177), the assumption of being stupid and blaming "themselves for their language loss" (p. 177), having absorbed the myth of a singular unified identity and not being able to reconcile that image with their own experiences, etc. At the same time, some participants felt "some kind of 'innate cultural recognition'" (p.181). They saw how important their native language was to them. As Kouritzin (1999) puts it, they were able to find the "essences of their souls in the cadence of their heritage languages" (p. 179). One example, in the words of Richard, an indigenous Cree:

> It's like losing half the man you are, you know… not to lose the language makes me twice the man, so the loss of the language is the loss of the soul I think for an Indian person. It's a loss of the essence of the soul, not to know the language, because you never know how beautiful you are until you know the language. Because you can only be described in a foreign tongue. (1999, p. 181)

Some reports show that people who have lost their L1 feel that they are lacking roots and have been alienated from their native language group: "My years without Spanish now appear tragic. How can I ever make up that loss? I barely communicated with my own grandparents! They died, in fact, before I re-learned Spanish" (Castro, 1976, p. 8, cited in Grosjean, 1982, p. 124).

Tse's (1997) model of ethnic identity formation describes the relationships among ethnic identity, attitudes and motivation, and HL development. In her model, she hypothesizes four stages of ethnic identification: (1) lack of awareness; (2) ethnic ambivalence/evasion; (3) ethnic emergence, and (4) ethnic identity incorporation (cited in Chien & Tucker, 2006). Yoshizawa Meaders (1997) developed a theory on identity formation by migrants as well. Her observations resulted in a theory of *transcultural identity building* which contains three phases: the immersion phase, bicultural identity phase and transcultural

phase. Yoshizawa Meaders also distinguished three groups of immigrants: 1) Group one: those who adjust quickly but superficially to the new environment and culture, 2) Group two: those who are unwilling and unable to make necessary changes, to be open or exploratory and 3) Group three: those who try to retain their own cultural identity and make the most lasting and flexible adaptation (Prescher, 2007).

One recent research project conducted by Prescher (2007) focuses on the individual's own perception concerning first language attrition and identity. The study used a deductive approach which combined qualitative and quantitative methods of data collection including: spoken data of 20 autobiographical narratives of German immigrants in the Netherlands through interviews, the results from a sociolinguistic questionnaire, Can-Do-Scales (proficiency of Dutch and German), and a language test. The data collected show "the close relation between language attrition and identity as a result of interacting factors over the lifespan" (Prescher, 2007, p.189). The narratives also seem to support Yoshizawa Meaders' hypothesis of transcultural identity building.

Next I will look at some related external factors: Family influence, peer influence, and school misconception on bilingualism.

Family influence

Another major external factor that affects L1 development, acquisition or attrition, is family relations, including siblings whose communicative language is English, particularly if their perspectives on the heritage language and value are not positive (Hinton, 1999, 2009; Kouritzin, 1999).

Parents' intentions and desires to maintain their mother tongue and their ethnic identity are seriously challenged because of the lack of encouragement from dominant institutions. Parents often experience tremendous assimilative pressures. For instance, the discouragement of the use of a heritage language by bilingual parents in the home is reported in Pacini-Ketchabaw, Bemhard and Freire's (2001) observations of Latin American, Spanish-speaking mothers' interactions compared to those on the frontlines of the Toronto school system,

teachers. Pacini-Ketchabaw et al. found that even when mothers were not explicitly told that speaking Spanish to their children would slow down their academic progress and acquisition of English, the implicit devaluations of bilingualism were not uncommon. Language and speech problems as well as schoolwork difficulties were often attributed to the use of Spanish at home. The mothers' feelings of insecurity, and sometimes guilt, led them to abandon the use of their mother tongue with their children, resulting in the loss of Spanish in their children.

Under the influence of negative opinions existing in society and schools, and based on the negative experiences of their own, parents may hold an unconscious and unsupportive attitude toward bilingual education or the maintenance of L1 among their children. Parents are vital determinants in maintaining L1 in families.

In a multi-case study on young Chinese ESL children's home-literacy experiences, Xu (1999) concludes that "parents' over-emphasis on their children learning English may cause a possible loss of children's ability to communicate in the native language" (p. 62).

Parental education, attitudes, and L1 literacy are also important factors affecting L1 loss or maintenance (Dopke, 1992; Guardado, 2002; Harres, 1989; Wong-Fillmore, 1991). Language loss will occur in homes where parents lack commitment to their children's linguistic education and development (Guardado, 2002; Kouritzin, 1999; Li, 2006; Liao & Larke, 2008). However, parental input cannot by itself ensure the acquisition of a language; a larger linguistic community is generally necessary (Chinen & Tucker, 2006; Guardado, 2002; Kravin, 1992; Li, 2006; Liao & Larke 2008; Pacini-Ketchabaw, Bernhard & Freire, 2001).

Peer influence

The social relations at school play an important role in the process of language development and language shifting. Harris's "group socialization theory" (2009) indicates how children become socialized and how personality

gets modified. She points out that people of different ages have different groups whose different pressures can drastically influence motivational levels to pursue activities. She assumes that *peer group* is an important shaper of the child's psyche. She argues that children identify with their classmates and playmates and they modify their behavior to fit with the peer group. Harris (2009) indicates that this ultimately helps to form the character of the individual:

> Children get their ideas of how to behave by identifying with a group and taking on its attitudes, behaviours, speech, and styles of dress and adornment. Most of them do this automatically and willingly: they *want* to be like their peers. (p. 158)

Harris uses the situation of the immigrant children as an archetypal example of the peer socialization theory. Children will often do anything to be part of the group, even if it means changing themselves: "Acceptance is a powerful feeling that can alter a child's state of mind towards their culture and based on public opinion it could make them less responsive to their native language" (Reisz, 2001, p. 3). Peers have enormous influence over the opinions, decisions and actions of immigrant students as well. Friends at school do not speak their languages; therefore children may avoid speaking their L1 as much as they can in order to try to fit into the environment (Chumak-Horbatsch, 1999; Hinton, 1999, 2009; Kouritzin, 1999). As Tse (2001) points out, "For children and adolescents, peer influence may be particularly strong and the presence or absence of such heritage language groups determines to a large extent whether the language is seen as an asset or a liability" (p. 39). The eagerness of belonging and being accepted sometimes builds resentment toward the home language and culture, which in turn contributes enormously to L1 loss.

School misconceptions

> Soltero (2004) indicates:
>
> In the United States, English is perceived to be a fundamental tool for achieving in school and becoming a successful member of society. The loss of home language and culture is often seen as necessary for the appropriate development of English. (p. 51)

Some parents decide to limit the L1 at home because they are prompted by school administrators or teachers who believe in encouraging the exclusive use of English at home, in order to avoid a perceived conflict that would result in students having problems at school (Tse, 2001, p. 38). Some researchers found that schools' misconception about bilingualism and heritage languages might be the major reason for L1 attrition of immigrant children. Based on his qualitative research, Soto (1997) found that "The families revealed interaction with school personnel that devalued their native language and culture…. Schools are capable of initiating a systematic process that results in the loss of language and cultures" (p. 31). The participants in some studies mentioned the effects of ESL teaching and teachers' attitudes and practices toward their L1 on their first-language loss and maintenance (e.g. Hinton, 1999, 2009; Kouritzin, 1999; Schecter & Bayley, 1997; Soto, 1997; Wong-Fillmore, 1991).

Some schools and educators are "providing a climate of disregard for children's home language and culture." They force children to "view the language and culture of their families as less than valued" (Soto, 1997, p. 42). One of the participants in Kouritzin's 1999 study, Richard, states, "You shame people away from their language, you shame them into speaking yours" (p. 67). A professor in Soto's study (1997) also says,

> They [some school districts] do not look at the research on bilingual education…. They don't value it, they don't value our people's ethnicity…. Kids lose their self-esteem, or their self-esteem is taken away from them…. Here they use the assembly line approach in education which is reflective of the nineteenth century. (p. 49)

Hinton (1999) noted that despite decades of research findings to the contrary, a large portion of the American public, the educational system, and the government still hold that bilingualism is both bad for children and unpatriotic, and that the only way to be a true American is to leave behind any other language and loyalty that might be in their original cultural background. "Children also buy into this belief system—both long-term Americans and immigrant children" (Hinton, 1999, p. 203).

At a young age, school is a large part of children's lives. They start becoming aware of themselves and how they relate to society. They quickly see that to learn English is the only way to gain access to the social world of school. The problem, as Wong-Fillmore (2000) points out, is that:

> they also come to believe that the language they already know, the one spoken at home by their families, is the cause of the barrier to participation, inclusion and social acceptance. They quickly discover that in the social world of the school, English is the only language that is acceptable. The message they get is this: 'The home language is nothing; it has no value at all.' If they want to be fully accepted, children come to believe that they must disavow the low status language spoken at home. (pp. 207–208)

A number of studies have investigated language issues throughout the discourse of power relations (Bernhard, Freire, Torres, & Nirdosh, 1998; Corson, 1995; Cummins, 2001; Kondo-Brown, 2006; Schecter & Bayley, 1997, 1998; Soto, 1997). Cummins (2001) argues that teachers' attitudes and behavior toward the language and culture of students largely affect how students perceive their own background. Students are empowered or disempowered as they interact with educators. Their interactions are mediated by the role that teachers and administrators play in relation to language incorporation, community participation, pedagogy, and assessment. Teachers may unwittingly contribute to students' feelings of shame about their cultural and linguistic background.

Consequences of L1 Attrition

Serious negative consequences of L1 loss or attrition have been identified by various researchers (Cho & Krashen, 1998, 2000; Guardado, 2002; Hinton, 2001; Kouritzin, 1999; Pacini-Ketchabaw, Bernhard & Freire, 2001; Tse, 2001; Wong-Fillmore, 1991). For individuals, L1 loss may eliminate the cultural and social advantages to being bilingual. It may block their access to multiple sources of information; resources that have been called "social capital" or "funds of knowledge" that come from interactions with families and communities (Tse, 2001).

Krashen (1998b) argues that when a HL speaker has partial fluency, a kind of 'language shyness' develops around using the language. Being a member of the HL group by birth, HL speakers are only too aware of the fact that "their imperfections are very salient to more proficient speakers, who may respond by correction and even with ridicule" (Krashen, 1998b, p 41). This not only has an impact on their self esteem, but HL speakers may stop using their HL altogether because it isn't 'fluent', 'grammatically correct' or spoken 'with a proper native accent' (Krashen, 1998b, p. 43), leading to even lower proficiency in the HL, added insecurity and estrangement from their HL community.

Similar phenomenon Andersen (1982) mentions that happens among language attriters because of linguistic erosion is “avoidance”. According to Andersen (1982),

> An LA (language attriter) may avoid situations where he (sic) would have to use language X, claiming to not know language X. Such avoidance would be evidenced by turning down invitations, joining language-Y groups at an event in which speakers of language X and language Y both participated, claiming to not know language X, claiming his knowledge of language X is inadequate, etc. This avoidance could be documented ethnographically or in self reports, experimental procedures (role playing, for example), etc. (pp. 110-111)

The pattern of linguistic erosion follows certain stages. First is the reduced ability to be quick and expressive. Since a language attriter, by definition, will be less capable than a comparable linguistically–competent individual of the same language to be fluent and at ease as well as expressive in the language, “the gaps in his linguistic repertoire will slow him down in his linguistic interactions with others” (p. 111). The second is linguistic insecurity. According to Andersen, a person who has lost a certain amount of his original competence in a language may be able to hold his own for a long time. The gaps in his linguistic performance may initially pass unnoticed and not interfere with communication. However, if the competence in the language continues to fade, he might at some point “begin to get negative feedback from some of his conversational partners” (p. 112). The attriter might resort to borrowing, innovations, or transfer frequently

to get a point across. “In addition, some listeners may overtly comment on his inadequacies or question his use of certain words, form, or expressions” (p. 112). Thus the attriter “will eventually feel insecure in his use of the language” (p. 112).

Wong-Fillmore (1991) documents the loss of intimacy between parents and children caused by L1 loss. With this loss, an intergenerational language gap, a lack of acceptance by members of the heritage community, and conflicts that emerge between parent and child and between child and heritage community will occur. Such language gaps can have a great impact on the parent-child relationship.

> What is lost is no less than the means by which parents socialize their children: when parents are unable to talk to their children, they cannot easily convey to them their values, beliefs, understandings, or wisdom about how to cope with their experiences. (p. 343)

She points out that this loss can be very costly to the children, their families and society as a whole. A crucial and often-ignored reason for this is that parents have lost the means to socialize with their children, with an ensuing consequential breakdown in parental authority and of children's respect for their parents.

Tension and frustration result from the miscommunication caused by the different languages used between parents and their children (Wong-Fillmore, 2000; Zhang, 2008). Those who do not speak the heritage language or who do not maintain their L1 are considered outsiders lacking one of the most salient symbols of group membership (Tse, 2001).

Kouritzin (1999) states that “perhaps the most familial consequence of first language loss is the subsequent loss of extended family” (p. 169). Her research project examined L1 loss in 21 cases, from a personal narrative perspective. In her research, she (1999, 2000) recorded many negative familial, psychological and social effects of L1 loss. From the results of her research she argues that it seems fairly clear that:

> neither the home, nor the school, nor the community could have single-handedly ensured first language maintenance.... Each of these has a role to play in fostering the first language

> development of potentially bilingual children either by actively teaching the L1 or by supporting it. (p. 210)

Guardado (2002) conducted a qualitative study to explore the loss and maintenance of Spanish in Hispanic children in Vancouver from the perspective of parents. Data collected support the notion that L1 cultural identity is crucial to heritage-language maintenance in the context of a dominant second language. In his conclusions, he argues that poor self-image and contradictory cultural identity are serious by-products of L1 loss. According to him, some participants blamed themselves for losing their language. As a result, at times they felt inferior and unintelligent. Some participants sometimes felt shame for their own culture and heritage and tried to adopt other cultural values. Other times they expressed their feelings through racism toward more recent immigrants from their own culture.

Mrs. Torres, a parent in Soto's (1997) study,[1] was quoted as saying that with the loss of L1 and without an understanding of bilingual education, there are no enriching linguistic or cultural learning experiences at home or at school: "We are not only failing the kids, we're failing the family, we're failing the parents, and we're failing our community. And when you put all of that together, we're failing this country" (p. 48).

Hinton (1999, 2009) examined at the human cost of L1 attrition (loss). With the first language loss, some of her participants experienced a loss of family intimacy and communication. They also received criticisms from relatives and acquaintances. They feel two kinds of shame (Hinton, 2009):

> They become deeply shamed of their heritage language and cannot bear to speak it in public with their families. At the same time, they are ashamed in front of their relatives and relatives' friends because they do not know their heritage language and culture. (p.341)

[1] In 1993, the local school board of Steel Town, Pennsylvania decided to eliminate its 20-year-old bilingual education program in a Puerto Rican community of the city. Soto conducted a case study exposing conflicts surrounding the education of language- and ethnic-minority children. Data were collected from bilingual families living in Steel Town regarding their educational experiences. Local bilingual families organized and spoke out on this issue.

Some experienced a sense of bitterness toward the system feeling strongly that "this is a racist country that does not want to make room for them" (Hinton, 1999, p. 250). This sense of bitterness and alienation is a human cost for the dominant country (Hinton, 1999).

L1 maintenance and attrition among Chinese immigrants

While the phenomenon of L1 maintenance and attrition has been widely discussed in the last two decades, detailed investigations of the experiences of Chinese immigrants are comparatively rare. However, "The development of the field of Chinese as a Heritage Language (CHL) has been nothing short of astounding" (McGinnis, 2008, p.IX). In this part, I will present a brief overview of some selected research literature on Chinese immigrants' L1 maintenance, such as research on Mandarin programs and practices that helped Chinese heritage students to maintain and develop their L1, and L1 attrition, such as external and internal fators that contributed to L1 attrition among Chinese immigrants. This part of literature review will be presented in a chronological order.

As early as in 1980s, Lee (1984) studied forty Chinese parents in Edmonton, focusing specifically on their attitudes towards the retention of Chinese language and culture, the development of a Chinese-English bilingual school and parental expectations of and rationale for supporting such schools. This research was carried out in the second year after the English-Chinese bilingual program was first initiated. The interview results showed that the Chinese parents supported the establishment of a Chinese-English bilingual school in Edmonton. The reasons were to preserve their ethnic culture and language, to prevent intergenerational language and culture loss, to develop positive ethnic identification in the younger generation, to widen their children's scope of experience for cognitive development and to promote communication between the younger generation and the older generation. However, Lee also found that parents at that time were uncertain as to whether such program would be effective in teaching both good English as well as good Chinese to their children. Therefore, most of the parents were not certain whether they would send

their children to such a program. Twenty three years after this research was done, Wachowicz (2007), the curriculum director of Edmonton Public School Board, pointed out: "Now in its twenty-fifth year, the program, which had small beginnings, has grown in size, quality, and renown. The Mandarin bilingual program is known and referenced internationally" (p. 52).

Lin (1998) conducted a study to examine some of the relevant major factors of heritage language maintenance in Chinese-American populations. Using a self-reported questionnaire and follow-up interview, Lin compared the way that balanced bilingual (proficient in both languages) and pseudo-bilingual (those in whom skills are more developed in one language than in the other)[1] students develop and maintain Chinese. The participants were 12 second-generation Chinese Americans who were in grade five attending a Chinese school in Seattle. Lin (1998) reported the following:

1) Reasons for maintaining Chinese are different between parents who have raised balanced bilinguals and those who have raised pseudo-bilinguals. The former stressed ethnic identity, family communication, and the pride and gift of becoming Chinese-English bilinguals. The latter chose language advantages, professional options and cultural appreciation as reasons.

2) Parents with higher education and professional jobs tended to raise balanced bilinguals. They generally provided more input and a richer linguistic learning environment. Mothers with full time jobs were more likely to raise pseudo-bilinguals, while full time or part-time housewives raised balanced bilinguals.

3) All the parents in her study thought it was important to raise bilingual children.

4) Balanced bilinguals had immersion opportunities in Chinese-speaking countries, while pseudo-bilinguals did not.

5) Balanced bilinguals were more committed to learning both languages and thought it was fun to be a bilingual. The two groups did not differ in reasons for

[1] For more information about "balanced-bilingual" and "pseudo-bilingual", please refer to Peal and Lambert's "The relation of bilingualism to intelligence" (1962). Psychological monographs *76* (27. whole No. 546).

learning Chinese. Given the small sample size and the inherent shortcoming of a survey approach, it is hard to generalize to the larger population of Chinese Americans. However, this study seems to confirm the belief that family and the individual learners both play a very important role in maintaining a heritage language.

In the 1990s, the number of studies on Chinese as a heritage language increased. And researchers started paying attention to L1 loss/attrition among Chinese immigrants. Hinton (1999) conducted qualitative research on involuntary language loss among 250 Asian-Americans from the University of California at Berkeley. Her participants wrote linguistic autobiographies, and many of her participants were Chinese. Their self-reporting data describes why the language shift took place. The phenomenon of first-language loss was discussed in almost everyone's writing about their personal language history. Hinton found that L1 language loss created many problems for children, including personal frustration, poor communication between generations, intergenerational conflict, being alienated from peers in the old country, etc.

> I know that I have been extremely fortunate to have been able to learn English so easily, but I have paid a dear price in exchange. I began my English education with the basics, starting in first grade. As a result, I had to end my Chinese education at that time. I have forsaken my own language in order to become "American". I no longer read or write Chinese. I am ashamed and feel I am a statistic adding a burden and lowering the status quo of the Asian community as an illiterate of the Chinese language. (p. 216)

The feeling of "I have to forsake my own language in order to become 'American'" was not uncommon among the participants. Hinton claims that the bitter feeling of "not being accepted as American" (p. 250) in her participants' autobiographies is clear. One of her participants said:

> When some of my classmates began to ridicule and throw racist remarks at Chinese people, I began to distance myself away from Chinese culture. I felt ashamed when my parents spoke to me in Cantonese at a supermarket…I continuously tried to fit in, even if it meant abandoning culture and identity. I was probably most

> hostile to my background during those years in junior high. (p. 229)

This study also examines the efforts families made to keep their heritage language strong. Hinton discovered that students who are fluent in their heritage language find that "their bilingualism is a great benefit to them. There is a feedback relationship between being bilingual and finding bilingualism useful; each begets more of the other" (pp. 240–241). This study also supports the idea that "strong maintenance-oriented bilingual education programs" (p.251) make success in becoming bilingual possible. Hinton also found that most of the Chinese participants were dominant in English, and most of them found that their heritage language had suffered. One Chinese participant wrote:

> I noticed that I began to think more and more in English. Now, the only thing that is still Chinese in my mind is the multiplication table. I wish I had kept up with my reading skills in Chinese. It felt as though my Chinese heritage was fading away with my Chinese literacy. (p. 210)

Another Chinese participant mentioned:

> Even with the Chinese I speak, I am limited to the normal yet shallow "everyday" conversations I have with my parents and do not have enough of a vocabulary to have meaningful talks with them. Such was the case just the other night when they asked me what my major at Berkeley was but I did not know the phrase for "Biology," much less, "Molecular and Cellular Biology." The best I could manage was "science" in Chinese and explained the rest in English; I could not communicate to them why I selected this major, what I was going to do with it, and so forth. We ended the discussion by changing the subject. (p. 218)

In conclusion, Hinton states: "There is no doubt that the school experience in the United States is the most important factor in the pressure on children to abandon their heritage language" (p. 250).

On the same year, Kouritzin (1999) conducted research on L1 loss through interviews conducted with five participants who came from different language and heritage backgrounds. Each of the participants told Kouritzin stories that are related to the "why-question" and the "how-question" (de Bot, 2007) of first

language loss. The first participant in her study was a third generation Chinese female called Ariana. Her grandfather immigrated from China to work on the Pacific railway. Ariana's mother tongue was Cantonese. She was teased because of her Chinese background even though she never spoke Chinese at school. The "hurry up and become a Canadian" (Kouritzin, 1999, p.49) atmosphere caused her to lose her L1. She claimed that she would never fully be a part of mainstream WASP culture and was still not interested in learning about her own Chinese heritage. Ariana spoke of "losing out" because she was not Canadian enough as a child: "not having blond hair, and blue eyes, not speaking the English language, not having her cultural heritage respected" (p. 38). She worked hard to become part of the majority culture. However, today she is still "losing out", not because she is not Canadian enough, but because she is not Chinese enough to fit in with the current climate of multiculturalism. According to Ariana, "[Cantonese] is an ugly language, I just don't tend to associate, don't want to really associate with people like that" (p. 178). She also referred to speakers of Ukrainian sounding childish or immature, and its speakers being nonsensical and annoying. Having lost out twice, Ariana was "angry that when I was growing up, there was just so much lacking in terms of educational resources and services" (Kouritzin, 1999, p. 39) related to multiculturalism and bilingualism.

Xu (1999) scrutinized the home literacy experiences of six Chinese ESL kindergarteners including the parents' provision of literate home environments as well as children's functional use of Mandarin and English and engagement in Chinese and English literacy activities. The findings indicate the diverse and cultural nature of the home literacy experiences and the supportive roles of parents and other family members. Xu points out: "Parents' over-emphasis on their ESL children's learning English may cause a possible loss of children's ability to communicate in native language" (p. 62). Parents need to be informed of the empirical and research evidence which supports the important role that native language plays in their ESL children's English literacy development. "While celebrating children's accomplishment in English literacy, parents need to remember promoting native language literacy" (p. 62). Xu concludes that both

teachers and family members should be familiar with children's literacy experiences in school and at home. When teachers and parents become partners, "the children's chance to successfully develop literacy both in English and native language can be maximized" (p. 63).

Starting from the new millennium, more research on Chinese immigrants and their heritage language development, maintenance or attrition, has been conducted. Wong-Fillmore (2000) discussed the experiences of Chinese immigrants when first generation children quickly replace the primary language with English rather than becoming bilingual:

> They [immigrants] know what happens in families when children abandon the family language and parents are no longer able to communicate easily with them. They know about the gradual erosion of trust and understanding among family members and about the loss of parental control. (p. 208)

Wong-Fillmore suggested, "Teachers can help parents understand that they must provide children opportunities to attain a mature command of their first language in the home" (p. 209).

Using ethnolinguistic theory, Luo and Wiseman (2000) examined the familial and peer influences on 131 first-generation and 114 second-generation immigrant Chinese-American children's ethnic language maintenance. The results indicate that Chinese-speaking peer influence, followed by English-speaking peer influence, are the most important factors in Chinese-American children's ethnic language retention. Parent-child cohesion is an important mediating factor in the relationship between the parents' language attitude and the children's L1 retention. In addition, age of immigration plays an important role in Chinese-American children's L1 maintenance.

In the same year, An (2000) investigated the role Chinese mothers play in their children's language and literacy learning, and the extent to which there is a standard approach toward literacy teaching in the mainland-Chinese community in Britain. An found that many "Mainland Chinese families invest considerable time and effort in helping their children maintain high levels of achievement in reading and writing Chinese" (p. 88). However, the "mothers took a highly

structured instructional approach" (p. 87). An concluded that the difference between this highly structured approach used by these mothers and the interactional styles and approaches of the school need to be acknowledged and better understood.

Michal and Pauline (2002) investigated the relevance of emotional and familial factors to language maintenance in immigrant families. They collected information on the family relations of 40 children from Chinese-speaking immigrant families in Sydney, Australia. Analyses revealed that children who are likely to use their parents' mother tongue were those who perceived their family to be more cohesive and low in hierarchy, had fewer negatively loaded emotions associated with parents, and showed indications of a secure attachment pattern.

Li (2002) investigated four Chinese immigrant children's intersecting worlds of home literacy, culture, and schooling. Using observations and ethnographic interviews, Li depicted a picture of different home literacy milieux and practices of the Chinese immigrant families in Canada in association with their communities. The parents' socio-cultural experiences in China and Canada, their perceptions on literacy and on Western schooling, their difficulties in understanding Canadian education system and the logic, coherence and consistency of and curriculum, their dilemma on how to provide academic support to their children, the "cultural clash" (p. 101) they experienced when they implanted their Confucius values in their children in a Canadian context were also illustrated in this study. One finding of the study is the contradictory attitudes of the parents towards the children's learning of Chinese, especially parents in the academic families. The parents of Yang and Yue thought that learning Chinese was important but that it would negatively influence their children's progress in English. So they decided not to send their children to learn Chinese or to teach their children much Chinese at home until their English reached a certain level. At the same time, school teachers lacked interest in learning about the cultural differences of these immigrant children. The teacher of one of the participants Yue did not even realize that her first language was Mandarin. The mother of Yang said: "I never have too much hope for teachers to be aware of the culture

differences!" (p. 72). Both families were afraid that their children were going from being Mandarin monolingual to being English monolingual. The findings of the study suggested that the physical and social environments of the four families were significantly different and were important factors affecting their children's literacy development.

In a longitudinal 3-year study of Chinese children and adolescents learning English in the U.S., Jia and Aaronson (2003) observed 10 native Chinese-speaking children and adolescents who immigrated to the United States between the ages of 5 and 16. Changes in their language preferences, language environments, and proficiency in English and Chinese—their L1—were measured quantitatively and qualitatively. They found that children with an arrival age of 9 or younger switched their language preference from L1 to L2 within the first year and became more proficient in L2 than in L1.

Wu (2005) conducted a qualitative study through interviews of 15 fifteen Chinese families in the Phoenix metropolitan area in Arizona to determine parents' and children's attitudes toward learning Chinese and English. Although this was not a study of L1 attrition, it is related to heritage language maintenance. The researcher found that the Chinese parents thought that bringing up children bilingually was not easy in reality because they confronted many obstacles due to unfamiliarity with the new culture and environment when they immigrated to North America.

"The fact is that those Chinese children may not be defined as truly bilingual anymore since they can only speak basic daily Chinese conversation and do not have much literacy ability" (Wu, 2005, p. 2393). The parents (most of them from the mainland) held lower expectations because they thought "the ideal is too hard to achieve" (p. 2393). One of the participant fathers said, "As long as my son knows how to write his name and some 'big' Chinese characters, and knows his ancestor is Chinese, that is enough for me. I do not expect him to read and write a composition well" (p. 2393). Even if parents think it is better for their children to become bilingual, they do not do much or behave passively to help children in learning both languages.

Wu concludes that issues within and outside the environment such as school or community, determine whether a child will maintain his/her language ability. Another finding from the Wu study is the discrepancy between the opinions of parents and children. Generally speaking, parents think their children have low motivation and interest, or they are too lazy to learn Chinese. On the contrary, children think of themselves as good Chinese speakers. They feel proud of themselves that they can speak Chinese in addition to English compared to their American peers. Wu suggests that perhaps the criteria for proficiency levels are different for parents and children. The findings of this study are concerned with what the literature review indicates: when parents express stronger views regarding the preservation of a heritage language, and act on those views, their children are more likely to maintain their proficiency.

Li, M. (2005) used qualitative methods to collect data through interviewing four people including two teachers and two administrators in private Chinese heritage-language schools in Arizona. This research identified challenges faced by community Chinese language schools. Since parents of the students were the main group of school administrators and teachers, the excessive dependence on parents created several problems. First of all, Chinese heritage language schools suffer from teacher shortages, high turnover rates, and unqualified teachers. Because teaching in Chinese heritage-language schools is perceived to be a volunteer-oriented position for parents rather than a strong committed profession, there are no widely agreed teacher recruitment criteria. Inadequately prepared teachers contribute to low quality classroom instruction. Essentially, teachers in Chinese schools teach heritage-language learners according to the pedagogical methods used while they were growing up in their Chinese speaking countries. The limited selection of textbooks makes the situation even more difficult for teachers. Taken together, the researcher concludes, these reasons help to explain why many Chinese heritage-language learners have difficulty learning Chinese and even show resistance to Chinese schools.

More recently, Li, G. (2006) conducted another qualitative research study into the role of parents in heritage language maintenance and development.

Drawing on two ethnographic studies of Chinese immigrant families' home literacy practices in two Canadian cities, Li's study explored the issue of heritage language (HL) loss and the role of parents in facilitating Chinese immigrant children's HL maintenance and development in the home milieu. The study indicates that due to a lack of mainstream school and societal support, parents experienced different barriers in fostering their children's positive attitudes toward HL learning. Li concluded that "what parents do or do not do is vital" (p. 29). She also claimed that ethnolinguistic vitality may not be a determining factor, as the two families were from two different communities where Chinese is deemed to have a different status—one low and one high—but both children experienced language loss regardless. Li suggests that both parents and educators need to work collaboratively in helping learners to become bilingual and biliterate. One of Li's findings from her research on formal instruction in weekend Chinese-language schools is:

> These instructional supports from both home and community schools undoubtedly helped develop their levels of proficiency in Chinese, it is however limited in this impact on the children's motivation to become better Chinese language learners. Though their reluctance to learn the language might be related to the rigid methods that often characterize Chinese instruction, I contend that forces from more powerful institutions such as public schools may have played a much more significant role in shaping the learners' attitudes toward Chinese learning. (p. 28)

Another study investigating why parents send their children to Chinese HL schools was that of Liao and Lark (2008). They conducted a qualitative study by interviewing thirteen parents who sent their children to learn Chinese in a city of one southwestern state. The researchers noted that there were three areas that parents cited for sending their children to Chinese heritage schools: 1) the need to learn two languages, 2) for communication and social skills, and 3) for professional competitiveness. The parents believed that their children should learn two languages and one of the languages should be Chinese. They felt that Chinese is a universal language and that it is more popular today. They felt that speaking the same language also tied families together and that being able to speak more

than one language gave their children more access to their culture. The participants in this study thought the schools provided a networking opportunity not only for parents but also for their children. The parents felt that the experience was positive as noted in several comments.

> Emily wanted to let her daughter know that there were many other children learning Chinese. Joyce felt that the Chinese school as a place for parents to exchange thoughts on helping children to learn and excel in Chinese. Nancy mentioned that the Chinese school is a place where her daughters could see other Chinese people. Haley appreciated the values of the parents, teachers, and principal of the Chinese School. She said, "Everybody in Chinese school is attentive and diligent. (p. 6)

Jia (2008) investigated Chinese heritage language development, maintenance, and attrition among 85 recent Chinese immigrants in New York City. Participants of the study were young adults whose age of arrival in US ranged from 4 to 20. Questionnaires were completed on self-rated Chinese and English proficiency and on demographic variables (age, time of arrival in US, socioeconomic status, cultural identity and preference, language environment). A Chinese grammaticality judgment task was also undertaken to assess the validity of the self-rated Chinese proficiency. Jia found that significant and variable L1 loss had occurred among the young adult immigrants, especially among those who arrived in US at early age and those who were from higher income families. Jia also found that reading and writing were the abilities most subject to attrition and that a stronger cultural identity might result in better L1 maintenance.

Liu (2008) conducted a study among 28 Chinese students at a Sunday Chinese school in a large southwestern border city in the US. Data were collected through a questionnaire and follow-up group interviews. Factors that Liu found at a micro-level that influenced participants' decision to maintain or to lose their heritage language were: parents' attitudes and beliefs about heritage language to their children, the cohesion among family members in terms of language proficiency, frequency of use, parents' educational attainment, peer influences, and characteristics of extended family members and individuals. Factors at a macro level that played import roles were: ethnic identity, ethnolinguistic vitality,

pressure for language assimilation and negative attitudes towards minority languages and educational politics. The difficulties for children to learn Chinese included: lack of interest, cross-language differences in the writing system between English and Chinese, lack of a conducive environment for HLM (heritage language maintenance) in the English-dominant society.

Zhang (2008) studied language maintenance within a larger context of acculturation of 18 Chinese immigrant families in two Chinese communities in Philadelphia. Ethnographic interviews and participant observations were the major date collection methods used to answer the research question "What issues are involved in heritage language maintenance between two generations in the Chinese immigrant families?" She found that different language attitudes and preferences among parents and children bring inter-generational conflicts. On the one hand, she found that better-educated Mandarin-speaking parents who work in middle class job positions demonstrated a clear language preference for Mandarin. The Chinese parents in this study "not only see their heritage language as a valuable resource that can help the children succeed in the globalized job market, but also believe that it is important to the family's survival as an organic whole in the US" (p. 216). On the other hand, the children showed resistance towards their parents' efforts to make them learn Mandarin. They thought their heritage language had little value in the mainstream US society. One important finding is that although weekend community schools are decisive in heritage-language preservation, they are "not as effective and fruitful as the parents expected, due to the voluntary nature of the teaching and learning activities in them" (p. 224). Zhang argued that only when the larger society, including public school systems, fosters heritage language learning can immigrant parents pass their language and culture to their children successfully. Ethnic networks, family ties and peers have also been found to be very important factors affecting the maintenance of heritage language. Zhang argues that "total assimilation is only achieved at the expense of valuable loss to the second-generation children and therefore may not be the best acculturation outcomes" (p. 220).

Fu (2009) conducted a study on how new Chinese immigrant students continue to develop their first language literacy in a bilingual program in a New York City's Chinatown middle school (Gr. 6-Gr. 9). One of the major discoveries of her study is that actively engaging in reading, writing, and talking about historical and current events in the students' first language, Chinese, prepared these students to function as literate citizens in this new world and fostered their new identities in becoming Chinese-Americans. "These students were preparing not only for their education in America, but also their present and future lives in this democratic world" (p. 251). Another important discovery of her research is that discussing and questioning history books not only helped students understand the American society and their home country better, but it also encouraged them to become more critical of what they read. "This was a huge leap for these students, as their training in the Chinese culture had taught not to question books or authorities" (p. 252). Fu also concludes that neither the type of assignment nor the level of English mastery determine the extent to which language-mixing occurred. Rather, the content and ideas presented in writing determined its form and style.

> As thinkers and writers, student in the CLA [Chinese language art] classes were given the kind of freedom to make rhetorical choices that other students usually do not have when they are learning to write in a new language. Those choices were determined not so much by levels of English or Chinese proficiency but by rhetorical decisions related to the message to be presented and how best to present the message, with regard to how the writer wanted to position themselves. (pp. 258-259)

One of her suggestions to the teachers who work with English language learners (ELL) is to value and promote biliteracy by planning literacy programs across subject areas and promoting the view of writing development as bilingual thinking.

This chapter first has provided an outline of the research on language attrition within a wider perspective of bilingualism, outlining the major theoretical frameworks, reviewing linguistic and internal and external factors as well as the research methods used in the studies. The last part of this chapter has included an

overview of research on L1 maintenance and attrition among Chinese immigrants. In the next chapter, details on the research methods this study uses in collecting data and in analyzing data will be provided.

CHAPTER THREE
METHOD

This dissertation presents a multiple-case study carried out with three bilinguals, one male and two female Chinese young adults, who had all immigrated to Canada from China during their childhood. This chapter discusses case studies as a research method and describes the participants and the procedures used in this study.

Case study as a research method

The purpose of a case study is "to understand the complexity and dynamic nature of the particular entity, and to discover systematic connections among experiences, behaviours, and relevant features of the context" (Johnson, 1992, p. 84). Stake (1988) defines a case study as the "study of a 'bounded system,' emphasizing the unity and wholeness of that system, but confining the attention to those aspects that are relevant to the research problem at the time" (p. 258). Case studies are used to "gain an in-depth understanding of the situation and meaning for those involved" (Merriam, 1998, p. 19). As Duff (2008) points out:

> By concentrating on the behaviour of one individual or a small number of individuals (or characteristics of sites), it is possible to conduct a very thorough analysis (a "thick" or "rich" description) of the case and to include triangulated perspectives from other participants or observers. (p. 43)

Since case study allows multiple sources and techniques in the data-collecting process, it is able to provide "rich and in-depth data" on the behaviour of an individual or small group (Zhu & Annabelle, 2008). The case focuses attention on the process rather than the outcome, on context rather than a specific variable, and on discovery rather than confirmation (Merriam, 1998). The researcher engages in a process of generating a picture of the case and then producing a portrayal of the case for others to see. The case thus becomes "both a process of inquiry about the case and the product of that inquiry" (Stake, 2006, p. 8).

Given that the research questions of this study required a focused and detailed examination of young immigrant adults' L1 maintenance and attrition experiences, I chose to use a multicase approach (Duff, 2008; Stake, 2006; Yin, 2003):

> In multicase study research, the single case is of interest because it belongs to a particular collection of cases. The individual cases share a common characteristic or condition. The cases in the collection are somehow categorically bound together. They may be members of a group or example of a phenomenon. (Stake, 2006, p. 6)

By using a multicase study method, I attempted to understand the phenomenon of L1 maintenance and attrition among young adult immigrants from China. This included (1) an examination of the first language abilities of the participants and (2) exploration of the extralinguistic factors that have affected their L1 maintenance and attrition. By using a cross-case analysis with some emphasis on the *binding* concept or idea (Stake, 2006), I attempted to find a way to explore individual differences—and at the same time the interrelation of the characteristics of participants' L1 maintenance and attrition processes—in both social, cultural, and linguistic environments.

Design of the present study

This study of heritage language attrition and maintenance consists of a linguistic analysis that addresses the question of "what is maintained and lost" and a life-history analysis that examines why language is maintained or lost. The first type of analysis has been a familiar approach in case studies stages of research in bilingualism and second language acquisition (e.g., Leopold, 1939-1949; Wong-Fillmore, 1979). More recently, these two dimensions of the research reflect the *objectiv*e as opposed to the *subjective* aspects of language loss. Although these perspectives have sometimes been viewed as mutually exclusive rather than complementary, de Bot and Hulsen (2002) argue that "a complete portrait of [language attrition and maintenance] involves both these perspectives: the

objective, external one, and the subjective, internal one" (p. 253). Such a complete portrait is the aim of this study.

Linguistic Analysis

The purpose of the linguistic analysis was to provide specific information about the participants' level of proficiency in their L1. Following the recommendations of Schmid (2004), three types of data were used: spontaneous speech production, self-assessments, and a formal test. The focus of the analysis of the data was on describing participants' grammatical competence. Grammatical competence (also referred to as linguistic competence) is defined by Savignon as "mastery of the linguistic code, the ability to recognize the lexical, morphological, syntactic, and phonological features of a language and to manipulate these features to form words and sentences" (1983, p. 37). Production errors in Mandarin such as the misuse of the counting particles, or incorrect word formation were quantified and analysed. Measures of lexical richness and diversity such as the use of sophisticated compound words were calculated as were lexical retrieval problems such as involuntary word borrowing and code-mixing (but not code switching and word borrowing as a communicative strategy). On the basis of these analyses, I was able to determine which aspects of L1 were more resilient and which were more fragile (Goldin-Meadow, 1982) and to rank my research participants in terms of their bilingualism.

Life-history Analysis

De Bot and Clyne (1994) and Waas (1996) suggest that individuals' experiences with the L1 and the L2 are treated as important parts in the process of language loss. The concept of major life events, that is, events that have a significant impact on the course of life (de Bot, 2007) are closely linked to language loss and therefore deserve our attention. One way to gather information about the major life-events in people's lives is through biographies or life-histories. Oral accounts of the participants' life, narrated by the participants or created from interview data are often used in life-history study. Other available

documents relating narrators' life events and third-party interviews with other people might also be used in life-history study (Kouritzin, 2000). A much cited example of a life-history study dealing with language loss is Kouritzin's (1999) research in which she describes the qualitative research data she collected from her selected five participants using first-person narrative. Life-history "focuses on individuals' understanding and recollection of events that have had a substantial impact on their development" (Kouritzin, 1999, p.20). Through the analysis of multiple detailed life-history case studies, her study opened "a window on the lived experiences of people who have lost a first language, as well as on the familial, social and educational consequences of first language loss" (Kouritzin, 1999, p. ix).

In the present study, the participants' linguistic changes or developments are framed within a context of their life histories, especially within the context of the phase after they immigrated to Canada. I have chosen a life-story-telling approach as one of my data-collecting methods in order to achieve an in-depth understanding of the process and experience of my participants' L1 maintenance and attrition. The life-story method serves as one of the most desirable and powerful methods for this focus because it helps me to go into the inner world—the past, the present and the future—of my L1 attritor participants. As de Bot (2007) notes: "From a language attrition perspective all events that lead to a reduction of the use of one language can be viewed as major life events" (p. 58).

In the pilot study of this research (Yan' case), I found that what Kouritzin and de Bot said was true. This life story approach enabled Yan to recollect events that have had a substantial impact on her, and to tell me her understanding of her social, cultural and linguistic lives both in her early years and at present in Canada, through her own words in a very effective way. By and through her autobiographical storyline, she gave meaning to her experiences and important events. As Prescher (2007) points out, "this narrative process is a more or less creative one … they often go beyond the facts as people … selectively take aspects of their experience construct narratives that integrate their life and make sense to them and to others" (p. 194). This approach also helped me to establish a

personal and friendly relationship with my participants. This relationship made my participants willing to provide me, the researcher, inter-related aspects which tie in with the topic of L1 maintenance and attrition. Such a relationship set an important ground for me to seek a better understanding of the complex processes of the phenomenon linguistically and culturally.

In contrast to Kouritzin's model, this researcher and the participants in this study came from the same cultural and linguistic background. My Mandarin language and my background as a Chinese immigrant in Canada have "created a common bond" (Li, 2002, p.38) between my participants and myself. This common bond has allowed me to develop a discourse in which my participants share with me their lived experiences, beliefs and thoughts. This shared meaning in understanding the participants' cultural and linguistic system assists the researcher to be a good listener, to capture the mood and effective components, to understand the context from which the participants come from and which the participants are in, to make a continuous interaction between the issues being studied and the data being collected, to obtain information "between the lines" (Yin, 2003) and to better interpret the data collected. Above all, this provided this researcher a valuable opportunity to scrutinize the participants' linguistic data in Mandarin in addition to the data in English.

Participants

Selection of participants

Three participants were selected for this study based on key criteria such as their age and length of stay in an L2 environment. This small-scale design was intended to provide more detailed knowledge on the complex phenomenon of L1 maintenance and /or attrition.

Four important parameters were established to guide selection:

1) The participants should be the first-generation immigrants from Mandarin speaking areas in China. Although there are many young adults from China or other parts of Asia who can speak Mandarin, there is the possibility that their L1 language is not Mandarin. If so, the other accent or language could affect

their Mandarin performance (Huang, 1991) in all of the language skills. The participants selected for this study were first-generation immigrants from mainland China or Taiwan, where standard Mandarin[1] is the only language (or dialect) used.

2) My participant should have learned to read and write Mandarin before they came to Canada. Their Mandarin literacy level at the time of immigration should be from grade 4 to grade 6. I chose to include grades 4 to 6 because, according to research conducted by Huang (1991), students in China in grade 4 have already mastered basic reading and writing abilities. At this grade, the average number of Mandarin characters students are able to recognize is around 2500-2700, while the required number for the grade level is 2805. At grade 5, the average number of Mandarin characters students are able to recognize is close to 3000. Therefore, selecting adults from the group that arrived in Canada between grades 4 and 6 guarantees that my participants had already mastered basic Mandarin literacy, not only in speaking and comprehending, but also in reading and writing. Selecting participants from this group allowed me to see the greater linguistic behavioural picture rather than only part of it. At the same time, this parameter also controlled the age at which the participants acquired their L2. The three participants in this study all met this parameter.

3) My participants should have lived in Canada or an English-speaking country for more than eight years. Landweer (2002) points out that language maintenance and shift are long-term consequences of consistent patterns of language choice. Therefore, it might be difficult for my participants to tell—and for me to collect the data on these consequences—if they had been in an L2 language environment for a shorter time.

4) My participants should represent different sex. In this study, two females and one male were selected.

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[1] Standard Mandarin is known as *putonghua* (common language) in mainland China, *guoyu* (national language) in Taiwan, and *huayu* (Chinese language) in Singapore and Malaysia.

Participants

1) Yan

Yan came to Canada in 1990 at the age of ten. She was in grade five when she left China. She came to Canada with her father, a former scholar in Ancient Chinese history field in the Social Science Academy of China. Her mother, a former English language instructor in a university in Beijing, China, She came to Canada as a visiting scholar and continued to study as a master's student at the U of A. Although Yan is the only child in the family, she was not spoiled by her parents, who encouraged her independence. Yan was a good student in her elementary school in China. Many times she received awards for her writing and public speech. Growing up in an intellectual family, Yan was exposed to rich literacy in Mandarin. She not only read books as her obligation required by the teacher but held an interest or passion in reading. Yan had no English background before coming to Canada. Starting from the time she landed, she was in a challenging comprehensive "foreign language" environment with almost none help.

Yan was 26 years old in 2006. She graduated from the U of A with a major in marketing in the Business Faculty in 2002 and from UBC law school in 2005. She is now a lawyer.

2) Jinhong

Jinhong was an 18-year-old university student at the U of A. She immigrated from Taiwan to Canada in 1998 at the age of eleven with her father and her brother. She lived in Calgary for seven years, and then moved to Edmonton. Her mother is still living in Taiwan since the couple divorced before the father immigrated to Canada.

Born into an intellectual family, Jinhong was greatly influenced by the family literacy tradition. She was a very good and well-behaved student. She always tried to be the best, both in Taiwan and Canada. She is a thinker. She likes to explore many "why"s about herself and about the world.

Jinhong had no English background before coming to Canada. She indicated that with the help of her teachers and peer helpers, her English developed quickly. She has maintained her Mandarin very well.

She was studying in the Biology department in 2006. She plans to be a dentist in the future, although she has a passion for being a school teacher. She was a member of the Taiwanese Students Association in the U of A. She was also a very good swimmer.

3) Datong

Datong was 20 years old second-year university student majoring in science when I first interviewed him and he later switched to the Department of Secondary Education at the U of A. He was born in Yichang, Hubei province in China. He came to Canada with his mother to join his father, an engineer, when he was in grade five. He is now living with his parents and his grandparents in Edmonton. Right after he came to Canada, his parents decided to send him to an English-Mandarin bilingual school in Edmonton Public Schools (EPS). He was one of the few immigrant children from mainland China whose parents wanted their children to continue their Mandarin study in bilingual schools.

Datong was a good and very well behaved student. He didn't take any mainstream English LA or math classes in elementary. He learned English and math in his ESL class. Yet in high school, he already had very good marks in English writing. He also received a high standard award in Mandarin in grade 12. In addition to English and Mandarin, he understands Cantonese but cannot speak it.

Datong is a Jin Yong (a Chinese writer) fan. He is passionate about his books. Datong is good in Chinese history, and he is also a good writer. He likes writing both in English and in Mandarin. He wrote journals on a journal website in both English and Mandarin. Datong wanted to be an English or a Mandarin teacher in the future.

The following table illustrates the participants' biographical information in 2006:

Table 2 Participants' Biographical Information (2006)

Names	Sex	Age	Grade in China	Immigr-ated from	Language(s) spoken	Learned English	Current status
Yan	F	26	5	Beijing	Mandarin English Spanish French(B)	Main stream class	Articling lawyer
Jinhong	F	19	5.5	Taipei	Mandarin English Japanese(B)	ESL class	University student (Biology)
Datong	M	20	5.5	Yichang	Mandarin English Cantonese(B)	ESL class in English Mandarin bilingual school	University student (Science & education)

B: Beginner level

Ethical considerations

This research was conducted in accordance with the SSHRC Guidelines for using human participants. All three participants were informed of their right to withdraw from the study at any time. Participants' informed written consent was obtained. Confidentiality and anonymity were maintained by the use of pseudonyms to protect the participants' identities. Interpretations and translations were offered to participants to read and to modify. The participants were also informed that they were free to remove any parts that they might be uncomfortable with.

Data collection

A combination of several research methods ensured data triangulation (Yin, 2003). Gathering data from a variety of sources that shed light onto the research questions helped me to gain a holistic picture and capture the diverse nature of my participants' L1 maintenance and attrition experiences. The sources that were used in this study include: interviews, direct observation, participant observation and archival records.

Six types of data were collected and used for analysis and examination:

1. Oral production data from interviews in both English and Mandarin.

2. Written materials both in English and Mandarin provided by the participants.[1]
3. A self-assessment questionnaire (Appendix I).
4. Results from an English-Mandarin and Mandarin-English translation task (Appendix IV).
5. Email and phone interviews with the participants.
6. Field notes of direct observations.

Interviews

The present study was conducted mainly through three interviews with each of my participants. All of the nine major interviews were one-on-one interviews during which I asked questions to, and recorded answers from, only one participant at a time. Each interview lasted from 120 to 180 minutes. The time and the location of the interviews were determined in consultation with each participant.

The interviews in this study were semi-structured (Johnson, 1992) and open-ended (Creswell, 2005). They were flexible and natural in nature, allowing new questions to be brought up during the interviews as a result of what the participants said. Before the interviews I carefully designed the interview framework of themes to be explored and listed some of the questions to be asked as well as providing questions for use in probing for additional information. To elicit memories of participants' major life events for L1 maintenance and attrition in the new environments in which English is spoken, to get my participants to reflect and tell about their stories and their views on L1 maintenance and attrition, I prepared 6 "narrative questions" (Kim, 2006, p. 186). My questions intended to ask 1) in what way the participants maintained and/or lost their Mandarin after they immigrated to Canada, 2) how they viewed the maintenance and attrition, 3) how much their parents and teachers were involved in their maintaining Mandarin, 4) in what aspects their maintaining was challenging, 5) what the effects of their

[1] These materials include both physical artifacts and archival records.

L1 maintenance and attrition have been and 6) what they thought and felt about their cultural and ethnic identity in the process of their linguistic development. The responses to these questions contain factual stories that further illustrate their answers. At the same time, in order to "encourage a natural and uninhibited oral production" (Prescher, 2007, p. 195), loose interview techniques for open recalls were also used. Introductions, explanations, descriptions, comments on the targeted questions and the open recalls provided by the participants in the relatively natural conversations in the interviews were valuable for further content analysis.

Lived experiences with respect to my participants' L1 and L2 development, culture, education, identity formation and reformation were very much the focus. The interviews were phenomenological in nature. That is, there was an "emphasis on participants' narrative reconstruction of aspects of their lives and experiences, such as connection between their affective or emotional states or their identities and their experiences of language learning" (Duff, 2008, p.133).

The interviews served two functions: to elicit information about the participants' lived experience and to provide naturalistic samples of participant's language. The interviews were conducted both in English and Mandarin. The open-ended nature of the questions encouraged full, meaningful answers using participants' own knowledge and/or feelings and as a result provided contexts for participants to produce a wide range of grammatical structures.

The first interview was designed for the collection of data that would answer research questions concerning extralinguistic psychological and socio-cultural factors the participants believed had affected their L1 language maintenance and attrition. This interview was conducted in English only. The questions for the interview were based on questionnaires used in previous research by Naiman, Fröhlich, Stern and Todesco (1996) and Wallace (2001). The participants were interviewed through "guided conversation" and "friendly dialogue" (Kvale, 1996). I asked them to give me illustrative examples to support their answers to the questions. In addition to answering the interview questions, the participants were also invited to speak openly about their English learning

experiences and their reflections on L1 maintenance and attrition**.** I asked them to reminisce about their own experiences in their language development as closely as possible. The aim of doing this was to encourage them to tell me as much and as openly and honestly as possible the matters they experienced. Through these narratives, the participants presented their personal voice, identity, affect, feelings, perceptions, attitude towards their L1/C1 (first language and first culture) and their L1/C2 and their lived experience as young Chinese immigrants who came to Canada.

The second set of interviews was conducted approximately two weeks (in Jinhong and Datong's cases) and two months (in Yan's case) after the first set of interviews. This time the participants were asked to use their L1 (Mandarin) when responding to my questions. The interviews in Mandarin had the following additional purposes:

1. To provide a natural setting or actual discourse to learn directly about the full extent of the participants' (oral) competence/performance in their L1, their proficiency both in comprehension and in oral productive ability in Mandarin.
2. To collect spontaneous orally produced data for linguistic and conversational analysis, and for identifying the organizational competence (grammatical and textual competence) of the participants' L1.
3. To collect data on cultural and social linguistic competence including narrative structure and discourse-level performance.
4. To collect observational data on participants' natural verbal and non-verbal interactions in Mandarin.

The interviews in Mandarin functioned as a direct integrative test, involving a task which is assumed to call upon a larger range of skills and which assesses the participants' general language proficiency rather than the separate components of that language. The interviews also assess how well the participants can communicate in Mandarin for this particular purpose in this given situation. This approach to linguistic interviewing helps "elicit as many types of discourse

or targeted structures and as much analyzable language as possible to understand learners true abilities and systematic language use" (Duff, 2008, p.133).

The third set of interviews were conducted about two weeks after the second set in Jinhong and Datong's cases and two years later in Yan's case. These interviews were conducted in English and focused on my participants' self-evaluation of their competence in Mandarin and in English. In Yan's case, two years passed since the first two interviews. From the third interview with Yan, more detailed narrative information and data was elicited and updated. In addition to the data "generated by means of social interaction between interviewer and interviewee" (Duff, 2008, p. 134), during the third interview, different instruments were used as data collection instruments. The participants were invited to use a self-rating scale on their own ability of language skills in both L1 and L2. They were also asked to finish a controlled lexical translation task.

To test reading ability, participants were also asked during the interviews to read aloud randomly and impromptu the text from certain works of literature. Comprehension questions were asked orally to determine whether the participants understood the gist, facts, details and the structure of the text. Specific questions on idioms and figurative language were also asked.

During the three interviews, I took brief notes when necessary. I wrote notes on a separate pad of paper and numbered the notes to correspond with the question guide. Certain sections of Jinhong's and Yan's interview were not recorded because of technique problem, and so I went over the notes to fill in gaps later on the same day.

Several short, in-person interviews were conducted to clarify some of the data collected in the previous interviews or to follow up on important issues. In addition to face-to-face interviews, many short telephone interviews and electronic e-mail interviews were also conducted during the period of data analysis and report writing to clarify the data collected and to extend my understanding of the topic or central phenomenon being studied. At the same time, I also told my participants how I had proceeded with the data ensuring that

they understood where and for what purposes the data would be used and how it would be presented.

Writing samples

In this study, data from writing samples provided by the participants has also been collected and scrutinized in order to provide more information on both questions. The writing samples include: (1) articles written by Jinhong as Mandarin writing homework for a church weekend school when she first came to Canada; (2) articles and diaries in both Mandarin and English written and published by Jinhong and Datong on an Internet diary website; (3) journals recently written by Jinhong; and (4) letters written by Yan to her mother (in English) and to her grandparents (in Mandarin) over the years. These archival records have broad coverage and proved to be very valuable in this study.

Self-assessment of Mandarin and English proficiency scales

A self-assessment measure was specifically developed for this study. It consisted of 46 "can do" statements that were partially derived from the model of communicative competence by Bachman (1990, 2004). Thus, items were asked to rate their ability in English and Mandarin to carry out communicative activities that reflect the ideational (utterances used to express people's experience of the real world), manipulative (utterances used to affect the world), heuristic (utterances used to extend people's knowledge of the world) and imaginative (utterances used for aesthetic or heumarious purposes) functions of language (see Appendix I) based on Holliday's (1976) identification (Luoma, 2004, p.100).

Next, the participants were also asked to assess their own basic skills in the Mandarin: reading, writing, speaking, and translating, as well as her knowledge on social and cultural elements at the time of interviews.

Finally, they were asked to rate their development or attrition of their English and Mandarin along a 1-100 point scale. They did so for each 2-year segment of the entire time period from the time when they first came to Canada to the time of doing this task.

Translation task

A short translation task was developed for this study (see Appendix IV). The design of this translation task was based on "The Curriculum of Chinese Language Teaching and Learning for Overseas Students" (Guojia Hanyu Guoji Tuiguang Lingdao Xiaozu Bangongshi, 2004)[1]. Morphemes, words, set phrases for first-year, second-year and third/fourth-year overseas Chinese-language students in higher-education institutions in China were selected accordingly. This ranking of words and phrases in Mandarin is a standardised procedure for measuring lexical proficiency in the field of teaching Mandarin for overseas students in China.

There are two sections in the first rank level: 1) The Mandarin-English translation task functions as a specifically designed lexical recognition task in which the participants are required to recognize first the Chinese words (including two or more than two characters compound words) and then translate them into English so that their morphological awareness in words recognition could be tested. 2) English-Mandarin translation task and Mandarin-English translation task. The English-Mandarin translation task works as a controlled lexical naming task. The participants are required to retrieve from their Mandarin lexical store first based on the English words given and then write down the retrieved equivalent Mandarin words in Chinese characters. This translation task is designed only on the lexical level rather than on syntactic and rhetoric levels which would require special translation techniques. The reasons for using the translation task are:

[1] Guojia Hanyu Guoji Tuiguang Lingdao Xiaozu Bangongshi is The Office of Chinese Language Council International. The Chinese Language Council International is composed of members from 12 state ministries and commissions, namely, the General Office of the State Council, the Ministry of Education, the Ministry of Finance, the Overseas Chinese Affaires Office of the State Council, the Ministry of Foreign Affairs, the State Development and Reform Commission, the Ministry of Commerce, the Ministry of Culture, the State Administration of Radio Film and Television (China Radio International), the State Press and Publications Administration, the State Council Information Office and the State Language Committee. Governed by the Council is the Office of Chinese Language Council International, known as "Hanban" for short. Retrieved June 25, 2009 from http://english.hanban.org/gywm.php

1. To obtain profiles of lexical maintenance and attrition in participants' reading and writing.
2. To provide an opportunity for the participants to use higher-level words and phrases in Mandarin which are difficult for the researcher to obtain from natural speech data.
3. To provide firmer evidence about participants' word recognition ability (Yagmur, 1997) and morphological awareness (radical / word levels) in Mandarin in addition to the evidence provided in spontaneous speech data.

No English-Mandarin translation was designed for rank 2 and rank 3 since it is hard to limit participants using only high rank words and phrases in English-Mandarin translation.

Data analysis

Linguistic Analysis

Errors in the speech and writing sample data were quantified, categorized, and intensively analyzed in order to answer question 1, following the categorization approach offered by Seliger and Vago (1991) for language attrition research. Eight linguistic aspects were given particular focus in the error analysis:

1. *Phonology*: The phonology analysis is based on the phonology of *Putonghua* (modern standard Chinese or Mandarin), the common language of China, based on the northern dialects, with the Beijing phonological system as its norm of pronunciation. This definition was formed at the National Language Reform Meeting (Quanguo Wenzi Gaige Huiyi) in 1955.
2. *Lexicon*: Quantitative parameters such as errors and involuntary code-mixing were used as rough and mechanical measurements of participants' lexical proficiency in Mandarin. An error here refers to the use of linguistic items including characters, morphemes, words, phrases, set phrases, and expressions deviant from that of a native Mandarin speaker as judged by this researcher. Errors in language

textual competence (cohesion, rhetoric) and in sociolinguistic competence (register, culture) were also included in this analysis.

3. *Syntax*: The participants' use of grammatical features and correct word order in Mandarin was examined. Slips of the tongue were not included in this analysis.
4. *Reading*: Reading comprehension questions were asked orally to determine whether the participants understood the gist, facts, details and the structure of the randomly selected literature text. Specific questions on idioms and figurative language were also asked.
5. *Orthography*: There are three basic types of systems for writing Chinese characters: pictographs (象形字), pictophonetic complexes (形声字) and logical aggregates (会意字).[1] Only about 4% of Chinese characters are derived from pictographs, a form of writing whereby ideas are transmitted through pictures. The others are either logical aggregates or pictophonetics. Therefore, in order to read or write Chinese characters, one needs to know these systems, understand how language elements are encoded in the writing system, and follow the rules of writing accordingly. "Without this competence, lexical inference is seriously hampered, and word learning becomes excessively challenging. Lacking lexical inference ability, reading comprehension is also acutely impaired" (Koda, Zhang & Yang, 2008, p. 140). One's orthographic ability and morphological awareness can be seen in the ability to read and write characters. In addition to participants' comments on their own orthographic ability and through reading aloud, the English-Mandarin translation task was also used to determine their ability to write Chinese characters. Errors were

[1] Pictophonetic complexes are characters containing two parts, one indicating a general category of meaning and the other the sound. In logical aggregates two or three parts are placed together to make a logical meaning.

counted. The handwritten data were also analysed in detail when available.

6. *Writing*: Written works done by the participants were analysed based on the five-stage description of objectives for writing skill set in the International Curriculum for Chinese Language Education by the Office of Chinese Language Council International (Hanban) in 2008. Participants' comments on their own writing ability were also considered.
7. *Language use strategies*: The language use strategies here only focus on the communicative strategies my participants used during the Mandarin interviews. The data were collected through my observations during the interview. The analysis of this part was based on the five-stage description of objectives for communicative strategies in the International Curriculum for Chinese Language Education by the Office of Chinese Language Council International (Hanban) in 2008, and Language Strategy Use Inventory by Cohen, Oxford and Chi (2005). .
8. *Translation*: The analysis of translation skill is based primarily on the translation task. Errors of English-Mandarin translation and the Mandarin–English translation were counted. When my participants did not know how to write the Chinese characters and instead used *pinyin* (phonetic symbols used in Mainland China) or *zhuyinfuhao* (phonetic symbols used in Taiwan), I counted them as correct translation. Participants' comments on translation are also considered in the analysis.

Both the Self-rating Task and the Translation Task were conducted right after the third interviews.

Extra-linguistic Analysis

The extra-linguistic data analysis of this study is at these two levels, descriptive and interpretive (Johnson, 1992). The descriptive data analysis I

conducted was an examination of the context of each participant. Stake (2006) points out, "Each case to be studied is a complex entity located in its own situation. It has its special contexts or backgrounds" (p. 12). I examined some of the cultural, ethical, linguistic, social and educational backgrounds of the three participants which I considered important in understanding each individual case.

The next descriptive data analysis I undertook was an examination of the individual cases of this study. In order to make the collected data more accessible and understandable (Kvale, 1996), the nine major interviews were first audio-taped and then transcribed verbatim. Subsequently, I examined the transcribed speech data and all other data resources for meaningful themes, in order to discover how they were patterned. Stake (1995) states, "The search for the meaning often is the search of patterns, for consistency within certain conditions, which we call 'correspondence'" (p. 78). Sentences or group of sentences were coded into categories. Data coding was conducted using Creswell's procedure (2005):

Step 1: All transcriptions were initially read carefully to get a sense of the whole.

Step 2: Text segments were identified and a code word or phrase that accurately described the meaning of the text segment was assigned.

Step 3: All code words were listed and similar codes were grouped.

Step 4: Overlap and redundancy of codes were reduced to develop "themes or broad categories" (p. 241) about the participants that could be used in analysis, forming answers to the research questions as well as "an in-depth understanding of the central phenomenon description and thematic development" (p. 241).

Both speech data and the written productive data collected from my participants were organized and analyzed for common or distinctive themes or categories. Worksheets for multicase study suggested by Stake (2006) were used in different phases of the analysis process. Cresswell (2005) pointes out: "Because themes are similar codes aggregated together to form a major idea in the database,

they form a core element in qualitative data analysis" (p.243). After sorting through the data, the important findings with regard to the research questions were placed within the theme categories that emerged as most important. During the process of analysis, the theme categories were sometimes detailed by further subdivision. On other occasions, when an initial category contained only a very small amount of data, it was reassigned to a broader category. The theme categories were determined following Johnson's four principles (1992, p. 90):

1. Identify important variables, issues, or themes.
2. Discover how these patterns and interrelate in the bounded system.
3. Explain how these interrelationships influence the phenomena under study.
4. Offer fresh new insights.

By doing this, minor themes were subsumed within major themes and major themes were included within broader themes (Creswell, 2005). The theme coding not only reduced large amounts of data into a smaller number of analytical units, but also laid groundwork for cross-case analysis by common themes. Sometimes a large text was also structured into tables and figures (Kvale, 1996).

Telephone conversations as well as observations on the participants' linguistic behaviour and strategies used during the interviews were recorded as field notes. The Mandarin component of these interviews was translated into English when necessary.

In presenting the extra-linguistic data of each case, I decided to use first-person narrative[1]. Influenced by the work of Kouritzin (1999) and de Bot (2007),

[1] In the report of the pilot study and the first two drafts of this thesis, the extralinguistic data was organized and analyzed in logical ways based on different themes as have been done in most of existing ethnographic research. However, since the experience of my participants has touched many different areas related to the phenomenon of L1 maintenance/attrition, as a researcher, I felt that this type of presentation might limit the readers. As I wrote in my research journal: "I want to give my readers more room to imagine, to create, to indulge, to interpret and to understand the stories before I 'constrain' , 'border' or 'bound' their minds. I know if I were a participant, I would like the researcher to create space for me to tell my own story. I want my voice to be presented as a whole instead of ripped pieces. Because when I say something, when I do something, it's not only what I say and what I do matter, the background stories behind that statement and that action are more important. They are not isolated trees. They are trees in the forest. Finally as a reader, perhaps because of my personality, I felt uncomfortable to be interrupted or lead by the analysis and comments when I was 'experiencing' the stories through

I wanted to give the readers more chances and larger space to follow, to think about, to understand and to interpret the life history of my participants, to listen to their voice as uninterrupted by my analysis, so that they could obtain a holistic and in depth perception on this multifaceted phenomenon of L1 maintenance/attrition. As de Bot puts out that some "specific language-related major life events" may be "insignificant on the larger scale of life, but they may be very significant for the development of the language system" (p.57). Through first-person narrative, readers are invited to "experience" what my participants went through as they immigrated into an environment in which their L1 is not spoken, and to identify with my participants of not only their personal feelings, but also what the social practice has done to them positively or negatively. Through first person narrative, my participants might be "subjectively understood" (Kouritzin, 2000, p.18).

The stories were put together through the following steps. 1) I used the English transcript of the first interview of each participant as the outline. Since this first interview was based on carefully prepared semi-structured and open-ended narrative questions that I mentioned before, the data of the three participants I collected were all in the similar chronological structure. Basically what I needed to do was to take out my interview questions and connect their answers. 2) After I translated the Chinese transcript of the second interview into English, I coded the text based on the categories generated from the first interview. I then inserted the translated text into the first interview transcript while keeping the chronological order of the narrative form set forth by each participant (Kouritzin, 2009). 3) Overlapped excerpts and those that are not closely related to the present study were not included. 4) I also selected some of the related content from the written documents provided by the participants (e.g. diaries in both English and Chinese and letters written by the participants, e-mail interview data

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flipping the pages. It gave me a feeling of watching a movie with the interruptions of commercials. I want to find a way to present the life history of my participants in a holistic, interruption-free style" (June, 2, 2007). And then I read again Kouritzin's (1999) "Face[t] of first language loss". This time, I focused on and impressed by her way of presenting the data. I was excited: This is my solution! After discussions with my supervisor, I decided to follow Kouritzin's model to present the life history of my participants as a whole in first-person narration.

collected) and inserted them to the relevant part in their narration. 5) I edited the text by taking out all "uhms" and "ahs" and corrected some grammar errors that appeared in their oral performance (Kouritzin, 2009). In certain parts where connections are needed, I added a few words to make the narration read coherent. 6) After each narration was done, I asked my participants to proof read the whole text of their own narrations and asked for their feedback to see whether they are accurately told. The participants were encouraged to make any changes of the text (e.g. adding in anything that they thought were necessary or taking out any thing that they thought not correctly written). After discussions with them, I finalized the text of each narration according to their feedback.

Following Merriam's (1998) suggestion for cross-case analysis, a within-case analysis was first carried out. This was to determine whether the individual studies had the uniqueness and the commonality of participants' experiences to be put together for a cross-case analysis. After each individual case was examined in terms of its own situational issues, I analyzed cross-case findings with an emphasis on the socio-cultural factors the participants mentioned that affected their L1 maintenance and attrition, as well as the type of linguistic activities that exhibited the most maintenance or attrition in the participants' Mandarin. These are the binding concepts that hold the cases in this study together. The purpose of doing this cross-case analysis was to "make assertions about the binding" (Stake, 2006, p. 10). In the cross-case analysis, I first carefully re-read the description of each individual case and then applied the findings of each participant's socio-culturally situated experience and types of linguistic activities to the research questions of the study. However, this analysis was not simply a matter of listing the individual case findings applicable to every research question. I identified the prominence of each theme in each case and then sought the expected utility of each case for developing or modifying the cross-case themes. I also rated the findings of each case as to their importance for understanding the whole picture through a particular theme. I concentrated on what could be the most meaningful assertion as well as those at the top of the new ordering. By doing this I modified some of the initially identified themes, keeping in mind the study as a whole,

while mostly concentrating on data from each individual case. Stake states, "Typical situations probably contribute most to the main descriptions in the final report. The unusual situations probably do most to help limit the generality of the answers to the research questions" (Stake, 2006, p. 46). Next, I pondered not only typical situations, but also the complexity and the uniqueness of each case in regard to the final report. This cross-case analysis enabled me to see the interrelationships between the participants, their teachers, their parents, and their high- or low-quality school and home environments or contexts. It allowed me to see how L1 maintenance and attrition phenomena involve personal, cognitive and social processes.

After the descriptive data analysis of each case was complete, I considered what the data meant in each case and for the study as a whole with regard to the existing knowledge on L1 maintenance and attrition, language socialization, and the literature on bilingualism and biliteracy. I thought about what interactions and relations might exist between the socio-cultural and linguistic experiences my participants had in their L1 maintenance and attrition, and the current socio-cultural and linguistic practice of families, schools and community environments. With individual case data scrutinized, I attempted to examine which socio-cultural factors were encouraging or discouraging the L1 maintenance or development of children and young adults from China, and what could be done so that a strong self-concept, including a strong cultural and ethnic identity, for these young immigrants could be developed. I examined the narratives of my participants and contemplated what teachers, teacher trainers, and policy makers, could do to create high-quality and constructive educational, cultural, and linguistic ecologies or opportunities for young immigrants to explore their ethnicity and build positive cultural identities, to develop bilingualism, biliteracy, and greater competence in both academic endeavours and social interactions in the dominant society.

As a case researcher, one of the roles I played in this study was that of an interpreter, recognizing and substantiating new meanings from the descriptive data in order to make it more comprehensible; to make it understood in depth rather than superficially.

In this chapter, I first of all outlined the rationale that has guided my choice of research methods and the research design of the present study. Then I gave a brief introduction of the participants. Lastly, I described in detail the methods of data collection and steps of data analysis. In next chapter, measurements of the participants' L1 proficiency will be presented individually and comparatively.

CHAPTER FOUR
MEASUREMENT OF L1 PROFICIENCY

This chapter helps to answer the first set of the research questions: **What linguistic elements were maintained and lost in the participants' heritage language (HL)? What is the relationship between HL self-assessments and actual HL performance?**

The results concerning the participants' L1 linguistic abilities come from the analysis of 1) L1 oral interviews, 2) results of the translation task, 3) self-rating scales results, 4) observations, and 5) other collected data.

L1 oral interviews function as a direct integrative test, involving a task which is assumed to call upon a larger range of skills and which assesses the participants' general language proficiency rather than the separate components of that language. The interviews also assess how well the participants can communicate in Mandarin for this particular purpose in this given situation.

In the linguistic analysis of the data, the Mandarin interview speech data and the translation task, Chinese characters, phrases, and errors in different linguistic units were counted. An error in the present study refers to "the use of any linguistic item deviant from that of a native speaker" (Yukawa, 1998, p. 130). All errors were quantified, categorized and analyzed to answer the research questions mentioned above. Participants' comments on their own language proficiency in both Mandarin and English and on the strategies used in their L1 practice were used in the analysis. Field notes on interview observations, on other relevant behavior observations and information obtained which have relevance to participants' L1 maintenance and attrition, were also used. Each case will be presented in the following order:

a) Phonology
b) Oral lexical features
c) Syntax
d) Reading
e) Orthography

f) Writing
g) Language use strategies
h) Translation

In this chapter, each participant's L1 linguistic competence will be discussed in this order: 1) Yan, 2) Jinhong and 3) Datong. Then, a cross-case analysis among the three participants will be conducted to build a composite picture of all three participants in terms of their L1 maintenance/attrition data.

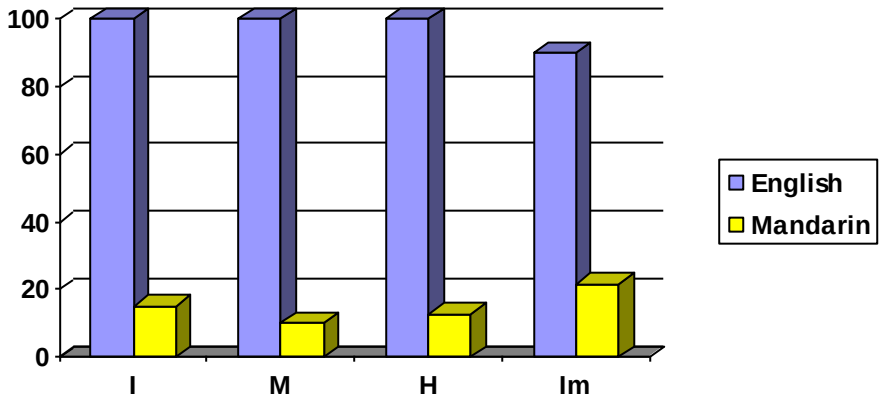
What linguistic elements are maintained and lost in Yan's L1?

Of the three participants, Yan is the weakest in Mandarin. On a global level, Yan is still able to engage in oral communication on informal and familiar topics. Her reading ability is also maintained. However, Yan has lost much of her vocabulary in Mandarin. Therefore her ability to communicate in Mandarin is much weaker than before. She mentioned this loss in the interview, "I wanted to say something, and I knew I used to have my vocabulary, used to be able to know how to say it, and all of a sudden, I just can't pull it out of my brain anymore" (English interview transcript, 2003). The distinct limits to Yan's communicative ability are demonstrated in the productive part rather than the receptive part of her L1 literacy skills. There were comparatively few occasions in which she was not able to understand certain words or phrases both in conversation and in reading.

Yan's self-assessment

Yan's questionnaire for self-assessment of the four functions of illocutionary competence in Mandarin and English (see Appendix I) shows that Yan does not consider herself to be a comparatively balanced English-Mandarin bilingual. The differences between her English language skills and her Mandarin skills are significant. This result is in coherence with the statement she made during the interview: "Language-wise, I would say 90% English and 10% Mandarin".

Figure 1 Yan's Self-Evaluation of her English and Mandarin



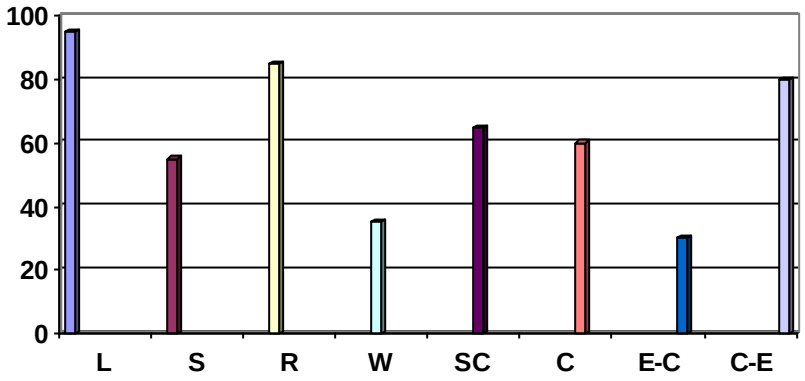
I= Ideational functional function; M = Manipulative function

H =Heuristic function; Im = Imaginative function

Yan also assessed her own basic skills in the Mandarin: reading, writing, speaking, and translating, as well as her knowledge on social and cultural elements.

The following chart shows Yan's self-evaluation of her Mandarin:

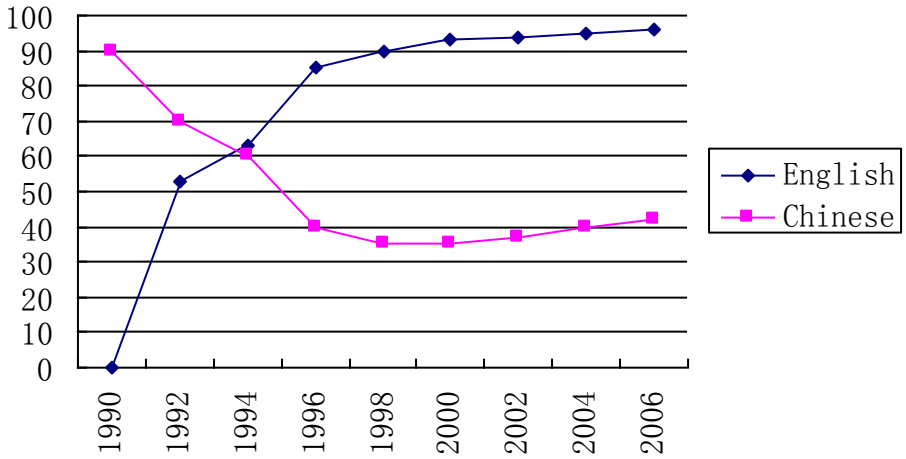
Figure 2 Yan's Self-Evaluation of her Mandarin Skills



L: Listening competence
S: Speaking competence
R: Reading competence
W: Writing competence
SC: Social communicative competence
C: General Chinese cultural knowledge
E-C: Translation ability from English into Mandarin
C-E: Translation ability from Mandarin into English

Yan's language development and attrition in English and Mandarinare demonstrated chronologically in the following chart. This chart was last edited by Yan in November 2006.

Figure 3 Yan's Language Development and Attrition



Yan's L1 proficiency

***a.* Phonology**

Yan is able to distinguish and produce the sounds and tones of Mandarin very competently. From the recorded tape I could determine that Yan has maintained a very good phonological system in Mandarin. Her pronunciation of vowels and consonants, intonation, rhythm, neutral tone (also called fifth tone or zeroth tone), the four tones, tone 3 sandhi and stresses are equal to those of native Mandarin speakers. The "r" suffix (rhotic consonant [ɻ]) was found in many places. She uses the "r" suffix as people in Beijing always do. There was no error or sign of attrition in any phonological respects found in the whole recorded data.

***b.* Oral lexical features**

The oral lexical feature analysis is based on the five-stage description of objectives for speaking skill set in the International Curriculum for Chinese Language Education by the Office of Chinese Language Council International

(Hanban) and ACTFL Speaking Proficiency Guidelines & Ratings. In addition to error counting, phenomena such as code-borrowing, code-switching, and the pronoun fillers such as 什么 and 这个 were also calculated. The errors were then categorized into different categories according to their linguistic features. Pauses, reformulations, self-corrections and hesitations were observed.

The collected speech data indicate that Yan is able to engage in conversations on general topics, or in discussions or arguments, and she can express opinions and attitudes (The Office of Chinese Language Council International, 2008). She is able to successfully handle everyday familiar topics and uncomplicated communicative tasks in the interview context. However, her speech contains pauses, reformulations and self-corrections as she searches for adequate vocabulary and appropriate language forms to express herself. Although there are a few occasions when the continuity of her speech breaks down because of her misuse of morphemes and lack of vocabulary, with her language use strategies, Yan's speaking skill is effective. Based on the ACTFL Speaking Proficiency Guidelines & Ratings, Yan's speaking ability could be categorized somewhere between *intermediate mid* and *intermediate high* at the time when the first two interviews were conducted. Yan thinks that her speaking ability has regressed, but because she uses Mandarin at her work in communication with her clients, she is regaining vocabulary. This has made her speaking ability better than before. Her speaking ability in 2006 could be considered on *advanced low* level.

To see the whole picture of the oral lexical features of Yan's L1, I will focus in detail on the result of Yan's natural speech production.

The transcripted text of Yan's part in the Mandarin interview taken in 2003 contains 2500 Chinese characters. There are 43 errors or improper uses found in the script. Of the 43 errors and improper uses, 14 (32.6%) are grammatical errors and 29 (67.4%) are inappropriate use errors caused by lack of vocabulary.

Morphemes, words, phrases and sentences are the grammatical units of Mandarin (Zhao, 1992, 1997). From Yan's Mandarin script I can see that Yan still has a strong maintenance of grammatical elements at the sentence level in

Mandarin. No mistakes have been found on the basic sentence structure level. All of Yan's grammatical errors are on lexical level. The following table shows the errors found in Yan's grammatical feature usage in Mandarin.

Table 3 Errors found in Yan's Grammatical Feature Usage in Mandarin

Grammatical Features	Number of Errors	Percentage
Morphemes	7	16.3 %
Measure words	5	11.6 %
Idiomatic phrase	1	2.3 %
Misuse of nouns and adjectives	1	2.3 %
Use of pronoun fillers "什么" "怎么"	29	67.4 %
Total	33	100 %

Yan's ability to call up words with speed, clarity and accuracy is weak.Yan's limited oral fluency is demonstrated in the following 5 aspects.

(1) Yan sometimes has difficulties in the formation of words when she speaks.

In Mandarin, morphemes, words, phrases, and sentences are the grammatical units. The smallest grammatical unit is a morpheme[1]. Morphemes form words, words form phrases, and phrases form sentences. A morpheme is the smallest structural unit that can form a word. It has a certain pronunciation. Morphemes can combine to create new words. For instance, 人 means *human being*, and 民 means *folks*. 人民 together mean *people*. Compound words are made up of two or more morphemes. If the correct combination is not used, either in the order of the morphemes or the replacement of one morpheme by another, the meaning of the word may change or the combination may not mean anything at all. This is one of the most challenging aspects of the language for Mandarin learners and for those who have language loss in Mandarin at the lexical level.

[1] In Chinese, morphemes are graphically encoded at two levels: radicals and characters. For more information, please refer to "Effects of print input on Morphological awareness among Chinese heritage language learners" (Koda, Lu & Zhang, 2008). Here I refer only to morphemes on the character level.

Yan's use of compound words is weak. She mentions her difficulty in finding or searching for the correct combination of morphemes for certain compound words. She refers to this as the "formation of *ci*" (words) and the "two-word stuff." In her Mandarin transcripted text, I easily found such mistakes and difficulties. For instance, when Yan wanted to say "集合 ji2he2" (to assemble) (Mandarin script, p. 25), she first used *ji2*, and then amended it to 及格 ji2ge2, which means *to pass a test*. When she realized it did not sound right, she changed the word again into the correct morpheme combination, 集合 ji2he2. But she was still not entirely sure whether or not this was correct, and ended up changing the order of the combination to 合集 he2ji2, which does not mean anything at all in Mandarin. In the end, she was still unsure about the combination, and paraphrased the word with "必须得 attend 的那个东西"（something you have to attend）(Mandarin script, p. 25). The second time she mentioned the word, she replaced it with "student gathering" in English completely. Her searching process is illustrated by the following chart:

Table 4 The Searching Process for Yan's Use of Compound Word 集合 ji2he2 (assemble)

Steps	**Initial**	**1st change.**	**2nd change**	**3rd change**	**Final**
Language elements used	ji2→	ji2ge2→	ji2he2 →	he2ji2 →	Something you have to attend
Result	Only one morpheme used.	The correct combination of two morphemes for "Pass the test".	The correct combination of two morphemes for "assemble".	An incorrect combination order of two morphemes. Makes no sense.	Failure to find the Mandarin word. Code-switching from Mandarin into English.

Another example is 发慌 fa1huang1 (worried). By themselves, 发 fa1 means *to feel* and 慌 huang1 means *panic*. Instead of using the morpheme fa1 in this combination, Yan used the morpheme 打 da3 (feel) from the combination 打颤 da3chan4 (to shake). Although 发 fa1 and 打 da3 both mean *to feel*, they can only be followed by 慌 huang1 and 颤 chan4 to mean *to shake* and *worried* respectively. However, Yan used da3 instead of fa1 in her combination, which does not mean anything by itself. She failed to notice the incorrect combination as she had in the previous example. She used the incorrect combination 打慌 da3huang1 four times throughout the topic. There are some other similar examples in her speech data. Therefore, choosing the proper combination of morphemes for words is quite problematic for Yan.

(2) The next difficulty lexical feature in Yan's speech is her use of appropriate measure words. *Measure words* are words that express a unit of things or actions, and they can be divided into nominal measure words and verbal measure words. *Nominal measure words* indicate the quantity of things while *verbal measure words* indicate the frequency of an action. In Mandarin there are many nouns that have their own specific measure words (Zhao, 1992).

When Yan was talking about fish, she should have used the measure word for *fish*, 条 tiao2. Instead of 条 tiao2, she used 个 ge4 (Mandarin interview transcript, p. 24), which is a measure word for many other nouns but not for *fish*. When Yan was talking about shirts, the proper measure word for *shirts* is 件 jian4. However, Yan used 条 tiao2, which is not the measure word for *shirt* but is the measure word for *pants*.

(3) Yan's retrieval difficulty, particularly for vocabulary, is the most problematic part of Yan's lexicon. When she speaks Mandarin she feels great difficulty in pulling the words out of her repertoire of vocabulary and expressions.

She often uses pronouns such as 这个 zhe4ge (this), 那个 na4ge (that), 怎么 zen3me (things like that, how) and 什么 shen2me (things like that, what). Most of the time, Yan makes herself understood by using these demonstrative. In some places, the filler 什么 shen2me is used so many times that the meaning of the sentence cannot be conveyed. For example, when Yan wants to say that she did not feel the existence of racial discrimination in her school, instead of saying "在这儿我没有感到种族歧视。"(I did not feel any racial discrimination), she said: "我这儿没什么什么的。没觉得有什么什么。" (I here no what what. Not feel what what." Her ability to distinguish between the two pronouns as fillers 怎么 zen3me and 什么 shen2me is good. The two have the same meaning and function but are used in different combinations with certain words, so it is often difficult for people to use them properly in sentences, but Yan made the appropriate choices.

(4) The linguistic interference of English on the lexical level was obvious in Yan's Mandarin-language performance. In the interview, she claims:

> *I don't think there is language interference in my mind. No I wouldn't think so. In my mind, if I really think about it, I would categorize these into different files. When I speak English, I pull out my English file. I think everything is there. So it's all categorized. There is not too much mixing in between.* (English interview, 2003)

However, the speech data collected negates her claim for Mandarin. Some English words have more than one meaning. For example, the word *Spanish* can mean both the Spanish language and the Spanish people. However, in Mandarin there are two words: 语 yu3 (Spanish language) and 人 ren2 (Spanish person, people). When Yan was talking about Spanish-speaking people and the Spanish language, she mixed these up frequently. She used either 西班牙 xi1ban1ya2 (the

country of Spain) to mean *Spanish language* and *Spanish people*, or used 西班牙语 xi1ban1ya2yu3 (Spanish language) to mean *Spanish-speaking people*.

(5) Code-borrowing was another indication of interference from English. Whenever Yan had difficulties retrieving a Mandarin word or expression, she borrowed English words to put into the Mandarin sentence structure, to compensate for her deficiencies in Mandarin. By doing this, she provided continuity in her speech. In the 2500-character script, 15 word borrowing phenomena are found. Because she knew that I could understand her even if she code-switched, she did not appear to avoid it. This could be interpreted as a positive communicative strategy to get her meaning across.

c. Syntax

The syntax analysis of the data is based on the standard syntax of *Putonghua* (modern standard Chinese or Mandarin). No syntax errors have been found in Yan's speech data, either in simple sentences or in compound sentences.

d. Reading

The analysis of this component is based on the five-stage description of objectives for reading skill set in the International Curriculum for Chinese Language Education by the Office of Chinese Language Council International (Hanban) in 2008. Yan thinks that her reading ability is the strongest of her language skills. In fact, she is a fast reader. Just before the first interview in 2003, she finished reading the 448 page (300 thousand characters) novel "Sangshuping Jishi" by Zhu Xiaoping, a famous writer in modern literature, in only one day. "I could not put it down." In the interview, she talked a lot about the novel. Her comprehension of the historical and cultural background of the novel, her comments on the plot and different characters were precise and to the point. I asked her to read one page randomly chosen from the novel. She was very fluent in reading the page aloud. There were no words or characters on this page that Yan could not read. Yan told me that she was eager to read literature works that involve Chinese culture. From reading, she has gained a better understanding of

Chinese history and culture. Her aspirations for reading Chinese literature have never declined. This has led her to take Chinese literature courses at university.

e. Orthography and morphological awareness

In the interview, Yan talked about her orthographic abilities in reading and writing.

If I don't recognize the whole character, first of all, there are basically two segments of the characters. Right? The left side and the right side. You know, some part will be hinted by the left side or the right side. And then I put that into the whole context of the sentence. And then I can basically figure out what it is. (English interview transcript, 2003)

From the above I learned that Yan's morphological awareness (Koda, Lu & Zhang, 2008; Koda, Zhang & Yang, 2008) was still strong. Using the facilitative benefits of radical morphemes[1], Yan was able to "analyze a word's internal structure to identify its morphological constituents" (Koda, Lu & Zhang, 2008, p.126). She still had a good mastery of the phonetic radicals and the semantic radicals and how to use them effectively, which she learned during her early grades in China[2]. She is able to apply the basic mechanical features and general rules of the writing systems to her reading and recognizing of Chinese characters. Since this ability is "essential in identifying a word's grammatical category, inferring the meaning of an unfamiliar word, and accessing stored lexical information" (Koda, Lu & Zhang, 2008, p. 126), Yan's reading ability is strong.

However, her ability to write Chinese characters[3] is far behind her reading ability. The result of the English-Mandarin translation task, designed based on

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[1] In Chinese, morphemes are graphically encoded at two levels: radicals and characters. Here I refer only to morphemes on the radical level.

[2] For more information on which Chinese characters and how are they taught at elementary schools in China, please refer to "Properties of school Chinese: Implications for learning to read" by Shu and his colleagues (2003).

[3] Chinese writing is not an alphabetic system. It is logographic, that is, every symbol either represents a word or a minimal unit of meaning. When we write the character 牛, it not only has a sound, niu, it also has a meaning, *cow.* Only a small number of symbols is necessary in an

"The Curriculum of Chinese Language Teaching and Learning for Overseas Students" (Guojia Duiwai Hanyu Jiaoxue Xiaozu Bangongshi, 2004), shows that Yan was the weakest among the three participants in Chinese character writing.

Of the 20 words in English that were to be translated into Mandarin, she wrote only 11 two-character compound words (55%) without any mistakes. She wrote five of them (25%) with a mixture of one correct morpheme and Pinyin for the other morpheme. There were four words (20%) that she could not write in Chinese characters; she used Pinyin completely instead. This result indicates that although Yan is still receptive to orthography in reading, she has lost much of her productive ability in character writing. She no longer retains her full properties of Chinese characters. In Mandarin, 3000–4000 Chinese characters are required for average literacy. And the thousands of characters all need to be memorized one by one although morpheme radicals rules might provide clues to help the users recall what they look like. It is well known that learning Chinese characters and maintaining the ability to write Chinese characters has always been a heavy burden for students (Norman, 2005).

f. Writing

Yan considers her Mandarin writing ability to be her weakest language skill. The most difficult aspects for her are the lexical features of Chinese words and the orthography of Chinese characters. There was a huge decline of her character writing as she mentioned in her story. Yan does not have a passion to write in Mandarin any more. She knows that her Mandarin is very conversational and her productive vocabulary is limited. This lack of vocabulary in Mandarin makes it impossible for her to use a variety of word choice to make her writing as interesting, purposeful and effective as it is in English. She is unable to use appropriate vocabulary and coherent expressions as she did before. She expressed regret about this.

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alphabetic system (generally under 50), but a logographic system, such as Chinese writing, requires thousands of symbols. Studies carried out in China have shown that full literacy requires knowledge of between three and four thousand characters (Norman, 2005).

In this study, I received only two pieces of Chinese writing done by Yan before she came to Canada. The two pieces expressed her personal critical views and opinions on some social and educational issues: one on the low quality of products in stores and the other on fairness of teachers' choosing role models in her school setting. She used appropriate vocabulary and coherent expressions, reflecting reality and expressing her opinion with clarity. The articles made her an award winner twice in her district in Beijing. However, Yan stopped writing in Chinese almost completely after she immigrated to Canada. Nothing in writing could be found and obtained for this study. I believe what Yan said about her writing ability: There has been a huge decline.

g. Language use strategies

When faced with communicative difficulties, Yan used compensatory strategies aimed at resolving the problems. During the Mandarin interview, I found many signs indicating that Yan is very good at employing interactive communication and compensatory strategies. Her strategy of making the most out of whatever she had maintained in Mandarin had an important payoff for her fluency level in Mandarin. When she did not know a certain appropriate word, she still avoided stopping the conversation. She always kept on searching for the proper word or made a substitution from her repertory for the item she could not find. Through different communicative strategies, she could allow her communicative partner to understand her perspective and personal feelings. She could also manage to build a natural interactive relationship with her communicative partner. In the whole text, no occasion could be found when she had to abandon the topic because of the communication breakdowns. The strategies she used assisted her to maintain self regulation[1], to continue the speech task and to strengthen the effect of performing the speech task at hand.

[1] For more information on regulation of communicative process and communicative strategies, please refer to Jimenez's (2007) "Stimulated recall methodology in language attrition research".

In her English interview, however, I found fewer of these strategies being employed; there was no need to use them because of her strong English proficiency.

The following table presents a list of Yan's communicative strategies in oral Mandarin, based on Yan's transcripted text and my observations during the interviews in 2003.[1]

Table 5 Yan's Communicative Strategies when Speaking Mandarin

1	Uses words from English to get her meaning across.
2	Uses body language to strengthen the content.
3	Interprets and uses a variety of non-linguistic conventions (mime, gestures, etc.) to enhance the effectiveness of communication.
4	Asks for clarification or repetition when she does not understand.
5	Uses words used by the researcher in subsequent conversation.
6	Starts again using a different tactic when communication breaks down.
7	Uses self-corrections or self-rephrasing.
8	Uses a simple word or paraphrases the concept she wants to convey, and invites correction.
9	Uses a range of pronouns as fillers to avoid a breakdown of the conversation.
10	Takes risks in trying unfamiliar or forgotten words in conversation.
11	Takes risks in the use of idiomatic phrases to make sentences sound more vivid and colourful.
12	Tries to retrieve set phrases and proverbs from Chinese culture and history.
13	Uses vocal variety in speaking (Use voice volume, pitch, rate, and quality to reflect and add meaning and interest to her message)
14	Uses interjections to express strong emotions.
15	Makes up new words or guesses if she doesn't know the right ones to use.
16	Looks for a different way to express an idea, such as using a synonym.

[1] This part of the report is based on "language use strategies" in *Chinese (Mandarin) Language Arts Curriculum, Kindergarten to grade 12* (Edmonton Public Schools, 2002, pp. 135–136).

h. Translating

Yan found translating Mandarin into English much easier than the reverse.

Because I don't know the Chinese words. If you say something in Chinese, I may not understand the exact wording, but I understand the gist of the meaning. So, I can just look for it through my English vocabulary. I can just search for the word I need, and you know, I'll come to the thing. I'll come to the sentence. [As for English-Chinese translation], I understand what the English sentence is, however, I don't have the necessary vocabulary to put it into Chinese. (English interview transcript, 2003)

Yan did not take the translation test in 2003 when the first two interviews were done. She took it in 2006 after she chose to study for one year at Beijing University and four months after she had started at a law firm in Canada where she worked with Chinese clients. Therefore, I am not able to compare her translating abilities, her abilities to retrieve vocabulary in both English and Mandarin, or her abilities to write Chinese characters, etc.because the samples were collected at different times. However, it is safe to assume that Yan would not have scored any higher in 2003 than she did in 2006. Based on the results of the translation task in 2006, I observed that Yan's vocabulary was not small. She scored 100% for rank-one vocabulary (Guojia Hanyu Guoji Tuiguang Lingdao Xiaozu Bangongshi, 2004). Her score for second-rank vocabulary was 80% and for third-rank vocabulary was 75%. This score is exactly the same as Jinhong's translation score. She did not make any mistakes when translating from English into Mandarin. I think these results are indicative of an increase in both storage and retrieval strength as a result of her efforts put in her Mandarin studies. Based on the internal and external retrieving theory (Nippold, 1998), I might further hypothesize that this improvement could be the result of her internal cues—her strong emotions and feelings toward the Chinese language and culture that she mentions in her story—and certain external cues, such as recently having studied law at Beijing University in China, frequent contact with her secretary who is proficient in Mandarin, and her more frequent use of the Mandarin language at work.

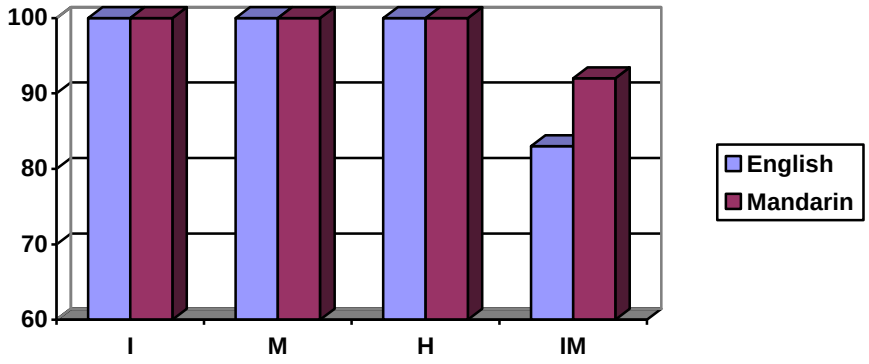
What linguistic elements are maintained and lost in Jinhong's L1?

Of the three participants, Jinhong was the most fluent in oral Mandarin. On a global level, Jinhong was able to engage in oral communication on some extended and sophisticated topics such as philosophy, Confucius, differences between eastern and western cultural values. The words and vocabulary Jinhong used were well-chosen. Her reading ability was also strong.

Jinhong's self-assessment

Jinhong's questionnaire for self-assessment of the four functions of illocutionary competence in Mandarin and English (see Appendix I) shows that she considers herself to be a balanced English-Mandarin bilingual. Jinhong chose "easily and fluently" in all items indicating the ideational function, manipulative function and heuristic function in both Mandarin and English. As for the imaginative function, Jinhong chose five out of eight items as "easily and fluently." In item 5, "I enjoy poems and am able to explain them," and item 6, "I read novels and short stories with no language obstacles," Jinhong chose "Fairly well but with some difficulties" in both English and Mandarin. As for item 7, "I can understand movies," Jinhong chose "Fairly well but with some difficulties" for English and "Easily and fluently" for Mandarin.

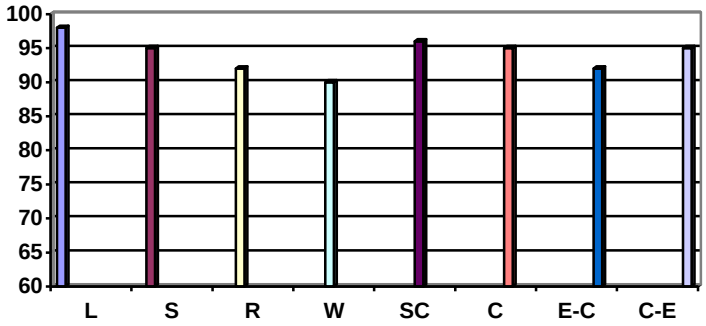
Figure 4 Jinhong's Self-Evaluation of her English and Mandarin



I = Ideational functional function; M = Manipulative function;
H = Heuristic function; Im = Imaginative function

The following chart indicates Jinhong's general self-evaluation of her Mandarin language skills:

Figure 5 Jinhong's Self-Evaluation of her Mandarin Language Skills

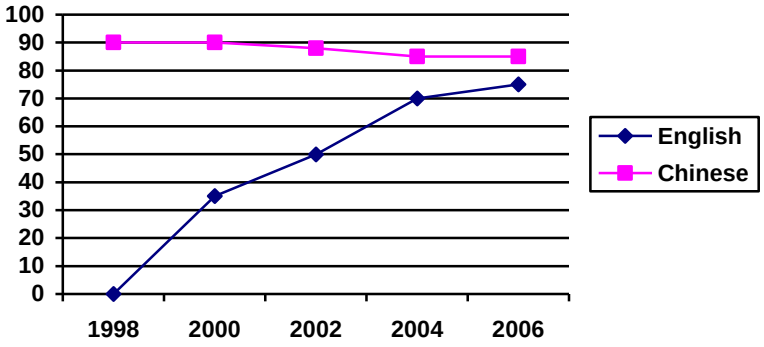


L: **Listening competence**
S: **Speaking competence**
R: **Reading competence**
W: **Writing competence**
SC: **Social communicative competence**
C: **General Mandarin cultural knowledge**
E-C: **Translation ability from English into Mandarin**
C-E: **Translation ability from Mandarin into English**

Jinhong considers her listening comprehension in Mandarin to be her strongest skill and writing the weakest. However, she assessed every skill above 90%.

Jinhong's self-rated language development and attrition in English and Mandarin are demonstrated chronologically in the following chart.

Figure 6 Jinhong's Language Development and Attrition



Jinhong's L1 proficiency

a. Phonology

Jinhong was able to distinguish and produce the sounds and tones of Mandarin very competently. From the recorded tape, I observed that Jinhong maintains a very good phonological system in Mandarin. The pronunciation of vowels and consonants, intonation, rhythm, the four tones and the neutual tone, and stress were as perfect as those of native monolingual Mandarin speakers from Taiwan. No single phonological error was detected in the recording.

b. Oral lexical features

The findings of this section are based on orally produced data collected in the Mandarin interview.

From the transcribed text of the Mandarin interview, I learned that Jinhong is very fluent. She seldom uses English words to get her meaning across. Code-borrowing is hardly present. Pronouns used to avoid a breakdown in the conversation are very few. The only filler I could find was "这样子" (in this way) in some places. There is almost no repetition for the sake of clarification caused by her lack of understanding. In addition to this, Jinhong's speaking pace is fast. The data show that Jinhong has a very strong lexicon. In the detailed analysis of the Mandarin interview script text, no errors at either the sentence or word level were found. Correct use of compound words that are made up of two or more morphemes is the most challenging aspect for Mandarin learners and for those who have language loss in Mandarin at the lexical level. However, Jinhong was very strong in this respect. During the entire interview she never struggled to search for the correct combination of morphemes for any compound word. It seems that they were all there, ready for her to use. In the transcripted text there were no mistakes or difficulties in using the combinations. She not only employed two-or three-morpheme combinations that are not usually present in everyday use, but also appropriately used many idiomatic four-word combination phrases which

are high-level literal expressions, such as 破土而出 (break through the soil) and 积少成多 (many a little makes a lot).

During the interviews, Jinhong mentioned several times that she was weak in Chinese vocabulary. However, the speech data illustrates that her lexicon had in fact been growing. For example, she used the following in her interview: 感受 (sentiment); 理念 (principle); 肤浅 (superficial); 深奥 (insightful); 冲突 (discord); 追求 (in pursuit of); 探讨 (probe into); 拥有 (in possession of); 象征 (emblematize); 无助 (hopeless, helpless); 孤单 (lonesome), etc. These are more formal literary words and they demonstrate Jinhong's rich vocabulary. I asked her whether she knew these words when she was in grade four. She said:

> *Probably at that time, these words were already there in my mind. But I was not able to use them. And because I really like certain things, and certain feeling, then you can absorb this knowledge in an unconscious way ... I would never have wanted to search for them. But now, I have the need to use them. So I dig for them from my mind. With these needs, I am eager to read others' works to see how others express themselves. Then I absorb the words unconsciously.* (Mandarin interview transcript, 2005)

From this, I deduced that Jinhong has increased or developed her vocabulary from a receptive level to a productive level. I assume that what Jinhong meant by "weak in vocabulary" is that she thought her vocabulary was still not large enough to express her feelings adequently. This "weak vocabulary" assessment is supported by the result of the translation task Jinhong did after the two interviews. According to her performance on the translation task, Jinhong has an excellent mastery of the first-rank vocabulary; her score for this section was 100%. As for the second-rank vocabulary, her score was 80%. She got 75% of correct answers for the third-rank vocabulary. As for specific technical terms, Jinhong was certain that her competence was very low. Therefore, in this respect, her vocabulary in Mandarin does not match her academic level.

The linguistic interference of English on a lexical level was not significant in Jinhong's Mandarin-language performance. There was almost no code-switching in the entire interview. On the ten-page transcription text I could find only two occasions when she inserted English into a Mandarin sentence structure. The first time was: "通常我跟爸爸讲话时都是用很普通的 language" (When I talk to my dad, I usually use everyday language). The second time was: "在你自己写 journal 的时候" (When you are writing your journal). It seems that Jinhong had no difficulties retrieving Mandarin words and expressions from her lexical repertoire in oral speech. However, when she was asked to evaluate her own Mandarin-language skills, she mentioned a lack of vocabulary as one of her weakest points. Apparently, Jinhong was using a native Mandarin speaker's standard to evaluate herself, a level which is almost beyond reach to Mandarin speakers brought up in North America.

c. Syntax

No syntax errors were found in Jinhong's speech data, either in simple sentences or in compound sentences.

d. Reading

Jinhong thinks that her reading ability is fairly strong: "My reading comprehension [in Mandarin] is so good". She feels that she has no difficulty reading. She enjoys reading all kinds of materials in Chinese, including foreign classic fairy tales. Her favourite category is prose in Chinese, in which she can get "the meaning behind the sentence" (English interview transcript, 2005). She has a good understanding of symbolism, irony, mood and perspectives. She thinks her mother and her father played a very important role in her literacy; they read her many books when she was in Taiwan. The traditional, classical Chinese her father let her study was also particularly advantageous for her Chinese literacy.

e. Orthography and morphological awareness

Jinhong thinks that her ability to write Chinese characters has declined slightly. In the first interview, before the translation task, I asked Jinhong whether she thought she had any L1 loss. Her initial response was loud and clear: "I don't think I lost any of it". When I asked her again whether she noticed any attrition in her Mandarin, she thought for about one minute and said, "Yah. Those little specific words I forgot. Just some characters" (English interview transcript, 2005). However, when she was asked to do the translation task, her opinion of her character-writing ability was actually: "好惨，好惨!" (It's terrible!).

I examined several of her earlier written works. In the four written works Jinhong did in 1998, the first year she was in Canada, I could find only two mistakes. Jinhong wrote "决对" instead of "绝对" and "时后" instead of "时候". Other than that, no mistakes in orthography could be found.

However, in the three journals Jinhong wrote in 2005, the seventh year she was in Canada, many mistakes in her character writing could easily be found. In addition to some incorrectly written Chinese characters such as 冷 (cold), there were many *zhuyinfuhao* (phonetic symbols used in Taiwan) on the pages to substitute for the characters that Jinhong wanted to write but had already forgotten. For example, there were 45 Chinese characters that were replaced by *zhuyinfuhao* in the three journals. Some of them appeared more than once in these writings. These characters are listed in the chart below, ranked from A to D according to their difficulty level based on "The Ranking Standards of the Chinese Vocabulary and Characters' Proficiency Level" (汉语水平词汇与汉字等级大纲) (中国国家对外汉语教学领导小组办公室汉语水平考试部, 1992)[1] Chian HSK: Department of Chinese proficiency Test, 1992):

[1] 中国国家对外汉语教学领导小组办公室汉语水平考试部 is the HSK (The Proficiency Test for Chinese Language) Department of the National Office for Teaching Chinese as a Foreign Language (Hanban).

Table 6 Rank Level of Jinhong's Words and Phrases Replaced with *Zhuyinfuhao*

Rank Level	Words and phrases replaced with *Zhuyinfuhao*
A	飞 (上了天); 旧 (伤口); 的; 地; 得; 办(法); (工)厂; (水)饺
B	(指)尖, 越 (来)越 (小); (代)替; (温)暖; (安)慰; 选择; (观)众; 秘密; 情绪; 悲(伤); 戏; 取; 庆祝
C	游戏; 炸弹; 奇迹; 化妆; 明显; 寿
D	(空)荡; 肤浅; 朦胧; 占据; 尝试

Note: Characters in brackets are correctly written Chinese characters

The above chart and graph indicate that some of the *zhuyinfuhao*-replaced characters belong to the top rank A, the most commonly used Chinese characters.

The three structural particles 的, 地, and 得 are:

> words that connect words and make them into phrases with certain syntactic construction, e.g. 的 connects an attributive modifier and its central word, 地 connects the adverbial modifier and its central word and 得 connects a complement and its central word. (Zhao, 1992, p. 61)

In the samples written by Jinhong in 2005, all three structural particles were replaced by the Japanese letter の, and among all of the three structural particles, the structural particle 地, which should be used before a verb or an adjective to make an adverbial modifier, was the most frequent error made by Jinhong.

Jinhong thought that the reason for this orthographic decline was her lack of use of these Chinese characters. When I asked Jinhong whether she had any difficulty communicating in written form due to her limited set of characters, she

replied, “No. Because I can always use *Zhuyin*.” She then laughed with a little embarrassment: “But those are easily gained back, if I’m willing to spend time.... And just type *Zhuyin* and the words are there. So basically with today’s technology, I do not lose my Chinese. I can still be a writer on the computer” (English interview transcript, 2005).

f. Writing

My examination of Jinhong’s written work over the last seven years indicates that Jinhong’s writing ability in Chinese has increased substantially in terms of wording, use of writing techniques, organization of ideas, and finding creative ways to express her feelings.

By comparing the written works that Jinhong produced when she first came to Canada and the writing she completed recently, I can substantiate that her writing ability has grown. From Jinhong’s written works on her website diaries, and from the diaries that she kindly shared with me, I learned that Jinhong is a very good writer. She has a passion for writing in Chinese.

From her writings, I could see that Jinhong was able to develop themes and moods through choices in language use, despite some linguistic errors here and there. Sometimes her writing was short yet very poetic and creative. She used metaphors in a fairly mature way to produce a variety of effects. She was also able to create impressions and tone. Mostly, she wrote about her feelings and produced narratives that described her own experiences and reflected her own personal responses. The following piece is about a green purse. It is a very short piece from her web diary:

Friday, January 28, 2005

昨天_____走完了下午那条 B.U.S.Y 的商店街, 领养了一个绿色包包. 它的样子是再平凡也不过的. 方形, 带着很有味道的绿, 银色钮扣轻轻的陪伴着. 就这样而已. 但却彷佛唱出了我心中的节奏>>>>就这样简简单单的喜欢上了它.带着它像似为自己打了个无形的惊叹号!

今天____J有了这绿色包包, 它会陪着Jinhong过今天, 明天. 那未知数

~~~~~~~~~~~~~我将带着它在我生命里漫游~~~~~~~~

它, Jinhong 的绿色包包, 将陪着 Jinhong 走向未来的旅程 !!

(Jinhong's Chinese blog, 2005)

Yesterday, after strolling through the street market, I adopted a new green purse. It's just an ordinary purse, rectangular in shape, with very tasteful green and silver buttons softly accompanying it. It's simple, but it sang to the rhythm of my heart. I fell in love with it just like that. Carrying it is just like carrying an invisible exclamation mark! It fills me with joy and excitement.

Today, I, Jinhong, have this green purse. It will accompany me all through today, tomorrow, and the unknown future. I will carry it with me on my adventures.

My purse will accompany me as I walk towards my forthcoming journey.
(Translated by the author)

The above piece illustrates the style and technique Jinhong uses in her writing. Her choice of words is particularly unique in this paragraph. For example, instead of saying that "I bought a purse", she uses "adopted" a purse, treating it as a child. This is just one example of her lively language use. She does not use heavy words. Instead, she allows the reader to hear her voice and her mood through the use of simple words, yet the word choice affects the reader's imagination. The writing techniques she learned from her high-school English language-arts teacher are adeptly applied. She uses imagery and figurative language to create a mood and tone that describes the feeling of a young girl who has just bought a lovely green bag.

Jinhong does not use punctuation in a conventional way. She uses dashes and various other kinds of markings to create her own writing style. I would consider this a creative decision on Jinhong's part rather than a mistake.

In this piece I can also find certain linguistic errors. For instance, incorrect usage of the Mandarin structural particle 地 in "银色钮扣轻轻的陪伴着" and in "就这样简简单单的喜欢 上了它", and coherence errors in "它的样子是再平凡也不过的" and "像似".

g. Language use strategies

The speech data of the second interview and Jinhong's responses during the second interview made it clear that she was able to use several communicative strategies when speaking Mandarin. The following is a chart that illustrates Jinhong's strategies:

Table 7 Jinhong's Communication Strategies when Speaking Mandarin

1	Uses idiomatic phrases to make the sentences sound more vivid and colourful
2	Uses vocal variety in speaking (Use voice volume, pitch, rate, and quality to reflect and add meaning and interest to her message)
3	Uses interjection to express strong emotion
4	Uses body language to strengthen the content
5	Has eye contact with her audience
6	Employs set phrases and proverbs from Chinese culture and history

h. Translating

Jinhong gave a lower grade to her ability to translate English into Mandarin (92%) than she gave to her ability to translate Mandarin into English (95%). When I asked her reasons for this, she told me that when she translated from English into Mandarin there were many words for which she did not know the Mandarin equivalent. For those "specific scientific terms, I don't know what they are called in Chinese" (English interview transcript, 2005). This weaker vocabulary might affect her rating of her translation skills. She scored 100% for rank-one vocabulary. Her score for second-rank vocabulary was 80% and for third-rank vocabulary was 75%.

What linguistic elements are maintained and lost in Datong's L1?

Generally speaking, Datong exhibits equally balanced receptive and productive abilities in Mandarin Chinese.

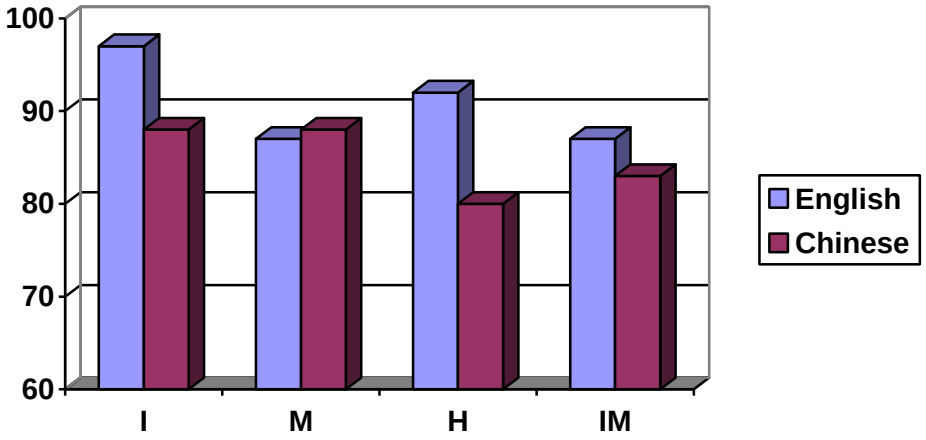
Datong's self-assessment

The results of the questionnaire for self-assessment of Mandarin and English (Appendix I) indicate that Datong is a balanced English-Mandarin bilingual. Datong chose "Easily and fluently" in all items, indicating his ideational function in English. The only exception was the question "I can describe a recent vacation in China." Here he chose "Fairly well but with some difficulties." As for the Mandarin part, he chose "Easily and fluently" in all items but the first, "I can tell my most important academic accomplishments to my friends," and the fifth, "I can talk about what I look for in my studies." He chose "With a lot of difficulties" for both of these.

As for the manipulative function in English, of the 14 items, Datong marked 8 as "Easily and fluently," 5 as "Fairly well but with some difficulties," and only 1 as "With a lot of difficulties;" namely, the question "I know how to start small talk in order to establish a good comfort level while conversing with others." In regard to the manipulative function in Mandarin, Datong responded exactly as he had for English with the exception that he chose "Fairly well but with some difficulties" instead of "With a lot of difficulties."

In regard to heuristic function, Datong chose differently on item 3, "I can add impact to my speech such as props or humour that would help me to enhance my message." For the English part Datong chose "Fairly well but with some difficulties" and for the Mandarin part he chose "With a lot of difficulties." As for item 4, "I can present facts, formulae and rules clearly and effectively," Datong chose "Easily and fluently" for English and "With a lot of difficulties" for Mandarin. This was the biggest contrast I found in Datong's questionnaire responses.

Figure 7 Datong's Self-Evaluation of his English and Mandarin



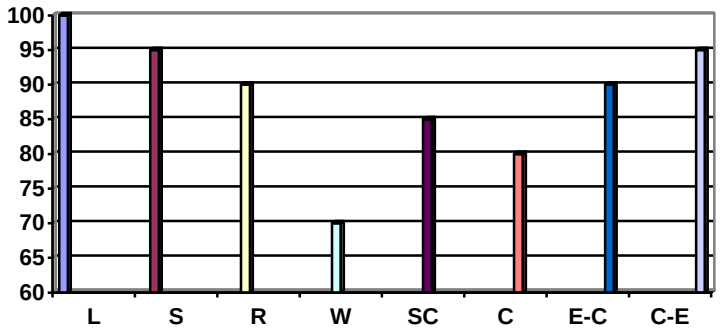
I = Ideational functional function **M = Manipulative function**

H = Heuristic function **Im = Imaginative function**

In the imaginative function category, only item 1 "I can use similes or metaphors to help make powerful points" shows any difference. He chose "Easily and fluently" for the English-language part and "Fairly well but with some difficulties" for the Mandarin-language part. He thinks that he can use similes or metaphors to help make powerful points fairly well but with some difficulties in Mandarin, but that he can do it easily and fluently in English.

The following chart indicates Datong's general self-evaluation of his Mandarin skills:

Figure 8 Datong's Self-Evaluation of his Mandarin Language Skills

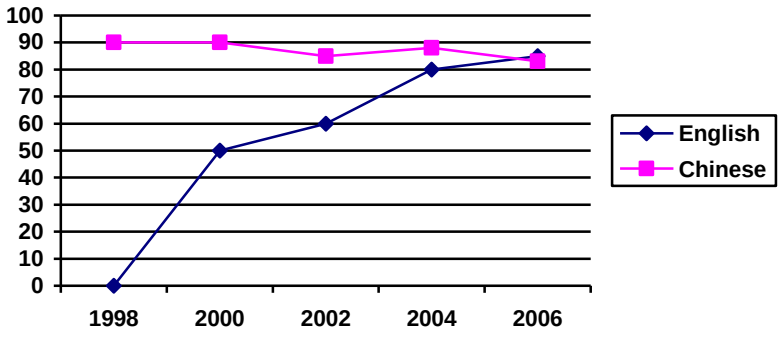


L: **Listening competence**
S: **Speaking competence**
R: **Reading competence**
W: **Writing competence**
SC: **Social communicative competence**
C: **General Chinese cultural knowledge**
E-C: **Translation ability from English into Mandarin**
C-E: **Translation ability from Mandarin into English**

Datong considered his listening comprehension to be his strongest skill, at 100%, and writing the weakest, at 70%. When Datong said that his Mandarin had declined since he entered university, for the most part, he was indicating his ability to write Chinese characters.

Datong's language development and attrition in English and Mandarin are demonstrated chronologically in the following chart.

Figure 9 Datong's Language Development and Attrition



Datong's L1 proficiency

a. Phonology

Datong was able to distinguish and produce the sounds and tones of Mandarin very competently. He maintains a very good phonological system in Mandarin. Some phonological interference from his *yichang* dialect is apparent in his pronunciation of certain consonants such as [*s*] versus [ʃ] and [ts] versus [tʃ]. Other than that, no phonological errors were found in the data.

b. Oral lexical feature

In the self-assessment questionnaire Datong chose "With a lot of difficulties" for "I know how to start small talk in order to establish a good comfort level while conversing with others." Datong is not a talkative person. During the interview, he seldom extended our dialogue or contributed relevant and factually based comments on any topics. When I asked him to tell his own stories, he did not produce long stories embedded with details and small episodes. He did not even once enter into an ongoing narrative to answer my questions or to support his point of view. However, when I asked him about the classic novels he was reading, he became very expressive. He showed high speech proficiency in discussing the characters and plot in the novels. He demonstrated high ability in all speaking features, including breadth of vocabulary and idioms, colloquialisms and relevant cultural references. During the interviews Datong was comfortable with lexical retrieval. The words he chose to use were often formal expressions that can be found in classical Chinese writings. He used them appropriately and demonstrated his knowledge in using infrequently used and extraordinary words and the mastering of high level Chinese literacy.

The following examples are from one section of the speech data describing Bujin, one of the heroes in a *Wuxia* novel by Gu Long. The English translation of his words cannot do justice to his level of literacy: "他很内向. 不喜欢说话, 外冷内热" (He is very introverted. He doesn't like talking. Cold outside

and warm inside) (Mandarin interview transcript, 2006). He also used phrases such as 投在...的旗下, 告老还乡 (retire on account of old age and return to one's home town) and 错手杀了他 (killed him by mistake) to describe the plotline of Bujin. Datong retrieved these morpheme-combination and four-word-combination phrases of classic Chinese from his storage of vocabulary easily and without any hesitation. In the data there were no signs of word-finding problems such as pauses, circumlocution, or use of indefinite pronouns or lexical substitutions when describing Bujin. The ability to quickly retrieve phrases indicates that Datong must have learned these phrases completely and solidly and must have subsequently used these phrases either in his writing or in his speech. This is a sharp contrast to Yan who struggled to find words of even daily language.

I could not find any sign of English linguistic interference on the lexical level in the data. As for code-switching, I found four instances. First, when I asked Datong what his favourite course at university was, he replied in English, "Psychology" (Mandarin interview transcript, 2006). The second time was when I asked him what kind of books he preferred reading. His answer was: "都读一读. Short stories. 长篇短篇都读" (I read all kinds of the books. Doesn't matter novels or short stories, I read them all). In another instance, when I asked about his plans for the future, he replied, "我想做 (I want to be) transfer student, U of A transfer student" (Mandarin interview transcript, 2006). When I asked him about his experiences upon arriving in Canada, he answered, "Culture shock 没有" (I didn't have). "Language shock 倒有,语言上的不同,不方便,语言上有障碍" (I did have language shock. The difference between the two languages, the language inconveniences, the obstacles in language). In all of the Mandarin speech data, I could find only these four instances of code-switching. However, I do not interpret these as a lack of mastery of Chinese vocabulary, because the Mandarin translations of the terms "transfer student" (转校学生), "culture shock" (文化冲

击), and “language shock” (语言冲击) do not correspond exactly with their English equivalents. Datong substituted Chinese words with English to express concepts that do not have (as of yet) exact equivalents in Mandarin. In the second sentence he immediately repaired his code-switching use of “short stories” by providing the equivalent Mandarin translation, 短篇. Therefore, it is safe to say that these are not signs of deficiency in Datong’s lexical repertoire. On the contrary, this code-switching shows the linguistic stability Datong possesses, because he sees the value in using code-switching as a linguistic tool when communicating with another bilingual individual. In addition, he also paraphrased “language shock” with phrases like “语言上的不同, 不方便, 语言上有障碍” (The difference between the two languages, the language inconvenience, the obstacles in language). This indicates a fairly strong lexicon.

I was also told by his Mandarin teacher and by Datong himself that on his IB Mandarin oral exam in grade 12, he received the highest mark in the whole school. His presentations on Chinese literature left a very deep impression on his Mandarin teacher and his classmates. Therefore, although Datong was not as talkative as Jinhong, his speaking ability could still be categorized as very high level.

c. Syntax

No syntax errors were detected in Datong’s speech data, neither in simple sentences nor in compound sentences.

d. Reading

Datong could be called an active and proficient reader. He is enthusiastic about Chinese literature, especially the *Wuxia* novels. Works by Jin Yong, Gu Long and other *Wuxia* writers are his favourites. When Datong says, “I read a lot,” he means it. From the written data I could clearly see that Datong has been influenced by both the classics and the *Wuxia* novel in many ways: his

appreciation of Chinese culture; his understanding of matters of importance to human life, including relations, class, value, nature; his knowledge of the way that ideas and feelings were talked about in the past and at present, etc. A large quantity of reading has engaged Datong in a continuing process of refining his capacities to use Mandarin and has helped him to develop his sensibilities for good use of the language. It has influenced his Chinese writing style as well. His word knowledge has also increased through reading. It is not an over-estimate to say that reading *Wuxia* has had a major impact on the formation of his world outlook. In short, reading Chinese has influenced Datong linguistically, intellectually and culturally.

During the interview I asked Datong to read aloud one page from his *Wuxia* novel. It was in the traditional version of Chinese and the semi-modern style. This page was full of four-word phrases; rare and abstract words that are seldom used in casual spoken contexts. Datong read the page fluently. There was not even one occasion in which Datong had to pause because of a lack of word or phrase knowledge. This indicates that Datong's word-phrase-recognition ability is not only well maintained, but also well developed.

e. Orthography

During the interview Datong at one point mentioned his declining ability to write Chinese characters correctly: "I have noticed that my Mandarin has declined a little bit. In writing especially because I don't write as much as I did before" (English interview transcript, 2006). However, when he finished my translation sheet, he noted that the decline was not "a little" but "a lot":

> *From the test today, I realize that my Chinese language level has declined a lot. There are many Chinese characters I can't remember how to write. I know the basic shape of them, but I don't remember the details inside the frames anymore. This is because of the lack of writing. I use too much computer. I should write more in hand. My vocabulary is also getting worse. I should read more. I will probably write more. I think I will.* (English interview transcript, 2006)

Because Datong uses a Chinese word-processor to write his journals, it was impossible to get any data on his orthographic performance ability from what

he wrote. The only data available were from my English/Mandarin translation sheet. There were in total 20 words in English that were to be translated into Mandarin. Datong wrote 15 (75%) Mandarin compound words or phrases correctly. The phrases in which he made orthographic errors (12.5%) are listed below (the characters in brackets were correctly written):

Appreciation:	(感)激
Technique:	技(术)
Experience:	(经)验
Easy:	简(单)
Condition:	状(况)

All five of the above words or phrases belong to the top list of most commonly used Chinese characters. Datong was shocked by these results and stated that his writing ability "had declined a lot" since entering university.

In the interviews and in the self-evaluation, Datong mentions that over the years, his vocabulary in Mandarin has increased a lot. Datong thought he had gone from below 70 to above 90 in his self assessment especially since 2001. From the transcripted text and his writings, I judge Datong's assessment to be reasonable and reliable. Many of the phrases he used are uncommon and/or abstract words. However, Datong's ability to write Chinese characters does reveal a decline.

According to Datong's performance on the translation task, I determined that Datong had an excellent mastery of all three ranks of vocabulary. Of the three participants, Datong scored the highest level. His score for first-rank vocabulary was 100%, for second-rank vocabulary, 85%, and for third-rank vocabulary, 95%.

f. Writing

In Datong's writing, more evidence can be found for his strong lexicon feature. The written data collected illustrate that Datong's Mandarin writing is comprehensive. He is able to put rich and varied vocabulary freely into appropriate narrative structures to express his feelings, moods and ideas. The

organization of his writing is cohesive. Descriptions are clear and elaborated. The contents are both concrete and abstract. His written pieces show that his writing ability developed at the same pace, if not faster, than the pace of average high-school students in China. Datong is a good writer in Mandarin.

On Datong's journal website, I learned that writing used to be an important part of Datong's life; when he felt up, or down and lonely, he wrote journals. Of the 14 pieces of writing that he composed between August and November 2004, nine pieces are in Mandarin and five are in English. I was impressed by these pieces. They are full of feeling, both the English and the Mandarin. Through writing, he raised a variety of questions. He tested his own feelings and opinions on different topics. He struggled to find the answers to different kinds of questions. He explored and expressed his inner world, his soul and mind, in his own way: a very free way. There are no boxed-in ideas or topics. In the English pieces the language used is witty and in a "let it out" style, while in the Mandarin pieces the style is more serious and well-structured.

The following is a journal entry Datong wrote in 2004 when he had just graduated from high school. I quote this piece in order to demonstrate Datong's different competences in writing:

我曾听过一句话:好人有好报,坏人有坏报,一切由天报.....但从历史方面看来,好人一向都是可怜的短命人.....虽然电视里的连续剧里好人都会得到一个圆满的结局.....而坏人一定会得到应有的惩罚.....但现代的小说和电视大多数是为了满足观众需求而描写的一些不现实的故事.....现在这个世界里并不是好人有好报.....好人往往为了做好事,不仅断送了自己的性命,还害了身边的每一个人.....相反坏人因以歪道赚钱,生活的比皇天老子都还要好.....最好的例子就是中国的那一些贪污犯,.....在政府里贪污的哪些官员,一旦有了足够的钱后,,就会潜逃于国外,..他们就在哪儿想受生命.....而那些辛辛苦苦一心为家的平民,反而因国家缺钱而不能供子女上学...有时更没钱开饭.....请问这样公平吗?自古以来好人就并没有好报.就拿刘关张三兄弟来说吧!他们这三个异姓兄弟一心一意为国为民,....身在乱世的他们一心想平息战乱....大哥刘备强一城救两城的美德至今还流传在世间....二哥和三弟的仁德虽只在军中所流传着,....

但他们那种为民而战的精神是值得我们去学习的....虽说他们的那份为民而战的精神是多么的可贵.....但他们的命运是非常之悲惨的.....二哥关羽被东吴所害.....三弟张飞被自己的将领暗算....大哥刘备欲被疾病夺去了生命....三位兄弟终究不能为民请命,含恨而众,也终究不能同年同月同日死....可见天下间公平二字早已无存....现今已是有钱能使鬼推磨的时代....你会当一个好人还是坏人呢?
(Datong's Chinese web journal, August 30, 2004, all commas added by the author)

> *A saying goes like this: Good will be rewarded with good and evil with evil. Heaven looks after everything. However, from the historical point of view, good people are always poor and short-lived. In the shows we watch every day on TV, good people always get the happy ending that they deserve and bad guys get punishment. However, in most of the modern novels and TV shows, unrealistic stories are told to meet the needs of the audience. In the real world today, good will not necessarily be rewarded with good. Many times, good guys die because they do good things. Sometimes even people around them suffer. On the contrary, bad guys get rich through the incorrect path, and they live a better life than the king does…. The best examples are those corrupted high-rank official criminals in China. Once they have enough money, they run abroad. They enjoy their whole life there. As for the ordinary people, they work very hard for their families but they are not able to send their children to school because the nation has no money. Sometimes they even don't have food on their table. Is this fair? From the ancient times till nowadays, good people have not been rewarded with good. Take the three brothers Liu, Guan and Zhang for example. They did everything for the people and the nation whole-heartedly. Being in the tumultuous world, they tried hard to stop the war. The elder brother Liu Bei demonstrated his virtue by strengthening one city to save two cities. He is still applauded by people nowadays. Although the virtue of the second and third brothers was known only in the army, their spirit of fighting for the people is also our role model. However, all of the three had tragic fortunes. Guan Yu was assassinated by Dong Wu. Zhang Fei fell prey to a plot of his own army leader. Liu Bei died of sickness. The three brothers could not plead on people's behalf. They all died with great sorrow. And they could not die on the same day. So we can see that there is no "justice" to talk about under heaven today. It is an era of money. Well, do you want to be a good guy or a bad guy?*
> (Datong's Chinese web journal, August 30, 2004, translated by the author)

Unlike Jinhong's writings, which contain artistic and poetic word choices, metaphors, similes and sensitive moods affecting the reader's imagination,

Datong's writings are more serious and are full of syllogistic reasoning which presents his arguments in an orderly and logical manner.

This journal entry is on his understanding of cause and effect. He criticizes the injustice and inequality that goes against "being good." He argued that the law of karma may not be true, and that it is not necessarily appropriate to believe that "whatever goes around comes around." He used the contemporary corruption and dishonesty among high-ranking Chinese officials as an example. He also used the story of three hero characters, Liu, Guan and Zhang, from *The Romance of Three Kingdoms*, one of the four most famous classic novels in Chinese literature, as supporting evidence for his argument.

In this piece Datong used the language of reason, which is a typical feature that can be sensed in most of his Chinese writing. He understood the question that he posed very well. He also selected as evidence both contemporary and classic examples, which he felt could most convincingly be used to support the claim, which was well structured. His argument was developed meaningfully. The transitional phrase that linked his first example with his second piece of evidence was used smoothly. This piece of writing displays Datong's thoughts, feelings, sensations, and his culturally formed ways of writing and thinking. It also illustrates Datong's rich lexicon. The only weak feature of this piece is the omission of punctuation. There are two linguistic errors: 享受 is typed as 想受 and 含恨而终 as 含恨而眾. To me, these look like typos.

From this piece it is clear that Datong's writing ability in 2004, when he had just graduated from high school, was very strong. As Datong said in his story "The writing assignments (in the bilingual program) kept me going because in writing assignment there is no limitation, I can do anything I want" ((English interview transcript, 2006).

g. Communication strategies

The communication strategies Datong employed when speaking Mandarin are illustrated in the following chart:

Table 8 Datong's Strategies when Speaking Mandarin

1	Uses idiomatic phrases to make sentences sound more powerful
2	Retrieves set phrases and proverbs from Chinese culture, literature and history
3	Maintains eye contact with his audience
4	Asks for clarification (repeating or rephrasing) when necessary

h. Translation

Like Jinhong, Datong gave a slightly lower grade to his ability to translate from English into Mandarin (90%) than from Mandarin into English (95%). He did a good job translating for his parents at home as well. As for the translation task in the study, he scored 100% for rank-one vocabulary. His score for second-rank vocabulary was 85% and for third-rank vocabulary it was 95%.

Cross case analysis on linguistic findings

In the preceding sections, I have provided a detailed account of the participants' self-assessments of their L1 maintenance and attrition and the L1 proficiency after coming to Canada. In this section, I will make a cross-case comparison of the findings from a linguistic perspective. Although the three participants came to Canada at almost the same age, with almost the same L1 literacy education background in China, their L1 maintenance and attrition patterns are different.

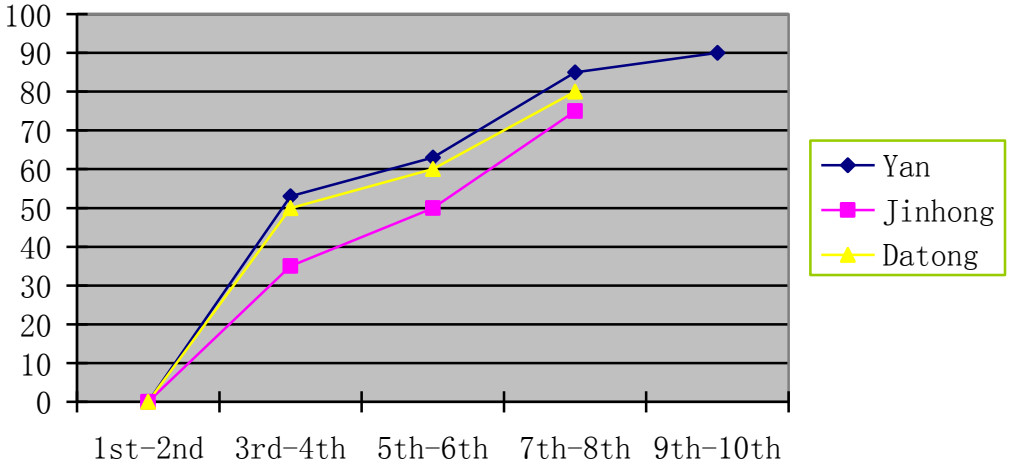
Self-evaluation of Mandarin and English language skills

In the self-evaluation, my participants first reported, for each 2-year segment of their Canadian residence, their perceived changes in their English and Mandarin proficiency over the first eight years. The time length of "eight years" was chosen since Jinhong and Datong both had eight-year residence in Canada. Yan in the study reported her English and Mandarin proficiency change over a 14-year time for each 2-year segment. After the change of language proficiency was reported, the participants were then asked to evaluate their proficiency in Mandarin.

a. The participants' self-assessments of their change in Mandarin and English productive skills at 2-year intervals are indicated in the following figures. Self-assessments of perceived changes in vocabulary are also presented below.

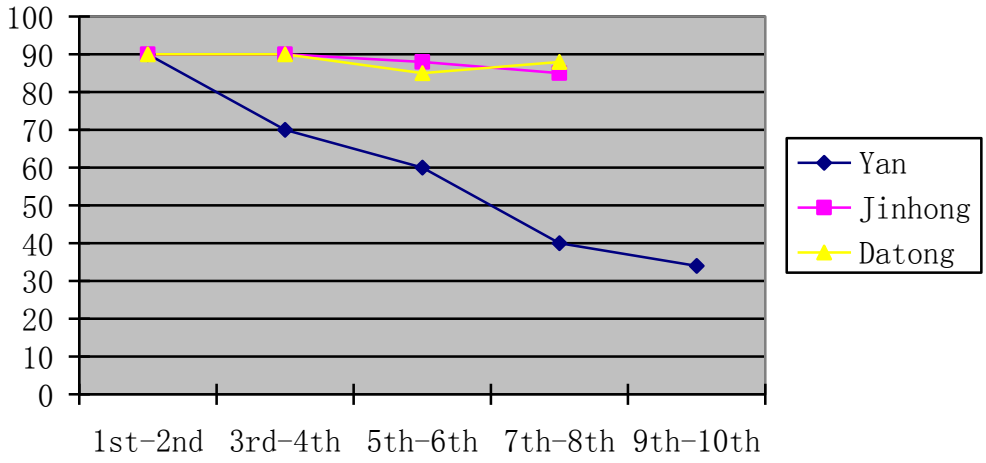
Over several years in an English language environment, all three participants reported a steady increase in proficiency in English production skills Jinhong's a little bit lower than the English proficiency of the other two. They all started from zero and ended at 75 or above.

Figure 10 Change of self-rated English production skills of the three participants



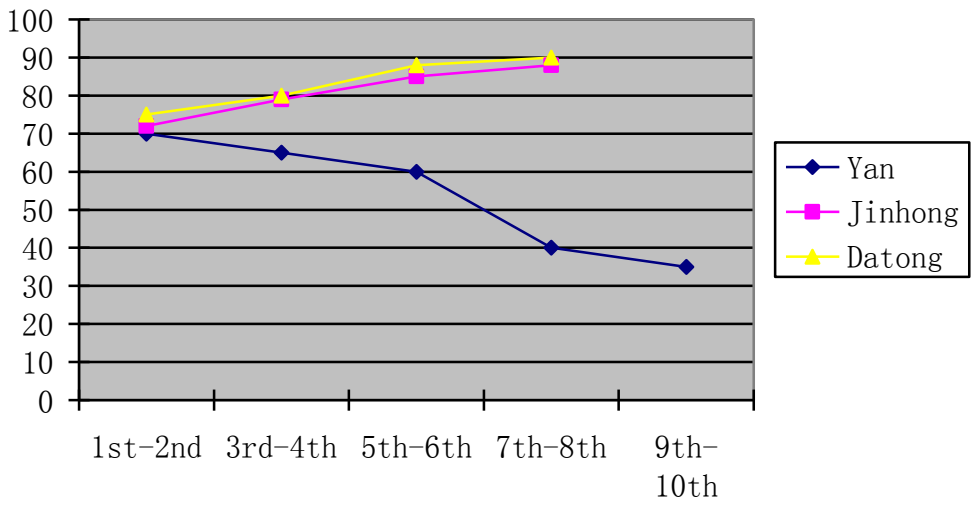
Their perceived Mandarin proficiency shows another picture. They all started at 90 indicating a very high level. Jinhong and Datong's proficiency dropped a little to somewhere between 80 and 85 over eight years while Yan's assessment of her Mandarin proficiency dropped dramatically from 90 to 40 in the eight-year time.

Figure 11 Change of self-rated Mandarin production skills of the three participants



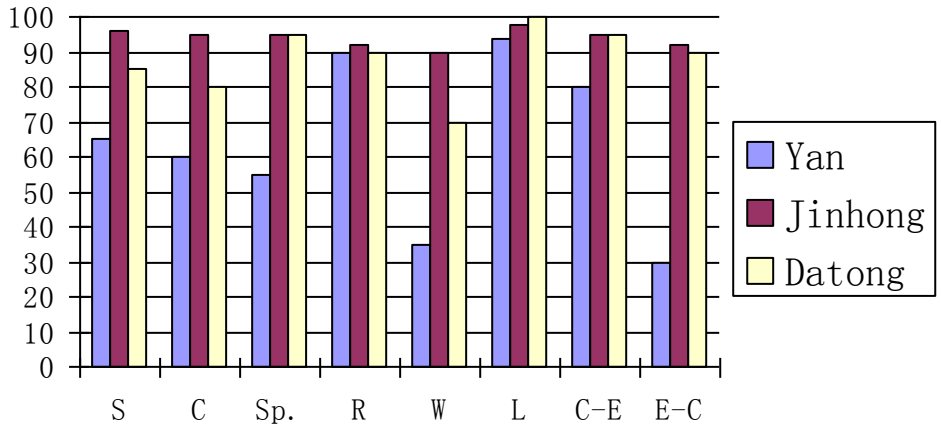
b. Although Jinhong and Datong showed that their productive skills in Mandarin dropped a little in general, they both indicated that their vocabulary in Mandarin had increased. Self-rated vocabulary of Jinhong and Datong both started from 70 and increased to above 90 while Yan's started at almost the same level but dropped to 35 indicating a below average level. She pointed out that she has lost a lot of words that once were there. The following figure indicates the change in the participants' vocabulary over a ten-year period.

Figure 12 Change of self-rated Mandarin vocabulary of the three participants



c. The self-evaluation task of their L1 proficiency was based on the traditional framework for describing the measurement of language proficiency, which places great emphasis on language skills: listening, speaking, reading and writing. I also added translating skills, social literacy and cultural literacy to the list because I consider them important components in measuring one's language competence. The figure below illustrates the results of the self-evaluation of the participants' Mandarin language skills.

Figure 13 Participants' Self-Evaluation of Mandarin Language Skills



S: **Social literacy**
C: **Cultural literacy**
Sp: **Speaking ability**
R: **Reading ability**
W: **Writing**
L: **Listening**
CE: **Translating from Mandarin into English**
EC: **Translating from English into Mandarin**

d. According to the results of the illocutionary competence questionnaire (Appendix I) containing questions measuring four different groups of macro-functions—ideational, manipulative, heuristic and imaginative—Jinhong is the weakest in English and Yan is the weakest in Mandarin. Datong's illocutionary competence is the most balanced. Illocutionary competence of the three participants in both the English and Mandarin is illustrated in the following two charts:

Figure 14 Participants' English Illocutionary Competence

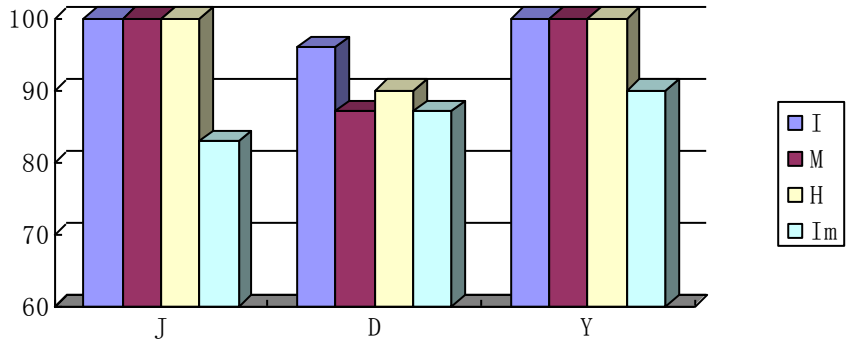
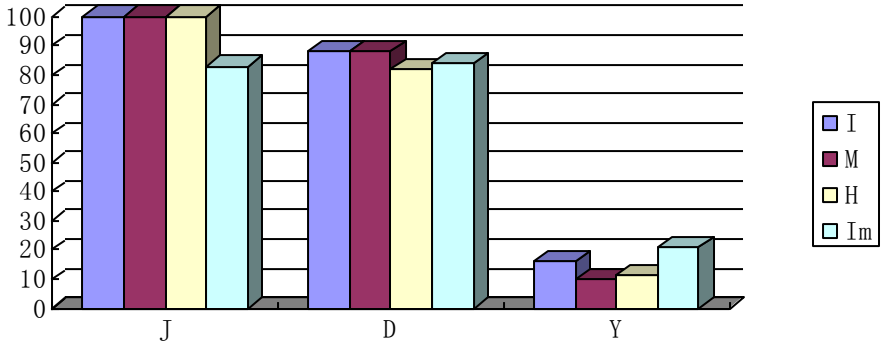


Figure 15 Participants' Mandarin Illocutionary Competence



I = Ideational functions M = Manipulative functions
H = Heuristic function Im = Imaginative function

The above important findings give us an idea of the self-rated linguistic skills of the participants. It is very important to recognize that the level and type of proficiency in both languages did not stay static for these bilingual young adults. They changed over time within their linguistic environments or as other social and cultural factors changed.

Well-maintained L1 competence

Through cross-case analysis and quantified analysis of the speech data and translation task data, it can be concluded that the following L1 skills have been very well maintained by the three participants: 1) Phonology, 2) Basic sentence

structures, 3) Storage of vocabulary, 4) Retrieval of first-rank vocabulary, 5) Listening comprehension (in the interview discourse or context), and 6) Reading. The following table depicts details on the well-maintained L1 competence of the participants (see Table 10.

L1 attrition in the domains of the above areas is not apparent. The analysis of the corpus did not reveal any obvious errors made by any one of the participants in the above areas. These maintained competences and skills enabled the three participants to maintain good basic interpersonal communication skills (BICS) (Cummins, 2000b).The results seem to confirm the findings made by some other studies: some grammatical features, once learned, are resistant to attrition independently of the length of time (Schmid, 2002). Findings in these aspects also lend partial support to the threshold hypothesis made by de Bot and Clyne (1989) indicating that once immigrants attain a certain threshold level of proficiency, they are able to retain their home language no matter how many years have passed.

Table 9 Well-maintained L1 Competence of the Three Participants

	Yan	Jinghong	Datong
Basic sentence structure	No errors were found (speech data)	No errors were found (speech & written data)	No errors were found (speech & written data)
Phonology	No errors were found in speech data	No errors were found Taiwan accent	No errors were found Yichang accent
Storage of Vocabulary **1st rank:** **2nd rank:** **3rd rank:**	Well maintained 100% 80% 75%	Well maintained and developed over the years 100% 80% 75%	Well maintained and developed a lot over the years 100% 85% 95%
Retrieval of the first –rank vocabulary	100％ (result of E-C translation)	100％ (result of E-C translation)	100％ (result of E-C translation)
Listening comprehension	Strong sensitivity to social and cultural references (within the context of interviews)	Strong sensitivity to social and cultural references (within the context of interviews)	Strong sensitivity to social and cultural references (within the context of interviews)
Reading	Able to read fluently and accurately most styles and forms of literary texts such as novels, plays, poems, as well as in any subject matter area directed to the general reader.	Able to read fluently and accurately most styles and forms of literary texts such as novels, plays, poems, as well as in any subject matter area directed to the general reader.	Able to read fluently and accurately all styles and forms of literary texts such as novels, plays, poems, as well as in any subject matter area directed to the general reader.

The attrited L1 competences

1) Orthography

The result of the English-Mandarin translation task shows that all the three participants declined in their writing ability. The percentage of orthographic errors shows that Yan's ability has attrited the most while Datong's attrited the least. This is the only area in which three participants showed attrition. Andersen (1982) hypothesized that the first area of language attrition is the loss of "quick

retrieval of appropriate vocabulary and idiomatic phrasing in on-going speech production" (p.113). However the data on L1 attrition gathered in this research is not consistent with Andersen's assumption. Instead of the loss of quick retrieval of appropriate vocabulary (only Yan had such loss), it seems reasonable to conclude that the ability of writing Chinese characters is the most vulnerable to attrition among young Chinese immigrants.

2) Speaking skill

The speech data collected in the interviews in Mandarin was analyzed using the ACTFL Speaking Proficiency Guidelines & Ratings[1]. The analyzed data indicated that Jinhong and Datong's speaking proficiency was on a *Superior* level. Jinghong was able to provide lengthy and coherent narrations, all with ease, fluency, and accuracy. She explained her opinions on a number of topics of importance to her, such as social and political issues. Jinhong and Datong's speech level (within the context of the interview) would be fully accepted by educated native speakers, including breadth of vocabulary and idioms, colloquialisms and relevant cultural references. Jinghong used extended discourse without unnaturally lengthy hesitations to make her point, even when engaged in abstract elaborations. Datong was able to use high level word combinations and rich vocabulary to discuss his interests: Chinese classic literature in detail. Yan could be considered as being between the *intermediate mid* level and *intermediate low* level. She was able to speak Mandarin with sufficient structural accuracy. However, she needed help from others or alternative techniques such as code-switching to handle complications or difficulties. She often had to grope for words to get her message across. She had a speaking vocabulary sufficient to participate effectively only in most informal conversations on practical, social topics. In formal conversation she was not comfortable. Although her comprehension was adequate at a normal rate of speech, she experienced

[1] ACTFL Speaking Proficiency Guidelines & Ratings, retrieved Jan. 31, 2009, from https://www.languagetesting.com/actfl_guidelines9.html

difficulty in Mandarin word retrieval processes. Sometimes her errors in choosing words interfered with understanding.

3) Lexical feature and writing skills

For Jinhong and Datong, the lexicon was very well maintained, and even further developed, but for Yan, lexical features (the ability to use Chinese word and word combinations), declined notably. She had a lot of difficulty retrieving words from her lexicon. To compensate for the loss she experienced, she employed a variety of compensatory strategies such as paraphrasing, using words 什么，怎么(what, how), defining the object, or simply using the English term (Yagmur, 1997). Yan exhibits great reduction of her lexical accessibility.

The data collected show the same results for the writing skills of the three participants: Jinhong and Datong demonstrated strong writing skills in L1 through their journal writings. They both were able to write about their feelings and thoughts in an expressive and descriptive way. They demonstrate the ability to explain complex matters in detail. They could both organize and present their ideas clearly. They displayed full control of cohesive devices. Their vocabulary was precise and varied with frequent use of synonyms in Jinhong's writing, and four-character set phrases in Datong's writing. Although their writing styles were different, they could both be considered to be "writers at the superior level" (ACTFL, LTI)[1]. Yan, unfortunately, has completely ceased writing anything in Chinese. With her limited high frequency vocabulary, it was hard for her to express herself in a satisfactory way.

The following table demonstrates some major L1 competencies of the three participants. Different degrees of attrition occurred in some cases while for other competencies, reductions of Yan's competence and maintenance or development of Jinhong and Datong' competences were exhibited.

[1] Language Testing International: ACTFL Proficiency Guidelines—Writing: retrieved on June, 14, 2008 from: https://www.languagetesting.com/scale_writing_acad.htm#novice_high

Table 10 Other L1 Competencies of the Three Participants

MP /Participants	Yan	Jinhong	Datong
Lexical features	Weak Top five problems: 1. Difficulties in finding the correct combination of morphemes for some compound words. 2. Difficulties in choosing the proper measure words 3. Retrieval difficulties 4. Code-borrowing 5. Too many pronoun fillers used	Very good 1. Good at using metaphoric language 2. Good at using figure of speech, etc. 3. Able to quickly retrieve words and expressions from her Chinese literacy repertoire	Very good 1. Richness in vocabulary. 2. Skillful use of classic Chinese such as four character combination idioms, etc. 3. Able to quickly retrieve words and expressions from his Chinese literacy repertoire
Orthography (Score percentage for writing characters)	Declining ability to write characters 55%	Declining ability to write characters 75%	Declining ability to write characters 87.5%
Retrieval of Vocabulary	With difficulties and slow	Fast	Fast
Writing	Completely ceased writing in Chinese	Superior level ACTFL, LTI (writing proficiency Scale)	Superior level ACTFL, LTI (writing proficiency Scale)
Speaking	Between intermediate mid and intermediate low (ACTFL)	Superior level (ACTFL)	Superior level (ACTFL)

The relationship between self-assessment and actual L1 performance

By correlating scores on the translation task, the number of errors made in Mandarin interviews and other linguistic data collected in this study, and the participants' self-rated Mandarin proficiency in different language skills: (listening comprehension, speaking, reading, writing, translating, cultural literacy and social literacy), it was found that there were significant bivariate correlations between the two sets of indicators. Datong's high scores in translation, the breadth of vocabulary, the complexity of word use and cultural expression found in both Jinhong and Datong's interview data and written pieces predicted significantly

higher self-rated proficiency scores in their productive skills in Mandarin. The large number of errors found in Yan's speech data, her lower score in translation, and her lack of written data in Chinese predicted her lower self-rated Mandarin proficiency. It appears as though the participants had a relatively accurate perception of their abilities.

In this chapter, four issues were discussed: (1) Participants' self-evaluation of Mandarin language skills, (2) Participants' well-maintained L1 competencies (3) Participants' attrited L1 competencies and (4) The relationship between the self-assessment and actual L1 performance. The results demonstrate the type of linguistic activities that exhibited the most maintenance and the most attrition of the participants' L1 Mandarin, and to what extent the participants perceived their L1 grammatical competence and pragmatic competence had been maintained or eroded. The findings help to answer the research questions: What linguistic elements were maintained and lost in the participants' L1? What's the relationship between the self-assessment and actual L1 performance?

In the next three chapters, I will present stories and linguistic experiences of my three participants in their own voices. Before each story, I will detail the research context. I will describe how I accessed the participants and what the research settings looked like so that the background information of each case and the relationship between this researcher and the participants are imparted. In the next chapter, Yan's narration will be presented.

CHAPTER FIVE

YAN: HALF WAY BETWEEN THE TWO CULTURES

The interview context

Yan was my first participant in this study. As I mentioned in the introduction, I originally planned to do a case study on L2 acquisition. When I started looking for participants, Yan's name popped into my mind. I had known Yan for a long time and I knew that she did not speak any English before coming to Canada. After many years of being in an English environment, she became fluent in English. Therefore, she must be a suitable informant for the study of L2 acquisition. I phoned her and asked whether she would like to be my participant.

"好啊。什么时候？我会来" (Ok. When? I'll come). As I expected, she agreed with delight.

The interview took place in my house. Yan arrived on time. I used Mandarin to break the ice. She was at ease having her voice recorded. She did not mind being interrupted by my questions for clarification. I observed Yan carefully and jotted down notes on her speech in English and Mandarin. Right after the interview started, I noticed that Yan's L2 English was much better than her L1 Mandarin. When she spoke in English she seldom paused and rarely used fillers. She sounded formal and confident when she spoke English. She did not use very many compensatory communication strategies such as facial expressions or gestures.

Yan's behaviour in the Mandarin interview was quite different. At the beginning of the interview, I asked Yan to read a language-loss story told by a lady who was a second-generation immigrant in the United States (Kourizin, 1999). I planned to use this language-loss story as an ice-breaker for further discussion. While I asked my planned interview questions, I quickly realized that Yan was shortening her answers as much as possible. She showed me that she was not interested in the story:

R: *What do you think of the story?* (Mandarin)

Y: *Because she was laughed at by other kids, she lost her Chinese.* (Mandarin) *That's it.* (English)
R*: That's it?* (Mandarin)
Y*: Yeah.* (English) (English interview transcript, 2003)

I decided to change my questions to break the ice. We talked about her own experiences as a student in her early school-years in Canada. This time, it worked well. From my experiences interviewing Yan and the result of trying out the ice-breaker story, I learned that asking participants to tell their own stories works much better than using someone else's story, which they might not relate to.

During the Mandarin interviews, Yan used a lot of body language and facial gestures. Both her hands were gesturing all the time. She used a lot of grunting sounds to complete her thoughts. She was quite sure that I would understand her, no matter how much she mumbled, because she knew I am also from Beijing. She put into her words many [ɻ] sounds which are typical for people from Beijing although she could use standard Mandarin pronunciation [Putonghua]. She showed her humour throughout the interview. It seems that she didn't care about the grammar and the structure of her sentences. She talked in a very everyday style. She never used any big words except one in a "joking" way. She uttered many unfinished sentences and she kept switching topics. Because of her lack of vocabulary, she used many demonstratives such as "*nage*" (that) or "*zhege*" (this) to fill in whatever she wanted to say.

On the whole, Yan's scripted Mandarin text of the interview reads like something by a grade five elementary student rather than a university law student. This style constructed the whole narrative context of the Mandarin interviews. As I found out later, this made it difficult for me to translate her Mandarin script into English, the only language which was to be used in my dissertation. Do I keep this style in the translation or do I change the style into something that approximates Yan's "English"? I gave myself permission to keep her original style. Therefore in reading the whole text, some "voice feature conflict" will be apparent: in some parts, her narratives sound sophisticated and integrated while in

other sections, they sound simple and even childish since I set out to dutifully reflect Yan's voice. Therefore, if readers may feel the inconsistency when flipping through the pages since narratives is based on her vocabulary-rich and fluent English voice and her slowly retrieved, attrited Mandarin voice.

The study on Yan's case lasted four years, from 2003 to fall 2007. The first two interviews with Yan, took place on 2003 and the others in 2007. During this particularly interesting time in Yan's life I kept in contact with her and therefore captured and witnessed the many things happening to her. When she served as a student lawyer in Vancouver she told me that she could not understand what her clients said to her in Mandarin. It was the first time that I heard Yan worrying about her Mandarin. "My Chinese sucks," she told me anxiously. Later she decided to go to Beijing University to improve her Mandarin, and to study law, especially the conceptual and technical terms in Mandarin in this field. She also did quite a bit of thinking about her own ethnic and cultural identity, which is demonstrated in letters to and talks with her family members before she went to China to study. She showed me her excitement when she started working at a law firm as an articling lawyer. She shared her pleasure and pride with me after she helped her newly immigrated clients from China to win their cases, which does not usually happen to articling students. She told me that her Mandarin was getting much better through providing law consulting presentations to new immigrants and students from China. In 2006 and 2007, she told me that she had more opportunities to use the Mandarin in her career life and she became more confident when speaking Mandarin. All these events happened to her over the course of four years and were closely related to her home country of China and to her first language, Mandarin. These events had a great impact on her perspectives and views on China, her L1, and on her own self-image and identity.

The four years of continual follow-up with Yan enabled me to see beneath the surface of many taken-for-granted values and myths. Yan provided me with many real-life, proximate and dynamic living data. Her stories in the past, the greater access to her updating experiences in these four years served as woven threads of a process of questioning and explaining, re-questioning and re-

explaining for her as a participant in my study and for me as a researcher. It also made me see clearly that the attitudes, the conflicts and the opinions of these young adults on different matters concerning their L1 maintenance and loss are never static unitary phenomena. They change and evolve over time with different experiences, different interactions and different collaborations within and outside of their L1 community and language group. Furthermore, the field notes I took on the constant data Yan provided to me during the four years turned out to play a very important role in this case study.

Of the three participants, Yan was the weakest in Mandarin. In other words, her L1 loss was the most marked. As Yukawa (1998) notes:

> Unlike acquisition studies, data collection for attrition studies can be a painful experience for the subjects. Especially when subjects lose the language under study very rapidly, they initially become bewildered, and then frustrated and depressed by their inability of producing the language they were previously fluent in. (p. 80)

When Yan talked about her feelings when speaking with older people and with her classmates in the university whose Mandarin proficiency was much stronger, she showed me her frustration. She used the word "stupid" to describe herself. For her, it must be a painful experience. As the researcher in this study, I am grateful to my participant Yan for her openness and bravery in letting me use her speech data, especially on her L1 loss.

It is reasonable to say that working with Yan made it possible for me to look at the dynamic process of the linguistic and cultural journey of a young adult immigrant from China. And at the same time, it helped me to question my ideas about second language or heritage language teaching and put these topics in a new light. She has shown me the value of the process of asking questions and seeking answers of what I or we do not know.

Yan's stories

Hi, I am Yan. I am from China. I was born in Beijing. I came to Canada in 1990 when I was ten years old. I was in grade five at that time. I came here with

my father who used to work in the Chinese Social Science Academy as a historian. My mother used to be a language teacher in a university in Beijing. At the time when I came, she was already in Canada and was a graduate student at the U of A.

I spent my childhood in Beijing. Mandarin is spoken in my home country. Before I could read, mom and dad always read story books to me. Sometimes when they were too busy to spend a lot of time reading to me, they would record those stories on tapes. I listened to these tapes again and again until I could recite them. And I would tell those stories to my friends in the kindergarten. Sometimes I made my own stories. Grandpa got my stories recorded. He treasured the tapes all these years. Whenever he missed me, he would listen to these tapes. When I went back to Beijing many years later, he asked me to listen to these tapes. We laughed together.

At six, I went to school. At school, I was one of the top students in my class. I was tenacious about reading. I learned how to read in grade one. First in Pinyin (the phonetic symbols for Chinese characters) and then the Chinese characters. I was so happy about being able to read because I didn't have to ask mom or dad to read me the stories any more. I could read books by myself!

I read a variety of books including stories, history, simplified classics, novels, non-fiction, etc. And I was a fast reader. Mom sometimes complained that I read too fast. They already bought me two cabinets of books. But I wanted more. Grandpa always brought me to bookstores and bought me books that I liked. Every year, the only birthday present I wanted from my parents was to buy me more books. Sometimes, I had to read books that I had again and again before I could get new ones. I enjoyed the stories whenever I read them. I liked writing too. In grade four and grade five, several times I received the Best Junior Writer Award in the district where my elementary school was located. My dad kept my writings all the time. And I enjoyed speaking in front of people, sharing life stories that happened in my school and my neighbourhood.

Up until I came to Canada, I had, I would say next to nil for English, all of my language skills had been in Mandarin. Reading the 26 English letters was the

extent of my proficiency. I learned them for the Pinyin system at school in China. Therefore, I knew the order of the alphabet and how to write the letters, but I did not know the correct English pronunciation. When I was six, once my dad's friend came over to my house and asked me whether I could speak English, I said "Sure I can." When he asked me to say something in English, I said loudly: "A,B, C, D,…". He burst into great laughter. The first weekend I was in Edmonton, mom brought me to a party. Everybody said "Hi" to me. I asked mom: "Hi 是什么啊?" （What does "Hi" mean?）I did not even understand what "Hi" means.

I started learning English as soon as I came off the plane. English has been my priority ever since. The first three months were very uncomfortable. I couldn't express myself, hardly ever…. I didn't worry about studying, but the most difficult thing I would say was interacting with the other kids, expressing what I wanted, and understanding what they wanted. I tried my best to pick up the language in order to enable myself to play with other kids. Without the language, I couldn't play. There was a game of skipping rope. I didn't know the rules and I didn't know how to ask about the rules. Even if they told me what the rules were, I wouldn't have understood what the rules were. So that's what the frustration was I guess. I overcame it by observing. At the same time, I watched TV a lot. You don't need to understand the language perfectly to understand what the cartoon characters are trying to do. I wouldn't say I understood everything exactly, but I understood the gist of it. I understood if the cat was trying to get the tweety bird.

There was no bilingual class in my elementary school. The principal and the teachers decided to put me in a lower grade, grade four. When my parents asked them why, their answer was that my English was not good enough to be in grade five. "Even grade four was too advanced for her." I heard mom telling dad what the principal said about me, although they tried not to let me hear this.

I still remember one afternoon that winter when I was helping my mom to deliver fliers in our neighbourhood for six cents per mailbox. An old lady came out of her house and shouted at me and my mom pointing at a sign stuck inside of her mailbox:

“Hey, junk lady. Don’t you read English? ‘No fliers. We save trees.’ ”

Mom told the lady to throw the fliers away if she did not want them. Then the lady got mad.

“If you can’t understand my English, go back to China!”

“Mom? What did the lady say?” I asked my mom. At that time I could not understand what she said. I could not figure out what had happened and why the old lady was so mad at us.

“Nothing.” Mom said. She took the fliers out of her mailbox.

“Tell me, mom. What did she say?” I insisted. Mom told me what she said. I understood the lady’s straight-forward message: She wanted to save trees of “her Canada.” She also told us that this was not a place for us if I don’t read English.

I was put in an ESL class. I tried hard to learn English. There were nine students from other parts of the world. I was one of the two students from China. We were only allowed to participate in the mainstream classes for Phys-Ed and music. Two weeks later, my parents made an appointment with the principal requesting a reconsideration of my placement. They talked with the principal for a long time while I was waiting outside of the principal’s office. Mom and dad insisted that I be placed back in grade five and in mainstream class.

Her argument was: “Even Yan was put in kindergarten, her English is still not good.”

The principal said the school could do so only if my parents agreed to accept one condition: “Never bother the school if Yan had low marks.” My parents agreed.

“I will discuss with the teachers,” the principal told my parents.

Back home, mom told me what they said. She also told me not to worry about my marks in the first year. She asked me to make friends at school. For the first time in my life that I heard my mom telling me not to worry about my marks at school!

We waited for their final decision.

The negotiation worked. I was put into grade five and taken out of the ESL class. I was put into mainstream classes full-time, including English, language arts, math, social studies and science. Since my school is very close to the university, a lot of my classmates were kids of graduate students in the university. I made friends, a lot of friends. Among them were black kids, First Nations kids, and Asian kids of all colours. I fought with my classmates too. The transition from the lower grade to a grade-5 class did not interfere with my study of English. On the contrary, this is a very good opportunity for me to receive adequate English input through interacting with kids of my age. It was a good idea!

At school, the LA [language arts] teacher did teach me the differences of writing essays within the Chinese context and within the English context. But other than that, I would say I acquired most of my language through the environment.

Two teachers greatly influenced my English studies, not the LA teacher but my music teacher in elementary and my drama teacher in high school. Their humour, their vivid analyses of different musical pieces or different characters in plays, their witty remarks and spontaneous anecdotes used in class—all of these contributed to my full appreciation of English. But above all, they both were very encouraging and supporting. I still remember the comment on my report card written by my music teacher: "Yan is an excellent musician!" Back home, my dad laughed when he read this. This meant a lot to me. In high school, my drama teacher taught us how to relax and how to be expressive on the stage. I used what I learned there in my presentations in the core subjects: LA, social, science, you name it! And I received full marks in almost all my presentations. The drama teacher helped me to get my confidence back. He helped me feel good about myself. As time went on, due to my linguistic and cognitive development and my academic achievements—especially in English language arts and social studies—I started enjoying the beauty and the power of the English language.

The majority of my experience in learning English in order for me to have a fundamental grasp of the basic language would be within the first three years.

The first six months was the duration of acquisition of the very basic English. And from there on, I built more vocabulary, more grammar, and a different style of speaking and writing as well. I didn't really learn too much in the LA class setting or ESL setting. I mostly learned just by interacting with fellow classmates, whether it be playing during recess, or eating lunch together, or even fighting. Basically, I absorbed English through the environment rather than learning it in formal settings.

Every day, I would say, my basic language study habit is to be given a set of tools or to learn the basic set of tools that enable me to ask questions and obtain answers. And that's what I prefer as my very first step. And then the second step would be to be in a more natural setting with native speakers of that language, and then acquiring the language more on my own rather than being taught so many things. And in advanced level, definitely just by subconscious learning, or active learning in pursuit of what my interests are. I didn't practice the grammar. I guess you learn when somebody makes fun of you. OK, next time I'll add the "ed", "ing", in the end. Usually I'd find different ways of saying it. You just find a different way in expressing yourself in the words you already know. Other than that, you go home and you ask your mom. Other than that, you check it up in your dictionary. This fundamental word you must know from now on. And you learn it.

At that time, mom had all her classes in the evening. I always went to the university with her. I would sit in the library doing my homework while mom was having her classes. I knew all the librarians. They were very nice to me. During coffee break, mom would come over and check my work. If I did a good job, she would bring me to the cafeteria and buy me a treat. After I finished my homework, I would go down to the basement of the library to read books. There were thousands of children's books there. I enjoyed reading those picture books although my English was still not good.

I would say after the first nine months, I started thinking in English. After a year, when I spoke English I thought in English solely. Once I have acquired the basic structures enough for me to ask questions and to obtain the answers, I would prefer to explore on my own. Because by exploring on my own, I am zooming in

on what I need to learn, or what I want to learn myself. And therefore, it gives me extra motivation to actually not only understand a word, but retain it.

When I graduated from high school I had already become very confident both in speaking and in writing English. I got a 100% in my grade-12 English language-arts provincial achievement test. I also won first place in Canada in the International High School Business Contest sponsored by Harvard University, together with another two classmates, one from Hong Kong, one from El Salvador. After graduation from business at the U of A I went to law school at UBC. English study is a continual process for me. And I would say that I am still learning, because there are still many words that I don't know.

As for my Chinese, there has been a big decline although I speak Chinese with my parents at home. Right after coming to Canada, I could immediately start noticing that I was regressing in my Chinese because of the lack of usage. I realized this when I wrote to my grandparents. Writing became harder and harder since I didn't like to flip the dictionary that often. And later I found that I forgot some very "simple simple" characters. Many times, my grandpa pointed out my mistakes in my letters written to them. He also wrote the corrected Chinese characters at the end of each letter he wrote me. Although I seldom write those characters as he asked me to, I know he cared about my Chinese. He passed away in 2004. I feel so grateful to him and I miss him very much. So writing is the first thing to go and to regress substantially.

In speaking, I also realized my language loss when I knew that I wanted to express myself or something, I couldn't. I knew I used to have my vocabulary, used to be able to know how to say it, and all of a sudden, I just can't pull it out of my brain anymore.

I never thought I could forget Chinese. Actually, I didn't pay attention to maintain it. I thought since in my house, we speak only in Chinese, I could not possibly lose my mother tongue. Now I realized that although most of the time Mandarin is spoken with my parents, sometimes, it's English. Actually, most of the time it's a mix because I forgot some essential words in Mandarin, so I need to fill it in with English.

I didn't think too much about Chinese and the loss, since at that time (2003) Chinese was not my high priority. Although a lot of times when I got embarrassed and thought I should do something about it, I just let the other priorities take over.

In elementary and junior high, the principal and my homeroom teachers always reminded me not to speak Chinese with my Chinese friends. I know they cared about my English. In high school, there was no Chinese language course provided. So I took Japanese.

When I was at U of A, I took three Chinese-language courses including classical Chinese, Chinese literature and Women in Chinese Modern Literature. I took these courses just for fun and I enjoyed the courses almost every way. However, I had some bad experiences in these classes. When the other classmates could use the very exquisite vocabulary that I could not have written, I felt bad. There were a lot of Taiwanese people there that just came from Taiwan and their Chinese was super-good. When I gave my report, I had to basically memorize the whole thing and rehearse it over and over again using very simple language. And that's my presentation. And when they had their presentations, even though some of them didn't have presentation skills as good, even if they just read basically an essay off from the paper, their essays were very very exquisite. The words and sentences were beautiful. So purely vocabulary-wise stuff, yeah. Well I didn't feel that bad, because I still had good marks. However, deep inside, I realized that my Chinese has not been developing, it was declining.

During all the years I stayed in Canada, I went back to China many times during summertime. Each time I stayed for about 1½ months. In China, I noticed the loss of my Chinese even more. I said a lot of wrong stuff when I talked to people. Some things were very simple and everyday stuff. I just can't pull it out of my brain anymore. For instance, once I called "地下室" (basement) "地室" (which is not a word). My grandparents, uncles, cousins, even nephews laughed about my Chinese. I just smiled. They are my family. They understand. I did not take the matter very seriously. I just thought, "You know what, the only reason

why I don't know how to speak Chinese properly is because I'm living in Canada. You don't know how to speak English well either." So I didn't feel bad.

However, my feelings on my L1 loss in Canada are different from when I was in China. In Canada, there are occasions during which I feel embarrassed about my L1 loss. When I was taking a Chinese university course which required greater Chinese proficiency, I had the bad experience like I mentioned before. In class, I had to think over what I wanted to say in my mind before I was going to say it. I could not just raise my hand and start off on the topic and just continue on.

The loss of my Chinese sometimes made me look stupid, especially in front of older people who would not understand my situation. When my parents' friends come over, I know they will ask me something, and then I'll look kind of stupid, because I can't say everything that I want to say. I feel very different in English because, I know that if I want to present myself as very sophisticated or something I have all the vocabulary necessary to present myself as such. But in Chinese, if I wanted to present myself as such I don't have the necessary vocabulary. And that's why a lot of times with older people I thought for a long time, and I couldn't think of the words. If I'm talking to a university student, an intellectual, and they are trying to speak to me in an intellectual conversation in Chinese, then I feel very bad. I feel embarrassed.

However, to me, English is my primary language. Chinese-language study is secondary. I sometimes—only sometimes—feel bad or embarrassed about this. I am regretful about the loss of vocabulary I once had. Many words I know I knew them before. It's bad that I lost them. But I also feel good about the part I have maintained, especially my reading skill. Before I thought I would regain my fluency within a very short period of time if I felt the need to do so. Yet after I studied at Beijing University, I still felt uncomfortable with my Chinese. I can read. No problem. But writing is different. I don't feel comfortable even after my study at Beida (Beijing University). My Chinese is very conversational. The vocabulary is still very basic. However, when I was immersed in the culture, in the environment where Chinese was the main written and spoken language, I

noticed that my speaking and listening comprehension skills increased dramatically and substantially.

My Chinese writing ability is very weak. I am kind of lazy. I seldom write in Chinese unless it is required. Only when I took Chinese courses at university did I write some assignments in Chinese. I do not have a passion for writing in Chinese. The Chinese characters are difficult to remember. Even when I use a computer, it is just a little better, I am still very slow. And there are many two-connecting words, and I have to think about the meaning of them when I write. Therefore, my Chinese writing ability is my weakest skill compared to my listening, speaking and reading.

I think I am very much on a need-to-know basis. Therefore if I can express myself in simple terms, I would do it. I will not learn. And even if I try to learn, I would not remember the way of saying it in a more difficult setting. However, if I would need it for my job, if it was a definite requirement, necessary for me to continue my success, then yes, I have an extra motivation to learn it. Not even myself motivating myself, it's just a natural thing to come about. I know I need to learn it, and therefore I become interested in the topic, and I learn it. But if there is no need for me to learn it, say if, all I am going to do in China or in Latin America countries is to travel, then I will always just retain what I have in Chinese and in Spanish and use the most simple forms of grammar to express what I want because that's sufficient.

I think that's almost a detriment because that limits me to what I have to know. It doesn't spur any extra interest in learning from others, in other styles, or anything unnecessary which may be interesting and useful, but not exactly necessary. So I only learn the things that are very necessary and anything beyond that I try not to learn. I only feel bad. I only think about it when I feel inadequate but it's not in my mind the whole time. I basically take everything on a need-to basis. If I need it to do some extra work, say actually be put in a business setting that requires me to speak in a more sophisticated type of language, then I would definitely acquire an interest, a natural interest in learning such grammar and such

vocabulary, and then I would naturally do it. If I go to China to do some business, yes, I'll guarantee you that my Chinese will pick up, but that hasn't happened yet.

I find my speaking skill in Chinese is a little better than my writing skill, but still weak. When I hear or read Chinese, there is no problem. When I volunteered in Chinatown on a two-hour-a-week basis, I used Mandarin most of the time to speak with my clients. I have incorporated a lot of the words that were once in my main pool of vocabulary that I have lost since then. Now I am regaining words like "responsibility" "prove," technical aspects of the vocabulary that I didn't have a need to sustain. I would say my spoken language in Chinese has regressed, but not as much as my written language skills.

I am feeling really, really good about being bilingual. Some people think that when learning a foreign language, one must completely forget one's native language, I strongly disagree. Because I retain my native language still. I am very happy with this, although I have had some loss. When I use a dictionary, I prefer using a bilingual dictionary rather than a monolingual dictionary. And I don't think there is language interference in my mind. No I wouldn't think so. In my mind, if I really think about it, I would categorize these into different files. When I speak English, I pull out my English file. I think everything is there. So it's all categorized. There is not too much mixing in between.

I feel very good about knowing different languages. I enjoy language learning. When I work at the Danier Leather outlet, I use my languages. I have more customers than other staff because of my languages.

I have a great interest in Chinese literature and have no difficulties in reading at all. I like reading all kinds of interesting novels, including those foreign novels translated into Chinese. I'm really interested in reading those that involve Chinese culture. Those ones, you know, I can't put them down. I am eager to read Chinese novels and watch Chinese movies. I learn a lot about China this way. I like to read contemporary Chinese literature. Actually I never read the old-style novels. I don't like classics either, they are not my style. I like the novels of Zhu

Xiaoping,[1] especially his *Sangshuping jishi*: I understand China more through the characters in this book, through Yuwa, Caifang, Fulin and others. I like this book and can't imagine those things happened in China. I want to read more books like this one.

I read fast in both Chinese and English, my reading speed in Chinese is still as fast as before and I pay more attention to the content. Although I learned only simplified Chinese characters in China, when I come across some traditional characters that I don't know, if I don't recognize the whole character then I utilize a strategy. First of all, there are basically two segments of the characters, the left side and the right side. Some part will be hinted by the left side or the right side and then I put that into the whole context of the sentence and then I can basically figure out what it is. Unfortunately, the time I can spend reading Chinese literature is very limited.

I think the reasons for my Chinese language loss are the lack of a language environment and limited time for using Chinese because before I was in the environment, and now I'm immersed in the English environment. So except for the little bit of Chinese that I get at home, I don't really receive too much else because we don't have cable TV with the Chinese channels. So other than just basically listening to my parents, I had nothing, no other environment to receive this training or continue the language. In a week I may use Chinese for 2-3 hours, that's it.

Another reason is how I value my mother tongue. When I first got here, there was one Chinese girl in my class, Xiao. We came to Canada almost at the same time from China. Her English was worse than mine. Many boys in my class bullied her and laughed at our names, our clothes and the lunch we brought to school. When they did so Xiao would yell angrily: "Shut up, go!" The boys would laugh harder and made fun of her accent. I was very upset. However, my English was not good enough to stop the boys. One day, they teased Xiao again. I could not stand any more, I beat the boys up. Then I was in big trouble. My homeroom

[1] Zhu, Xiaoping: a noted writer in China that has been publishing novels and novellas since the early 1980s. His most famous novel is *Sanshuping Jishi* (桑树坪纪事).

teacher and the principal called my parents. They were asked to have a conference with the principal and the homeroom teacher. During the meeting, my teacher told them that I bullied the boys and the principal told them that I always spoke Chinese with Xiao at school. They asked my parents to tell me to behave myself at school in the future and not to speak Chinese with Xiao any more. They also asked my parents not to speak Chinese at home because they wanted to expose me to as much English as possible. Although my dad's English is not good, since then he always tries to speak English to me at home. That incident I would never forget.

After I became an articling lawyer in 2005, I use my Chinese in my work a lot. Actually the firm hired me because of my Chinese. That happened on my way to Beijing to study. The man sitting beside me on the flight was the team leader, Mr. G, in my law firm. We talked a lot on the plane. He told me that China was such a large market. His firm was now bridging the gap between the practice of law in the west and the Chinese way of doing business in the east. When he got to know that I was going to Beida to study as a law student in UBC, he gave me his card and wrote me the address of his Beijing office. Since his firm has increased relationships with Chinese business, they set up an office in Beijing. They interviewed me in their Beijing office. I was hired. They told me to start practicing as an articling lawyer in the firm right after I graduated from law school.

I got the position because of my Chinese! I never thought that could happen. This time, the need for my Chinese language competence in real work was no longer a "that hasn't happened yet" scenario, it became a reality. The firm regularly assisted Chinese immigrants as well as Chinese students who needed help with everything from drivers' licenses to passports. It has also developed strong relationships with Chinese business and government leaders, which enables them to eliminate barriers typically encountered by foreigners. After I got there, the firm commissioned a large sign, written entirely in Mandarin, and had it erected on the side of its building where it could be easily seen. My name was one of the three names on the sign. According to Mr. G in an interview with *The*

Lawyers Weekly, the day the sign went up, the firm got its first Chinese clients. Being one of the two Mandarin-speaking lawyers in the firm and the only one able to serve the increasing number of Mandarin-speaking clients with a solid foundation in everyday Chinese, I was happy and excited.

I presented different seminars in Chinese to new immigrants about our law firm. I told them what we could help them. In serving those clients who came from China, I just used my simple everyday Chinese to get information from my clients and to discuss cases with them. My simple yet fluent communicative ability helped me to successfully establish an applicable relationship between me as a lawyer and my Mandarin-speaking clients. As for the written part, the firm hired a Mandarin-speaking supporting staff. Mr. G always said that no doubt firms acquire a certain clientele but at the same time, you need to be aware of what's happening in the world around you. From this I see that my L1 Chinese, my heritage culture, and my cross-cultural bi-cultural identity are useful, valuable and beneficial. I am familiar with both eastern and western cultures. I benefit a lot from this and I am very happy about it.

If I have kids in the future, I would like it if they spoke Chinese. And I will try to speak Chinese to them at home, although it may not be all the time, since it's easier for me to communicate in English. I may also send them to school to learn Chinese, but it will depend on other factors such as location and availability of Chinese schooling. I want my kids to learn Chinese because I want them to learn about their culture and heritage because it's a part of them. I know that it's important to me, and that I would like them to be able to relate to myself and other family members in China. I now feel the importance of knowing Chinese since I have benefited from it in my work. I think parents play a very important role in kids' linguistic life. If it's important for the parents, the kids will learn, at least somewhat. But if it's not important for the parents, then the kids will easily lose it. It really depends on the parents.

Talking about identity, I think I'm in the middle somewhere, definitely a mixture of both. To me, my identity has changed a lot since coming to Canada. I never think I had lost some of my Chinese identity. No, I don't think so, but I

know so and I don't like to think that this is so. But I know that when I have conversations with my other friends who are more immersed in the Chinese culture I can't comprehend some political stuff for example. I just don't know. I had no clue what the heck they are talking about and then I'll be like "Oh," and I can't join the conversation. I know that there are people with more Chinese identities than me, so I must have less than some people.

In elementary, I made friends with everybody, even with the boys who teased me and Xiao about our Chinese names and who stopped teasing only because I beat them up. I also had many Canadian and visible-minority friends in high school and in university. I had so many classmates from different ethnic groups. They were from China, Malaysia, East India, South America, Europe, there were black people, First Nations people, and Asian people of all colours. I never felt the racial attitudes in my school, not in elementary, not in high school and not in university.

In 2004, when I was studying in the law school in UBC, I wrote a paper on "Racial Equality in the Canadian Legal Profession." I started rethinking many things: my feelings on my heritage identity and culture; the dominant culture and the dominant society; family relationships; my own identity.

Just before I went to Beijing to study, all of a sudden, I found that now I was older, I felt a stronger pull towards China. I thought about it all the time. I sometimes wondered if I would want to live in China instead.

One day I was phoning my grandma, it was very nice. We actually talked for more than 1/2 an hour. It was quite odd, because I talked to grandma the way that I talked to my mom and not like before when all she would say was "eat good, dress good, study, don't get fat, etc. etc. We were talking about my childhood in China, about my mom and my aunty, about my cousin Gaogao, about me coming to Beida [Beijing University] to study. It was very good. I knew grandma had lung cancer for four years already. She sounded like she was doing well, just a little lonely I guess. But she prayed a lot everyday, so it's good. That conversation with my grandma made me think a lot. I do feel like living close to my family now. It would be so nice if I could live and work and enjoy being somewhere with Yue jie [cousin], Dou ge [cousin], Gaogao[cousin], Laolao

[grandma from mother's side], Nainai [grandma from father's side], Xiao gugu [aunt], and maybe even my parents if they move to China and so many other people with whom I have bonds. That would be really nice.

I always feel weird, because when I am in Canada, I miss China soooo much, yet when I'm in China, I miss Canada quite a bit too. I like both countries, but they are so different and distinct and I like both, it's almost as if I can't choose, but I kind of have to**.**

In doing the assignment, the more I study, and the more I learn about the way the legal system and even society in general works in Canada, the more I feel that there is discrimination here. Not that anyone would really feel it going shopping or in regular daily activities, but in job opportunities and areas of advancement. I feel that there is a much harder battle for ethnic people such as myself. Maybe I'm just saying this because in the practice of law, and in finding articling positions, I feel that even very qualified people don't get nearly the same opportunities that white students get. Perhaps the reason why I am really on this topic of racial inequality, is because my paper topic is on "Racial Equality in the Canadian Legal Profession." I have done my research and found out all sorts of stuff, all sorts of cases. I asked myself whether I have experienced anything like what happened in those cases? I do feel a lot better living in BC than I probably would in Alberta. I find that the diversity in BC is much more than Alberta, and frankly I didn't find anything wrong with Edmonton until I lived in Vancouver for a year, then I went back to visit. Only then did I feel that living in Vancouver was much freer as a minority than living in Edmonton.

I consider myself as a Canadian or a Chinese that's very Canadianized who felt halfway between the two cultures. For instance, walking into a room full of Chinese people, I would feel comfortable if they were younger people because I know that the other young people too had lost some of their identity as Chinese although not as much as I had. They would know how I feel and I am just another young person, Canadian or Canadianized Chinese who has lost some of the language. It happens very often. However, with older people, I would feel uncomfortable because I know they would ask me something. Because of the loss

of my Chinese, I would ponder for a long time. Sometimes I couldn't use the proper and suitable words and it's very embarrassing.

Sometimes I had this huge urge to meet some young people who had just come to Canada from China. I wanted to speak Chinese to them. But very soon, I would find that our culture, our "everything" was not the same anymore. We had few things in common. There are some of the common character traits amongst mainland people. They are very hardworking, but I'm not. They are always in the library studying while I would be like, "Oh, today Law and Order is on," or I would want to go home to watch my *Survivor* show. But they would be in the library everyday so we do not get along.

I always appreciate my Chinese heritage. In my memory, there were two things that embarrassed me about the Chinese culture. The first thing was the Chinese way of cooking. Once a parent meeting was going to be held in my school. I rushed back and asked my mom what she was cooking. "Fish." She said. Oh, my God! That was exactly the thing I was afraid of. The Chinese way of cooking fish would make me and my parents smell bad at the meeting. I begged my mom not to cook fish. She agreed but asked me why. "Because…just because…" I did not tell her the real reason. I knew she would be mad and hurt if I did. The other thing was the bad table manners, talking too loudly and the really annoying habit of making very loud noises while eating. I feel embarrassed and uncomfortable. When I was in high school, I also wanted to have pants with name-brands like the other kids wore. Other than that, I felt proud of my Chinese heritage and culture.

During these years, I always made efforts to reclaim my Chinese heritage. At my junior-high grad, I decided to wear a traditional Chinese costume. So I went back to China and had a red *qipao* (one-piece Chinese dress for women) made for myself. I was the only one wearing such an eye-catching colour of dress at the grad ceremony, and I felt good about it. In high school, I joined the Asian Culture Club promoting Chinese culture during International Week. As a business student at U of A, I tried to go deeper than wearing Chinese style clothes and selling Asian food. I took Chinese literature and classic Chinese courses. I also

took different courses in law during my summertime visit to China to help understand more about China, its past and present. As a law student at UBC, I chose to finish my last credit course at Beijing University, the most competitive university in China. I not only received excellent education in law there, but also experienced unforgettable students' integration on campus and gained a better understanding of the young intellectuals in China today.

Culturally and socially, I am now both Canadian and Chinese. In 2003, I felt that I was about 70% Canadian and 30% Chinese during the first interview. However, after the four years' time, there was a change. As a person, I think I'm now 50% Canadian and 50% Chinese. However, language-wise, I would say 90% English and 10% Chinese. I guess the Chinese culture and things are more important to me at the present than before. Being Chinese and keeping my Chinese culture has become a huge part of my life now and I feel comfortable with my mixed identity.

Summary of Yan's narratives

In this chapter, Yan's story was told in her voice describing her linguistic and culture experience after she came to Canada. Her narratives show that the "language as a problem" orientation is still a part of the "hidden curriculum" (Brown & Kysilka, 2002, p. 171) in her monolingual elementary school. Yan faced attitudes and misunderstandings about her heritage language and culture in her school setting because of the "prevailing monolingual-monocultural societal norms" (Lemberger, 1997). In regard to the findings on her linguistic development (attrition) in L1 and L2, it could be concluded that such misunderstanding and assimilation pressure in her school community could have had a negative impact on her L1 maintenance and her acculturation process. From her story, it could also be seen that natural L1 input and practice at home only cannot lead to a desirable levels of L1 maintenance. To some degree, Yan's case in 2003 provides a typical example of the first group of immigrants mentioned by Yoshizawa Meaders (Prescher, 2007) who "adjust quickly but superficially to the new environment and culture" (p. 192) because of the assimilation pressure.

Reasons of such identity formation and consequences caused by them will be discussed in detail in chapter eight. Yan's experience after 2003 also confirms that from a lifespan perspective, identity formation and language development, L1 attrition and development in this case, are anything but permanent and fixed (de Bot, 2007; Prescher, 2007). As the motivation to maintain and develop L1 grows, the result of her L1 maintenance could be productive, and there are high positive correlations between integrative and instrumental reasons in L1 maintenance/attrition. In the next chapter, Jinhong's narration will be provided.

CHAPTER SIX

JINHONG: A REDUNDANT CHESS PIECE OUTSIDE OF THE CHESSBOARD

The interview context

Before interviewing Jinhong, I had certain expectations of what she was going to say, because I had met many Mandarin-speaking young adults from China before. Jinhong is from Taiwan. She would be the first young adult from Taiwan whose life and linguistic experiences I would explore. Although we had previously spoken quite frequently in both English and Chinese when we both worked at a hotel, I still had feelings of excitement.

I first met Jinhong in 2005, in the banquet section of a hotel where I work part-time. With long dark hair, medium height, she was not the type of girl who leaves a strong impression at first. However, she left a very deep impression on me. This was not because of her typical oriental appearance—in fact, there are many oriental-looking university students working as part-time staff at this hotel. Jinhong was different. Unlike most of the other young staff (predominately high school or university students) who were joking, laughing, and playing around all the time at work, Jinhong was quiet and hard-working. She took this part-time job seriously. She was respectful to all the staff and was eager to learn everything she needed to know to be a server. She constantly had a very sweet smile on her face, even after long hours of hard and boring work. It was really a pleasure to work with Jinhong; she was not at all picky regarding the assigned work and I never heard any complaints from her. She was a very good team worker. In addition to all of this, what made it more pleasant to work with her was that we could always find common interests and topics to discuss. This made the long working hours shorter, and the hard and tiring work easier.

I still remember the first day we met. Jinhong asked me a lot of questions after she heard that I was a school teacher. At the time, she was about to graduate from high school, and was not sure what she was going to study in university. She asked me whether I liked my job as a school teacher and told me that she loved kids too and was considering studying education.

Jinhong mingled with some of the young staff at the hotel. During breaks she always sat at the "young staff table"—talking about what was going on in university: mid-terms, grades, teachers, etc.—even though they were in different departments. She shared her stories, her jokes and her laughter with them. Of course, at this time she used English only because nobody would understand her if she spoke in Chinese, despite the fact that most of the young staff were of Chinese background.

When I spoke to Jinhong, I learned that she was from Taiwan and was attending university. Her goal was to become a dentist. She was very good at swimming and had been a swimming athlete ever since she was a young girl. And of course, I learned that her Chinese was fluent. She left me with the deep impression of being a typical example of what the Chinese call "a nice understanding girl."

However, in the initial process of recruiting participants for this research, I did not think of asking Jinhong to be a participant. This was because, in my mind, based on her fluent Chinese and her "nice sensible girl" manner, I was fairly sure that she was a new immigrant from Taiwan. I did not expect that she might have been in Canada for a long time. That is why I was surprised when a hotel staff-member from Taiwan pointed out that she might meet all of the established parameters for participation in my research. I got in touch with Jinhong immediately to confirm whether or not she had come from Taiwan in grade 4; the answer was affirmative. When I asked her if she wanted to be one of my participants for this research study, I saw her eyes sparkling: "Really? Me? Yes! Yes!" she said with a big smile on her face.

We met in front of HUB mall. While driving to the university I was a little worried, thinking that Jinhong might not be able to make it because of her midterms. I knew that she had missed several days' work at the hotel because she had been too busy preparing for her exams and papers. However, she was at HUB on time. At my suggestion, we decided to have the interview in my classroom. I suggested this for two reasons: on the one hand, it is very quiet in the evening in my classroom and I could therefore get a good-quality recording of the interview;

and on the other hand, I wanted to see her expression when she entered a "Chinese language environment." Therefore, I drove Jinhong back to my school.

As I expected, the moment Jinhong entered my classroom she looked around with great curiosity at everything. She flipped through the Chinese textbooks on my desk. She read aloud the slogans on the wall. She stared closely at the *Chinese Journal* report on the wall; an article on our school's students winning a Chinese writing contest. She touched the heads of the lions on the filing cabinet. Obviously, she was thrilled.

I moved two desks together and set up the tape recorder on one of these desks. Sitting face-to-face with Jinhong, I started my interview questions.

The interview went smoothly. Jinhong was very open when answering questions. She took the interview seriously and wanted to do everything possible to help in my research and to understand her experiences and feelings as a young immigrant adult from Taiwan. She even generously offered to lend me her diary and the writing she had done on a website. I thought that this openness stemmed partially from the trust that we had built between us through working together at the hotel. But I also had the impression that she considered helping me to collect data as a responsibility of her own. We were so involved in the question and answer session that for about fifteen minutes we talked continuously without noticing that the tape had already stopped. I was quite regretful that I lost some of her valuable speech data in this way.

The second day after the English interview, we met again at the hotel. Jinhong came over with that sweet smile of hers and told me with great pleasure that she had not only found some of her writing journals, but also some writing she did many years ago when she had just arrived in Canada. Handing me two cute, little, girlish notebooks, she gave a deep satisfactory smile. I was touched. Other than "Thank you," I did not know what to say.

When transcribing the interview tapes, I was not surprised to hear Jinhong's fluent functional English with a standard local North American accent, and her fluent Chinese with a Taiwanese accent. I knew this before the interviews. Her voice is sweet, pretty and clear.

In studying the English interview transcript, I found some repeated words and phrases. Jinhong repeats things two or three times to put emphasis on her meaning. There were also pauses. Jinhong uses these to mark terminal junctions or as preparation for planning and processing the continuing speech. Fillers such as “er”, “mm”, or “uh”, which often appear in the utterances of English-speaking people, appeared scarcely, although the filler “like” appeared very consistently.

The extensiveness of both topics and content in Jinhong’s Chinese interview surprised me. Although we had often spoken in Mandarin while working at the hotel, this time was quite different. In this interview we touched on many topics: education, Confucius, philosophy, the meaning of life, etc. Some of these were deep in concepts ---not at all everyday topics. The words and vocabulary Jinhong used were well-chosen and well-used. She seldom used mixed code. It seemed to me that Jinhong’s Chinese language competence had developed in parallel with her cognitive development, although she had not received any formal training in Chinese language after immigrating to Canada. This left a shockingly deep impression on me as a researcher.

Two weeks after the initial interview, I asked Jinhong to come to my classroom again for a second interview. As the first time, I picked her up from HUB. We then went to a nearby Chinese restaurant for supper. Over the dinner table, we talked a lot about the content in her notebooks, her neat handwriting, and the sketches she made as decorations. I returned the notebooks to Jinhong, telling her that I had been amazed reading the journals and articles within them. I also told her that her Chinese writings were of great value for my study. Jinhong was very happy that I liked them. She also mentioned that her Chinese handwriting now was different from her handwriting then. “My dad was very strict with me!” (爸爸对我很严的). When I asked Jinhong to switch from English to Chinese for the Mandarin Chinese interview, she did so in a very natural way. With a simple “好” (OK), she was full of confidence in using Mandarin to answer all of my questions. I felt that she was always entirely ready to use her mother tongue. The interview went very smoothly. I was frequently

surprised by her mastery of the Chinese language and her knowledge of Chinese philosophy and culture. Jinhong spoke directly to the tape recorder and was full of confidence. She left me an impression that her Chinese language had not only been maintained but developed during her years in Canada.

The third time we met was in HUB Mall after her afternoon class. It was a cold day, shortly after the first snow of the year in Edmonton. As usual, Jinhong was on time. I knew she was very busy with her finals, and I could not help feeling guilty to have taken so much of her precious time. Handing her both the translation sheet to be used as a language test and the self-evaluation questionnaire, I told her that I needed both parts completed. Nodding with an understanding smile, Jinhong sat down and took out her pen immediately.

The translation took her longer than I expected. At first, Jinhong pondered a lot, trying to figure out which words she should choose to give a more accurate translation. In fact, for some of the words she wrote down more than one possible translation. Secondly, Jinhong was interrupted by two of her classmates, a girl from Hong Kong and a boy from Taiwan. When they asked what she was doing, she said, "Another midterm. Look. It is terrible! All forgot!" (又一个期中考试。你看，真是很惨很惨，都忘记了！) Then they discussed a Christmas dance party being organized by the Taiwanese Students Association. They also joked around about the girl from Hong Kong not being able to pronounce "ziran" (自然). Jinhong claimed that she must have a "big tongue", and then the three of them burst into laughter. From there, I suddenly saw another Jinhong with whom I was not very familiar: an outgoing and playful Jinhong who jokes and laughs with her friends.

As soon as she finished the translation and the questionnaire, Jinhong told me that she had to go home immediately to write her final paper. Watching her rush away, I felt blessed to have had such a lovely girl as a participant.

Jinhong's stories, like Yan's, again raised many questions that I had not previously paused to ponder.

Jinhong's stories

Hi, I am Jinhong. I'm from Taiwan. I came to Canada in the year of 1998 with my dad and my brother. January. I lived in Calgary for seven years. And here in Edmonton for one year.

My dad is from a scholar's family in Taiwan. My grandparents believed in Buddhism. However, my dad is an atheist, and my uncles are Christians. They speak Mandarin, not *Minnan* dialect. All children from his family received a very good education. My dad and all my uncles are very knowledgeable in Chinese literature. You know, all the university graduates in Taiwan are required to serve in the army for several years. My dad was one of them. He was in the army for several years. He is a very disciplined and strict person. He talked to me and my brother like giving orders. Once an order was given, we obey. No discussions. When I was very young, at the age of three to four, my dad already told me to memorise poems from the Tang Dynasty. I never argued with him. Different from Dad, my mom is a kind and nice lady. She likes reading and writing. She told me children's stories at bedtime every day when I was in Taiwan. She also bought books and tapes of children's stories for me and my brother. Before Dad decided to immigrate to Canada, they divorced. My mom comes to Canada only for short visits.

When I first came to Canada, I spoke no English at all, not even ABCD. I knew nothing. On my first day to school, my teacher introduced me to a Canadian-born Taiwanese girl who is more like a CBC.[1] She knows how to speak Chinese. When the teacher said something, she would translate it to me into Chinese. It was very helpful. Otherwise I would have no idea what was going on.

I was put into many ESL classes. So many. I remember when I was in elementary, I had five different teachers teaching me English. Yes, five, it was kind of a lot. In the morning, I had individual time with a teacher who just worked with me reading storybooks. After that I would go to another ESL class with other two or three or four girls from Taiwan. And sometimes they would just come and

[1] CBC stands for Canadian-born Chinese.

say, “Well, Jinhong, come”. I would be pulled out into the library. They helped me with my reading by different times.

At first, they taught me some very basic stuff, the alphabet ABCD, one two three four. They gave me those really kindergarten-like workbooks. On there, there might have just a picture of a circle, and then they would say, “C-ir-cle”. Or like a girl’s face and said to me, “G-ir-l”. Others would help me with my homework such as my science homework. They help me to understand what “sun” was in science.

After class, the teachers gave back to me the books and I studied the books at home. If I didn’t understand the words, I would punch them into a Chinese-English electric translator. The translator was helpful. But when I tried to write a little thing in English, at first, I used to type into it all the Chinese words and tried to translate all into English. But that didn’t work. Then I would ask my dad “Oh, Dad, what is this sentence like?” Then he would tell me because his English was like so much better than mine at the time.

I had English tutors too. This is the most important part. They were high-school students. They were my dad’s friend’s daughter and son. Also Taiwanese. If I didn’t understand a story, like “Beauty and Beast”, the Beast went into a “whatever”; the girl would tell me “whatever” in Chinese. And I would say, “Oh, yah.” And in my writing, if I tried to say something that I didn’t know how to write in English, I would say it in Chinese to her, then she would write it for me and said to me, “That’s how it writes.”

I struggled so much with my English in elementary school. Especially in science and English classes. When I read the articles, I had to look up in the dictionary every single word. I didn’t know the very basic words such as “forest”. So my articles were filled with Chinese: this equals to that, this equals to that.

I did like being pulled out of my regular class. First I liked the teachers. I had fun with them. I liked to be separated from the kids also because I didn’t know any English whereas their English was perfect. I understood that I wouldn’t even understand a thing to be in the normal class. So they would just pull me out when other kids took French.

I read a lot of English material then. But I did that just for learning English. I didn't want to learn English. But I had to learn English. I knew my priority here in Canada should be English. It's the local language. And it is a tool that can help me expressing. And my dad encouraged me to learn English too. I still remember what my dad said to me: "Every time, as long as the first step you cross the door, you speak English. No Chinese at all. I don't care if it's your friends or whoever, no Chinese whatsoever." He said to me, "Read books, read books, read books."

That's how I build up my English. The more I know, the more my vocabulary would grow. And then I can connect the vocabulary, then I can connect them into sentences. And then I work the grammar out.

I love Chinese language ever since I was a child. I think my parents influenced me a lot. My mom read me a lot of books in Chinese. A lot. I remember when I was in elementary, my Chinese-language level was already much higher than that of my classmates. When the teachers taught us new vocabulary, nobody in my class knew those new words, but I would know them already. I knew many many words ever since I was in grade 2. My mom bought me a pile of storybooks such as The Three Little Pigs, Grandpa's Garden. They were those translated stories. I read them every day.

I love reading Chinese books. I like Chinese novels, Chinese articles, Chinese newspapers. Anything Chinese-related. My Chinese reading comprehension was so good. I always got 100% on every Chinese comprehension in my Chinese tests in Taiwan. My dad made me memorize poems of the Tang Dynasty. I can recite the whole text of "jiang jin jiu" (A poem by a famous poet Li Bai from the Tang Dynasty).

I also have many story-tapes. My mom bought me a whole set of story-tapes, like Little Red Riding Hood or The Little Pig. Since I was in grade 2, I listened to these tapes. They are so good. I just love listening to them. Now I am 18. I love listening to them even now. My dad asks me, "How old are you?"

When we first came to Canada, my dad went to a church. When the adults were discussing religion upstairs, about ten of us kids just went downstairs to

learn Chinese. My teacher was a lady from Taiwan. My classmates were all Canadian-born. They were in grade 1 or 2. I was in grade 5. So I was like the helping assistant basically. The teacher taught us the basic stuff. Sometimes she also gave us a topic to write about, or to write whatever we wanted. For instance, during springtime, the topic would be "Spring Break". And then we wrote about it. And we handed in and she would mark them. I took this class a little bit more seriously than I actually had to. But I was just in grade five. The teacher also asked us to write as much as we could. My classmates sometimes wrote in English and then translated whatever they wrote into Chinese. Usually the teacher would just give me a check and a "Super Perfect." But after a while, fewer and fewer people went to the class. And then it ceased to exist. Nobody went anymore. The teacher just joined the rest of the adults upstairs and that's the end of the class.

At home I speak Chinese all the time. There is no mix when I talk to my parents. Our family policy is "Once you step out of the door, English only. Inside the door, you can speak Chinese." Only when some of the particular words or expressions I don't really know how to express or say in Chinese, do I probably say them in English. Then my parents would guess what I mean. But for most of the time, I can figure out how to say them in Chinese. However, I speak English only to my brother.

My dad didn't really encourage me to learn Chinese. However, in my house, he always invites his friends to come over. My uncle comes over too. They talk about Chinese literature, Chinese paintings and calligraphy. I like listening to them discussing on these stuff. When we were in Taiwan, he also brought me to the calligraphy exhibitions.

I never thought about wanting to learn Chinese. Because I already know Chinese. I never thought that, "Oh, I need to know more Chinese". But to me, there is so much emotion and feeling and meaning and everything in Chinese. My feeling is attached to this language.

I didn't have this strong feeling about Chinese when I first came here. This feeling started at one point. I remember I started this feeling the first time two

years ago when I was chatting with my friend sitting in the café area. She is a Cantonese speaker. We always talk in English because Cantonese doesn't really work between us. We were talking about boys and about writing journals. She asked me in which language I prefer to write journals, English or Chinese. I said, "Of course I would write it in Chinese".

She asked me, "Why write it in Chinese?"

I answered, "I love it. I can feel so personal to it. I can feel so much feeling and so much emotion. So of course I write it." And at that moment, I suddenly burst out a sentence: "Chinese is such a beautiful language!"

I think from that moment, from that point on, I just keep carrying on this idea in my head. Before that, maybe I realized a little bit, maybe I had this feeling, but I have never put it into words so clearly in my mind. The moment when I said, "Oh, I love Chinese!" has become a turning point to me. From that day on, I just always think, "Oh, I love Chinese"; doesn't matter anywhere and anytime. I have a need of using Chinese.

Then I started to have this feeling and wanted to own a Chinese journal. I just really want to get my feelings on paper. In Chinese especially. Because I think that would make it so beautiful. It's like a piece of art…. I just love to express my feeling in Chinese.

Last year I got a green handbag. And I like it so much. And then I just said to myself, "Wouldn't it be so beautiful to write an article on it? Just about having a green backpack." So I typed it on the website dairy. I usually think what I would say. And then I type…. When I haven't finished them, I will read them several times and say, "Oh, should be adding this in order to make it more beautiful". I just like revising. As if I would hand it in to a teacher to make it as perfect as possible. I do this only for my interest. Because I think it's so beautiful. I think human feeling is such a beautiful thing. And it should be expressed appropriately and in an appropriate language. I don't think that kind of feeling can get through with my English. Every day I want to write. Because everyday I have new feelings and new perspectives. If you want me to write about this classroom, I can. Not about there is a blackboard. I would say there is a feeling and so many

stories passed through this class. I would write a journal or whatever type of writing on this classroom. I would talk about how a personal story left here for people to pick up. Like your story. Your feeling is left here to be picked up by other people. It's just like a trail, or a station where you leave your trail for others to follow. Not necessary as a material classroom, but much deeper than a classroom. Something you can't see with your eyes. That's what I would write about this classroom in Chinese.

Whenever I see something, I write a piece down in my mind. And then I have the impulse to write the piece down. That's why I think Chinese is so beautiful. Usually one idea will lead to another idea, an idea that you have never thought of. It will go on and on just like chain. It will lead you to a place where you think that it is impossible to think of. On my way in searching happiness, I hope my footsteps and my stories will be left in every corner. I don't think I can do that in English. Because sometimes when I write English, what I do is that I think it in Chinese and then translate it. All my thoughts are in Chinese.

My grade-nine English teacher encouraged the students to write in similes, hyperboles, personification, etc. I enjoyed that very much. I learned many writing techniques from my grade-nine English teacher. I use these techniques in my Chinese writing.

When I'm thinking about the feeling, I use a language to think. And Chinese is the language. First of all, it's my mother language. It's the language that I was born into. So I can say that for twenty four hours it's in my head. Although I don't speak Chinese all the time, I have it in my mind every day, every minute and every second. It's my feeling. My everything. My perspective to everything is in Chinese. Because Chinese is the language that I like to choose to think my feelings. Maybe because of that, I maintain Chinese.

For Chinese, I think I have a really strong foundation to it, whereas my English has a kind of little holes in it. Not stable. You know. My Chinese is well packed, solid right there. I have the basics. Maybe not as high as a pyramid. Not at the top, but it's very solid. It doesn't collapse. My vocabulary grows too.

Probably when I was young, these words were already there in my mind. But I was not able to use them. And because I really like certain things, and certain feeling, then you can absorb this knowledge in an unconscious way. For instance, my mom read a lot of books with me, many storybooks, and the poems from the Tang dynasty that my dad let me recite. However, at that time, everything was so simple and pure. I read Chinese, I spoke Chinese and I wrote Chinese. Whatever topic my teachers gave me, I would write about. Whatever questions others asked, I would answer. But now, I can use Chinese to express myself, to understand myself. Now I have the need to do so. Therefore, I will search in my mind for the many things that I didn't know were there. That is to say, these things have been there for a long time. But there was no need to use them. Therefore I would never have wanted to search for them. But now, I have the need to use them. So I dig for them from my mind. When I write my journal in Chinese, I always ponder a lot on wording, structure and style to decide which ones would express the feelings in my inner heart more effectively, more clearly and more deeply. I also think a lot in choosing the characters or phrases, and the location of these words in order to transmit my feelings to the paper in a more powerful and truly illustrating way.

With these needs, I am eager to read others' works to see how others express themselves. Then I absorb the words unconsciously.

But there are many little holes in my English. If there is trouble in that hole, it can shake. I don't feel comfortable with English. I don't feel confident. I don't feel like I can express myself the best in English.

When I read Chinese, it's like I feel it. But English to me is just like something on the paper. There is no feeling attached to this language…. To me, English is a language without feeling. But in Chinese, there is so much emotion and feeling and meaning. Chinese is everything to me. So I don't really like reading English. It could be something really beautiful, but it's really not that beautiful to me. But without it, you don't survive. It is not a language for me to use to express my real self. I can put it this way: it is a shallow language. Well… maybe because it's not my first language.

One thing that is so weird is that my Chinese reading comprehension is so good. I always got 100% on every Chinese comprehension for my Chinese test in Taiwan. But here, the comprehension of English, even though I know what is it talking about, although I understand the story perfectly, and what is going on in the story, at the end, I would still ask, "What does this girl mean when she does this?" Those meaning behind the sentence, I just can't get it. I get it in Chinese. But I just don't get it in English…. And it's not culturally related. If you ask me, "What's the symbolism of this?" I can get it in Chinese. I would give the right answer right away. But for English, I would respond like, "Is it A or B or C? Maybe it's C or D."

I don't like western culture or Caucasian culture**.** No, I don't like it. Their family culture, their style of living, well, in some ways I like it. It's so free. Whereas in Chinese, typical Chinese family, it's so tight. There are so many rules. But in Canadian families, it's so free. That leads to the problem that they don't have rules. They do whatever they like, and they are not respectful to their parents. Then trouble happens. I like their culture that way so free, but I don't like the result. So I then just go with the Chinese.

When I was in high school, at first my dad said, "You go ahead and make Canadian friends. All your friends should be Canadians. That's how you can improve your English. And you can learn their culture, what they do, what they eat, what they say, and what they think." At first, I said, "OK. OK". My dad was very strict with me! But eventually I learned that it's not possible.

Their behaviour is so childish, so brainless. That's the main reason why I don't feel comfortable with Canadians. Not because they have been mean to me or anything. I don't feel OK with their personality. To me, they are really—especially the girls—so immature. I always ask myself, "Why do they act like that?" They don't know anything but they think they know everything. They make me feel really bad. To me, they seem so cocky. I feel they look down on me. Like they say, "You look Chinese. You don't look good. We look pretty". They like to show off. They like drinking parties. I can't stand what they are

doing. I don't understand why they do that. Like how old are you? They should just learn more stuff.

I don't like their attitude. For instance, sometimes they make fun of the teachers. They look down on teachers. I said, "Is that necessary?" The teacher is there for teaching. I don't mean you have to look up to teachers, but at least you need to respect them. Not only teachers, you need to respect anybody who is younger than you are too. Sometimes when they see somebody who doesn't dress nice or dress different from them, they make fun of them. I can't understand that.

I have not exactly been made fun of, but they made me feel uncomfortable. I remember once on the school bus in junior high. I was going home. You know when you don't really speak English or when you are just from different culture. You don't know what they really mean by what they said. When they say, "Hi, what's your name?" especially in a different tone of voice. If they say, "Hi, what's your name?" of course I would say "My name is Jinhong". But when they say [raising her tone], "Hi, what's your name?" in a different tone, you don't know they are making fun of you or what…. Eh, so then all I do is keep silent, do my own stuff trying to ignore. But they would just come and said, "Hey, what's your name? Are you deaf? Can you speak?" This makes me so uncomfortable... (Long pause). You don't know what they are thinking. I just tried to avoid them as much as possible. Because I know they made me feel different. I don't want to put myself into uncomfortable situation. I don't want to take the risk. And they talked about stuff that I don't like: drinking, parties, boys, etc. I don't want to talk about these things. So they feel boring with me. Our life style is different. So our attitude towards people, school, parent, everything is so different.

In elementary, everybody was so nice. I liked all Canadians. Everybody. However, the higher level I go, the feeling of not liking Canadians increases exponentially. So I just try to avoid them as much as possible. Then my dad asked, "Do you make Canadian friends?"

Eventually I said, "You know what Dad, I'm not going to make them. I don't want to be friends with Canadians". I told him the reason and he said,

"Really? Is this true?"

And I said, "Yes, it is."

My mom believes me. Sometimes she comes and visits, and she can see what I mean. When she saw the girls in the shopping mall or on the bus, she said, "Are those girls going to the party or something?"

I just said, "They are going to school. They are all going to school."

And she said, "Oh, really? They all look like they are going to a party."

You know, they don't act their age. My parents still don't understand me but they can see where I get this idea.

Basically I don't think I'm a Canadian. In what way I am Canadian? First of all, I don't look like a Canadian. That's for sure. And I don't want to act like them. I don't like their "whatever." I don't like their culture. I think they don't really have a culture. So I don't see how to be a Canadian. If you ask how to be a Canadian, how are you going to answer that? If you ask how do you be a Chinese? Well, first of all, you be a Chinese by studying hard. You respect your parents. You dress conservatively. You don't show your butt. You don't show your chest. That's how you be a Chinese. But how do you describe to be a Canadian? You don't know how. So basically I don't think I'm a Canadian.

I started to head towards Asian when I was in elementary school. I met my first good friend, also Chinese, in elementary school. Although the other Canadians were nice to me, they were just Hi-how-are-you? friends. And now, I think all my friends are Asians. No Canadians. But lots of my friends are from other countries like Germany, one is from Russia; you know, people who are also immigrants but not totally white, like cold white-washed, who still have their original personality. Those people I hang out with more. They are just so quiet. They don't know anything yet. But it takes time, which I understand because I walked this road before myself. I've been down this road myself. So I can understand why they are the way they are right now. I take on more like a leadership role. They follow me. When they have a question, they ask me. If you need help, I'm here.

We minorities should have all the rights the majority has. There is no reason for us not to have the rights, because we are all humans, aren't we? But we don't because we are the minorities. We can't do anything about it. The fact is that minorities don't have all the rights compared to the majority. You just have to accept that. Because there is just not enough people to change that. You know, so many of my friends say that the Canadians are being so mean to them. But they don't do anything about it. And I say, "What? Just if you stare at me and I will stare at you back. Even though if you think I'm so ugly like a geek or whatever, I don't care. I stare at you back." But I try not to because you know they have their friends. What if they gang up on me? My friends are not going to stand up for me because we are the weaker side. They are the stronger side. So I'm trying to avoid them. I got this idea from general, social, daily lives. Day after day, people around me, things around me are changing bit by bit as time goes on. At first, I thought I could do something about it. But in the end, I found that I could do nothing but shedding endless tears and having pain in my heart. If everything has been managed by the *shangtian* (God), how could I have any power to change anything? I have been shedding tears for a long time, but nobody noticed anything. I know crying is a stupid thing to do right now but what else can I, a powerless individual do!!??

The world possesses me, but I don't possess the world. Reality is reality. A dream can always be a dream. The two can never be replaced. Reality is not a dream and a dream will never be reality. How can I find the place of mine and the role of mine? I don't know. I'm not clear, I can't figure it out. I have nowhere to find. I am not on the chessboard. I'm only a redundant extra chess piece outside of the chessboard. I can only watch the chess game being played on the board, stupefying. I can't be in the game. I'm not allowed to get in. All the important steps, of course, I'm excluded to take any of them. I'm only an extra chess piece. Yet this extra chess piece also has an original place to come from. She should also possess a seat although she is absent. Right? However, the chess piece cannot find the chessboard. Neither can the chessboard discover the chess piece which is searching for the chessboard.

I am more like a thinking person. That's why most of my friends think I'm weird. I don't like parties. I don't like going to drinking parties. On their 18th birthday, all people go to bars. But I never want to go. It's not that I don't like it, but I don't crave for that. So that's why sometimes I find my friends' conversation so boring. That's why sometimes my friends said to me, "Are you sick?" I said, "No, I'm fine." And they say, "Are you mad at us? " I say, "No, I'm fine." They say, "You are not talking". I say, "There is nothing to talk about. Your conversation is so shallow." I find it boring with them. And they find me boring too. They say, "Why are we talking about this stuff?" while I think this stuff is the meaningful stuff. They are true materials. This is my personality. I feel lonely and helpless.

I want to be a writer. No, more of a teacher, I would say, because I really love children. I want to be a Chinese teacher. And I think there is a huge possibility. Right now I'm heading down dentistry. But that's not where my passion really is. I like interactions with humans. And Chinese is something I really really enjoy. So I think there is a huge possibility. And I have a lot of patience. Even with a two-year-old, I can totally play those tiny toys with him. And I wouldn't even feel bored. It's like so fun.

I think being bilingual gives a better understanding of everything. Really everything! It gives you a different perspective to the way you look at things, to the way you think about things, to the way you do things. And every time you look at something, you can look through different perspectives. And then it gives you a whole different meaning to really deep kind of things. It's like you can really have a better meaning of who you are, why you are here and like all those kind of deep questions…. But monolinguals have big limitation as persons.

I have friends who lost their Chinese. I think they lost everything. To me, it's just a shame! It's a shame to lose a language, especially your mother language. And especially Chinese. It's just a shame!! My brother has a severe loss too. But I never talk about this with my brother. I know he doesn't care.

I don't want to lose my Chinese. However, although I like writing in Chinese, I almost stopped writing after I got to the university. I have no time to

write. There are so many exams and papers to write. There is just no time for Chinese. I feel sorry about this. But what can I do? And when I talk to my dad, I only use very ordinary language, such as "Dinner is ready," "I'll come back early." I don't express my feelings. Of course when something you don't use quite often, then you don't know how to use them any more. For some words, I forgot [how to] make them up, what the shape is. I can think what goes in there but I can maybe figure out like one-third of it. Maybe two-thirds of it I forgot. But mostly I remember. Just some complicated letters [characters]. Like how do you write "龜" (turtle). Before I knew how to write it. But now I don't. But if you give me "turtle" in writing, I know that's turtle. I can still recognize it. Just not be able to write it.

I think in maintaining L1, parents play a very important role. Because parents play key roles in kids' life. If kids don't have the passion for learning Chinese, no matter how you force them, nothing is going in. It's just like if you give something such as a plate of food unknown to me, of course I wouldn't eat it. It's like I don't know what's in it. Right? But if I taste it and then, "Ah, that tastes good", then I taste more. And that is good and I eat faster. Eventually I like the food. So I think a language is really important to a person. But you need to introduce them in the beginning. That's when they learn the best. Because at that time, their mind is empty. They are free of other opinions. They are free of everything. They are just like a piece of white [blank] paper that you can just write on. If it's already full of stuff, there is hardly any space to fit in anything anymore. So if I ever had a kid, in the beginning, I would introduce the language to them: Chinese**.** I wouldn't introduce English, at least not as strongly because they already have English outside. So at home, I will do Chinese. They have English sources outside. And in school, teachers teach them. So it will be two languages going in at the same time, step by step, step by step.

Summary of Jinhong's narratives

In this chapter, Jinhong's story was told in her voice describing her linguistic and cultural experience after she came to Canada. From her story, it can

be seen that L1 literacy practice at home is possible and effective for children's L1 maintenance. Jinhong is very successful in her L1 maintenance, and her enthusiasm and commitment in developing L1 is also high and strong. However, although her English developed over the years, she still has not found her own place in the dominant environment. She still considers herself as an outsider. Her case shows a typical example of the second group of immigrants mentioned by Yoshizawa Meaders (Prescher, 2007) who are not ready to make necessary changes in the new country. Reasons for such identity formation and consequences caused by this will be discussed in detail in chapter eight. In the next chapter, Datong will tell his story.

CHAPTER SEVEN

DATONG: I WANT TO BE A LANGUAGE TEACHER, ENGLISH OR CHINESE

The interview context

Datong was the third person and the first male participant I interviewed. He is one of those few immigrant children from mainland China whose parents decided to enrol their children in an English-Chinese bilingual program in Edmonton.[1]

I had never met Datong before the interview. However, I had heard about him and his story much earlier: Datong's Chinese-language background is different from that of the other students in the bilingual program. In China, the simplified version of Chinese characters and Pinyin (a phonetic system using roman letters) are used. At the time when Datong was in the bilingual program, only the traditional version of Chinese characters and *Zhuyinfuhao* (another phonetic system using special symbols) were used in all English-Chinese bilingual schools. Because of this, Datong was often the main topic of discussion for many Chinese teachers during the period of reform in the bilingual program in Edmonton: teachers and administrators debated if simplified characters should be marked as "wrong", if grades should be deducted for them, and if it would be fair to students like Datong with a different linguistic background if this grade-deduction policy was introduced.

[1] With the encouragement of the federal Multiculturalism and Multilingualism Policy, seeing minority ethnic languages being taught in Ukrainian, Cree, Arabic, Hebrew and German bilingual programs in the city in 1980, the Chinese Graduate Students' Association of Edmonton proposed to the provincial government the establishment of an English-Mandarin program in Edmonton after holding community meetings to assess public demand. In 1982, an experimental English-Mandarin (Mandarin) language program was introduced at the kindergarten level in Edmonton Public Schools. In 1983, approval for full implementation at the elementary level was received from the Edmonton Public School Board. The success of this initiative led to the formal establishment of the English-Mandarin bilingual program in the same year. Each subsequent year led to the establishment of a higher grade (Grades 1 to 6). The Chinese Language Arts component was approved by the Edmonton Public School Board in January 1989 to the Junior High level (Grades 7 to 9). In February 1992, Senior High levels (Grades 10 to 12) satisfying International Baccalaureate (I.B.) standards for Mandarin were approved. From the original thirty-three students in 1983, the program has blossomed to almost 2000, from two elementary schools to a dozen schools today that include five elementary, four junior high, and three senior high locations (E.C.B.E.A., 2009; Wong, 2007).

I have known Datong's father for more than 15 years. He is a very talented musician who plays the Chinese instrument *Erhu* extremely well. However, prior to this study we had never talked about Datong's Chinese language study.

One day a friend of mine gave me Datong's number, saying that he might meet all of the established parameters for participation in my study. And the next day, I ran into Datong's parents at a supermarket. After exchanging greetings, I brought up my research project and stated that I might ask their son to participate if he were willing. His father was very supportive. He said that he was going to talk to Datong when they got home and that he would let me know whether his son was willing to participate.

The next morning the phone rang and it was Datong's father. He told me that Datong was willing to be involved and that I could visit him at one o'clock. I was very glad to hear this. I packed up my things and drove over right away; it was one day before Christmas in 2006.

When I knocked on the door, I felt a little guilty to be interviewing Datong at this time of the year. But Datong's father welcomed me with a smile and introduced Datong to me: "Xie laoshi hao" (Hi, Teacher Xie). Datong greeted me in Chinese very politely, as if I were his teacher. After that, Datong and I sat at the dining table.

Interviewing Datong was completely different from interviewing Yan and Jinhong. With the girls, each interview question led easily to additional opinions and stories. Datong was not as conversational or outgoing, but he was very serious about the interview. He was willing and ready to answer all of my questions. He considered the interview to be helpful to me as an educator.

As a researcher, I had different feelings about Datong during the first two interviews. In the first interview I was a little worried because Datong's volume was too low. I could hardly hear what he was saying. Many times his voice was so soft that I had to ask him to repeat his responses. In addition to his low voice, his answers were always short. Many of his answers were just one or two words. He often used "Yeah, kind of" or "Not really" as responses to my questions. Sometimes he only nodded or shook his head instead of saying anything. Seldom

were there times when he added, on his own initiative, further explanations or stories to his short answers, unless I prodded with more specific questions on the same topic. Many times I had to "use probes to obtain additional information" (Creswell, 2005, p. 218). I found that the most striking feature of his speaking was his chuckle; he chuckled a lot before and after his utterances. The other key characteristic of his language was his extensive use of those *uncertain* phrases such as "I guess", "Yeah, kind of", or "Not really". During the first interview, I had the impression that Datong was very introverted. In order to go deeper into our interviews and to collect data on his linguistic competence, I had to find an alternative way of understanding him. During the first interview I learned that Datong is also a writer. He likes to write both in English and in Chinese. Therefore, at the end of the first interview I asked Datong whether he could let me read some of his writings. Without any hesitation he agreed, with the condition that I would not share any of them without permission.

I was very lucky to have had the chance to read Datong's writings. This is not only because I was able to retrieve linguistic data from his English and Chinese writings, but also because his writing helped me as a researcher to explore additional meaningful aspects that he might not use to express himself while talking to me. I was able to walk into his inner world and gain a deeper understanding of his feelings on a variety of different things and experiences. I really appreciate Datong's generosity, because he had never shared his writings with anybody else, not even his parents. Yet, he shared those writings with me. Because I read his writings, I gained a much better comprehension of the context of my interviews and research with Datong. These writings enabled me to get better acquainted with this participant and to understand him much better than I did before the second and third interviews. It certainly helped me to understand and to analyze the speech data that I collected from the three interviews.

Before the interviews I was predominantly interested in Datong's life and linguistic stories on the topic of language maintenance and loss. I thought the stories might be interesting to me for two reasons. First, Datong was the only participant that I interviewed who went to a public English-Chinese bilingual

school. The other two girls had never formally continued their Chinese studies after coming to Canada. I wondered to what extent going to a bilingual school might help immigrant children to maintain and develop their first language and at the same time to acquire their second language English. Second, as a teacher in a bilingual classroom, I wondered what pedagogical practices we might apply to help and support our children's maintenance of their first language, to develop these children into comparatively balanced bilinguals, and to foster their appreciation of and identification with both cultures. Datong helped me to find the answers.

The study of Datong's case lasted two years. After the first interviews, I kept in contact with Datong and his family. We discussed topics like education and his writings on the phone and through email. He told me that education and psychology are very important to him because through them, individuals can have wide and deep impact on others. As he mentioned, he transferred from science into education. Being a language teacher is his choice of career.

Datong's stories

Hi, I am Datong. I am from China. I was born in Sha Shi, Yi Chang, Hubei province in China in 1985. I came to Canada in grade five with my mother to join my dad. At that time, my dad was already in Edmonton. I graduated from high school in 2004 and became a student at the U of A in science. In 2006, I transferred to the faculty of Education.

I spent my childhood in Yichang, China. That is my first home. It's the place I love most. There I left so many lovely memories. I still remember the road to school and the laughter me and my friends left on the road everyday. During the first years I was in Canada, I always dreamed about the road and the laughter. I missed the place very much. At that time, I always thought that I would rather spend my whole life in Yichang than in Edmonton. I have never told anyone else that I thought this. Whenever people asked me the same question about "Which one is better, Yichang or Edmonton?", my answer always was: "They are about

the same." I said so only because I didn't want my parents to feel bad about their choice.

I speak my dialect [Yi Chang dialect] and Putonghua [Mandarin]. At home, I speak the Yichang dialect with my parents and my grandparents. They don't speak Putonghua to me. When I talk to other people, I use Mandarin. I started learning Mandarin when I began elementary. In China, we didn't use dialect at school. To teachers and classmates, we speak Putonghua, the standard Chinese, or Mandarin as it is called here in North America. To friends, sometimes in our own dialect, sometimes we use Putonghua. Mandarin is very useful since it generalizes. As you know, so many people in China speak different dialects. Therefore having a standard or official Chinese spoken language is important for people to communicate with each other and to understand each other. I learned Mandarin at school and use Mandarin too at school although I feel more comfortable when I speak my dialect. It sounds faster and easier to understand. I can get the point faster.

Chinese is my own language which makes me feel good! When I first came here, I read a lot in Chinese, not the newspapers, but Jin Yong [a famous Chinese Wuxia, or martial arts and chivalry writer]. I like Jin Yong. I like reading his books and I read a lot of his books. I call myself a big fan of Jin Yong, and he is my favourite writer. I like his books because I found Daoism in his books. Daoism is a variety of related philosophical traditions and concepts generally focused on nature, and human-nature relationships. It's how you live your life. Reading Jin's books, I found so many ways to understand Daoism through different stories in his series novels. I respect Daoism. I try to follow it.

Since I hooked up with Jin's Wuxia novels after I came to Canada, I always asked my dad to borrow Jin's books from public libraries. My favourite is his Tian Long Ba Bu series. I don't mind that these books from the library are in the traditional version of characters and in a semi-classic/semi-modern style. I read them anyway. I learned the morals from the books. If I don't understand some of the words, I just guess, because I was so attracted by the style, the story

line, the depth and richness of his books. I was thrilled with the stories of powerful romantic swordsmen and their adventures to rid evil.

Unfortunately I don't read them anymore now. I just can't get hold of them. I have read all of his works in the U of A library and in the public libraries. I have already read the ones I could get, all of them. I want to read more. But there is no way to get more. Several times, I could only read my favourite books again and again. And when I finished reading all of Jin's novels, I switched to other Wuxia authors including Gu Long. The reading of Wuxia novels helped me in building my Chinese vocabulary and in understanding traditional Chinese culture. Reading Jin Yong was very helpful in maintaining my Chinese. I picked up different Chinese expressions from his books. My vocabulary increased a lot through the reading.

In addition to reading Wuxia novels, I also go on-line and read Chinese forums on occasion, although I do not communicate with people on-line. I just keep quiet because I think some of the discussions are really rough.

As soon as I got here in Canada, my parents sent me to T elementary school which is an English-Chinese bilingual school. There were about thirty students in my class. I spoke Mandarin to my classmates most of the time. They could understand me. I guess this helped a lot. I was not that shocked by the completely new environment.

Culture shock? Yes. Attending Canadian school was different from attending schools in China. There is reduced stress levels in schools here compared with the heavy burden of study in China. You don't get homework so much. However, the relationship among students is not as close as in China. The teaching styles are different too. Very different. I guess it's a kind of cultural difference. China is much more strict. They are on your back 24-7. They try to make you learn. Over here it is more relaxed. They just give you the homework and expect you to do everything yourself. I was not really used to this kind of teaching. I grew up in the other one. I don't know what would happen if I stayed in China. I don't know which one is better. But I like the Canadian one.

Language shock? Not that bad. At least half of the day I could be with my Chinese teacher and my classmates who could understand me. Although these kids' Mandarin was not as good as mine, they could understand what I said to them easily. They were trying to learn how to speak the language, how to read and write the language. And most of them continued their Mandarin study in junior high and senior high. At school, I also had my Chinese teacher who was there all the time to help me. In addition to that, my school also provided all kinds of Chinese cultural activities. Kids came to school not only for learning Chinese language, they also participate in these entertaining cultural activities. During recess, I played Chinese chess with my classmates. During traditional Chinese holidays, such as the Chinese New Year and the Mid-Autumn Festival, the whole school celebrated them with Chinese songs, lion dances and Kunfu shows. Not only the bilingual kids, but also the mainstream kids were excited about these events. Parents were invited to school to watch the performance as well. When I was in high school, there was a triple C club. The three Cs stand for: Chinese Culture Club. We had a dragon dance team in the club. They were the best dragon dance team in Edmonton. I did not dance with them. I like watching their dance. Sometimes I was asked to do the calligraphy. I wrote big characters indicating "good luck" "happiness" on red paper with brush pen. Girls will put them up on the walls in our classroom and sometimes in the big gym when we hold Chinese New Year Celebration Party in the gym. They performed the famous dragon dance, with other Chinese folk dances and yoyo performance. Elementary schools and junior high schools were invited to watch the show.

In addition to these culture activities, Chinese value, Chinese moral, traditions, literature and even Chinese philosophy were also taught or introduced in this bilingual program. Students had many opportunities to access or be exposed to Chinese culture.

In my Chinese class in high school, several times I had chances to do presentations on one of my favorite Chinese classic novels: The Three Kingdoms. I got high marks on these presentations. We also learned modern Chinese

literature such as "The Tea House" by Laoshe[1] and watched Chinese movies. I guess all these provided a supportive environment for my L1 maintenance.

English is my first foreign language. I started learning English in a weekend school in China. Every week, I spent two hours there. I stayed in this school for only two months. We didn't have textbooks, just teachers' talk. We learned basic words. The teachers used Mandarin to teach. We had to remember all the alphabets. We did dictation on simple words like "cat". When I first came here, my English was very limited. I just knew some words. It's really really basic. Although I can say hello, I could not really make conversation. Only the basic greeting: "Hello, how are you?"

When we first came here, my parents brought me to many family parties. We have two family relatives here in Edmonton. They all speak Mandarin. When I went to the parties, I spoke English to the kids. At that time, my English was not good enough to communicate with the kids. But I tried to speak English with them. I was trying to learn English. I wanted to learn English as fast as possible. I knew that without English, there would be a lot of obstacles in my future life. However, when I first went to school, students sometimes called me names. I got angry and called back. I fought a lot in elementary. When I fought, there was nothing much in my mind. I was just angry. I didn't tell my parents about this. Because I didn't want to get in trouble and stuff. This also had a bad impact on my attitude towards English language. Because of their hostility, I started holding a very negative attitude toward the English language. Although I knew the fact that there would be big obstacles ahead of me if I didn't grasp English as fast as possible, I didn't want to learn English.

At this time, I had my homeroom teacher Mr. G who helped me a lot. Mr. G was my Mandarin language teacher. He was very nice to me. When I felt frustrated and confused, he was always there to help. He understood my situation, my alienation, my loneliness and my fear. He told me how to socialize with the other kids and asked me not to be angry and sad. He showed me how to make

[1] A novelist and dramatist who was one of the most significant writers of 20th century Chinese literature. He was best known for his novel *Rickshaw Boy* and the play *Tea House* .

friends in this strange new learning environment. We could talk about everything in Mandarin. I felt at home when I was with him at school. Then I started making friends. When I made friends, at first I spoke Mandarin only. They understood what I said. Usually, when they talked to me, they would use English. If I could not understand what they were saying, they might try to speak to me in Chinese. Later, we went to the same junior high and high school that provided Chinese program. Some of my elementary classmates stay friends with me after all these years.

My parents wanted me to go to ESL class to learn English first instead of going to the mainstream class. Because in the mainstream, the English half, they teach more than just English. They teach math and other stuff. But if I go to the ESL, I just keep on pounding with my English. I didn't learn math in elementary. What I had learned in China was far advanced than what they were learning in grade six. I started learning math in Canada only in junior high.

There were about seven students in my ESL class. They were from around different places. One was from Brunei. Two from Hong Kong. Most of them spoke Cantonese. I could understand them. But I cannot speak Cantonese. At that time, teachers didn't give me marks at school. They always tried to be nice to me and to encourage me. It was very helpful. I had my ESL teacher, Miss M. who helped me with my English. When the others were in the class, I was pulled out. She taught me grammar, sentence structure, writing essays, very basic writings. The homework was to remember vocabulary and work on grammar. She asked us to write stories, creative stories. Sometimes she asked us to write diaries. I was not good at writing at that time. And vocabulary was the most difficult part in my English study. With practice I got better in grammar. And my speaking became OK. After one year in elementary, I could communicate in English with others already. My listening comprehension was all right too. I could even understand movies. I watched TV a lot, cartoons and story movies. Miss M always showed us movies. When we watched movies, we were eating popcorn and having fun.

I never went to the mainstream English classes in my elementary school. I went to the English class only once. Therefore I don't really know the English

half of the school. I think I pick up language pretty fast. I am pretty strong in language generally speaking. Not long after, with the help of both English teachers like Miss. M and my Chinese teacher Mr. G, and as I made more friends, I changed my attitude toward English. I wanted to learn more to improve my English. I wanted to improve my writing skill especially. Some English literature, the really descriptive ones, I even got attracted to them and started reading them. I just kept reading them without translating into Chinese. My vocabulary is pretty good now but I always want to expand it. I am really good in grammar and I enjoy reading English poems. They sound so beautiful and expressive.

I started writing in both Chinese and English in junior high. I'm still doing it, but not that often though. Not constantly. Not everyday. I enjoy writing in both languages and it became day-to-day things. Today, I want to write everything in Chinese. OK. I'll write in Chinese. Sometimes I really want to write in English, especially in summer when I have a lot of time. I wrote a lot of journals during summer break. I don't know why I write journals. Something comes to mind and I just want to write it down. If I have time on hand, I'll go back and read them. I don't think I have any junior high stuff left though, it's so long time ago. However, writing helps me a lot in maintaining my Chinese and in developing my English. In junior high and high school Mandarin classes I did not learn very much through sentence construction as an often used class activity, because the words and phrases were too simple for me. However, the writing assignments in my Mandarin class kept me going since in the writing assignments, there was no limitation. I could do anything, write anything I wanted.

I do translating too. When my parents ask me the meaning of some words that they don't understand, I do translation for them. Basically I do a good job. When I do translation from Chinese into English, I can do better than I do from English into Chinese. I think maybe because I know more English words. When I talk about everyday things, Chinese is easier. As for those academic words, chemical terms, I don't know them in Chinese. That's why I mark Chinese-English translation higher than English into Chinese.

Right now, I am not taking any Chinese language courses at the university. I have also stopped writing in Chinese because of the lack of free time. I think my Chinese writing competence has declined a great deal since entering university. Even though I still speak Chinese at home, I feel that my L1 is slowly deteriorating or at a halt. Currently, I seldom read any Chinese literature. I have finished reading all of Jinyong's work in grade 11. After I went into the university, I found it hard to pick up and finish a long series of novel such as Gulong's. As an effort to maintain my L1, I do read Chinese magazines and short stories occasionally, however it's been a while since I have written anything in Chinese.

In regard to my Chinese loss, before I have noticed that my Mandarin has declined a little bit, in writing Chinese characters especially, because I don't write as much as I did before. But from the test you gave me, I realized that my Chinese language level has declined a lot. There are many Chinese characters that I can't remember how to write. I know the basic shape of them, but I don't remember the details inside the frames anymore. This is because of the lack of writing. I use too much computer. I should write more in hand. I realized that after I graduated from high school, my vocabulary is getting worse. I should read more. I will probably write more. I think I will.

I seriously considered taking advanced Chinese courses in the university because I would like to be a Chinese language teacher in the future. However, in university, I was not allowed to take most of the Chinese classes. They said that my Chinese is too good to be a student in those classes. Many of my high school classmates stopped learning Chinese for the same reason. The university does not know where to put us. They don't have courses for students who graduate from English-Chinese bilingual programs. But to me, learning Chinese and Chinese culture in university is important for me. I don't want to quit. It's a great part of me and I wanted to know more about the rich cultural background, the literature, philosophy, psychology, a lot of very rich stuff from China from the university courses. And I want to read books on Chinese philosophy, about Daoism in the original language, Chinese. Not the translated books on Chinese stuff. I want to

discover different areas about China. I wanted to take content courses about China taught in the Chinese language. I have great interest on this. But I could not find any course like this. It seems that they put more focus on the more basic Chinese for people who don't know any Chinese, for those beginners.

So I had to fill my credits with courses like Chinese poetry in English, and introduction to Buddhism. Surprisingly enough, I was enjoying myself in those classes because I was learning about the Chinese culture. The more I learn about it, the more I enjoy it. It's really a pity they don't offer these courses in Chinese. Maybe I will go to China to study for one year, to study Chinese and Chinese literature. I want to be a transfer student. A U-of-A transfer student. Or I will teach in China, teaching English.

After I transferred from faculty of science to education, I just took a few science courses, major in language and minor in science, because I want to be a teacher in the future, either a Mandarin teacher or an English teacher. I want to be a language arts teacher, English or Chinese. I like both of the languages. I enjoy both English literature and Chinese literature. I like them equally, movies too, because they have their own unique cultures. Actually, all of them are interesting to watch and to read. I like the action part in American movies, they are so exciting and at the same time, I like the storylines in Chinese movies, they are so beautiful.

In Canada, I guess it's a mixed culture. I like how it's mixed, because we need different people. People here have different backgrounds. They always have interesting different kinds of stories to tell. I guess I can learn more. I guess I can find myself better, because I can look through everything and understand better from different perspectives. That's why I want to be a language arts teacher, English or Chinese. I am serious about this. I made the decision by myself. I am happy that I made this decision, because I am able to. I talked to my parents about this, they all agreed. I really appreciate their support.

Being bilingual makes me feel very good since I can talk to more people and I will have more opportunities. If you have more languages, you have more job options. Right now, if I am talking about schools, or technical things, I use

English. If I am talking about everyday life, general life, Hubei dialect is more comfortable. Actually, I treat Mandarin and the dialect as the same.

As for the Chinese identity, I guess it's just who I am. The language identifies who I am. I consider myself 100% Chinese and I never had any second doubts for my Chinese heritage. Chinese language is my primary language which I always want to keep. If in the future my kids in school age, I want them to learn Chinese. I will send them to the English-Chinese bilingual program. I can't really say for how many generations I can keep it, but I'll try to the end. I think maybe I'll speak dialect at home, or I will speak Mandarin to them.

I have many friends who were born here in Canada, maybe the second or the third generation Chinese immigrants. They learned Chinese in the bilingual program. Most of them were put in the program by their parents. After graduation from high school, they stopped their Chinese learning. They speak English only again. As for these English-only people, I can't say anything about it, right? I guess everybody has his own opinions. You can't really judge them. I am cross-culturally sensitive, and I never tried to force my own beliefs onto others. But I still think if they keep their Chinese, if they could find suitable Chinese courses in university, they might still be bilingual.

My experience in junior high was hard, because I had to write everything in traditional version of Chinese characters which I hadn't learned before. I can read all the traditional, but I can't write them. This was a transition phase for me. Now the policy has changed. But at that time, the policy had not changed. Everybody had to write traditional. Well, I guess it was a kind of learning experience to me. I learned more words and I learned a bit more culture.

I think teachers can make a difference in students' lives. In elementary, I had my Mandarin teacher whom I could reach out to for help when I was confused. He always tried to help me, telling me what to do, that kind of stuff. If I had problems at school, I went to him for help. Sometimes he came to me. The more important part was that he valued my educational background. He allowed me to use simplified version of Chinese characters. So when I was in junior high, it was a big transition. I had to write traditional. Otherwise, I got mark deductions.

I tried to complain about it, but nothing happened. This lasted for three years. I also talked to my parents. They brought this to the parent-teacher meeting. They told the teacher that they wanted their son to stick to simplified. But the policy was still there. This hurts me a lot, because you know when I wrote the words, they are just in simplified. It wasn't really wrong! If I were the teacher, I would allow my students to write simplified. I would just let them do what they thought was more comfortable I guess, even if I'm supposed to teach traditional. I would try to suggest them to write traditional. Not really force them to write them. If you force it, it makes people feel bad, right?

When I was in grade 12, I had a new Chinese language teacher. Everything went well again. I enjoyed both English classes and Chinese classes. I still remember clearly that in my Chinese class, I once did a presentation on my favourite classical Chinese literature "Romance of the Three Kingdoms".[1] I got a very good mark on that. In my final IB oral exam, I did the same project. I chose the *Romance of the Three Kingdoms* as my topic because my home town Yichang is very closely related to the big events that happened during the Three Kingdoms Period[2] in Chinese history. In the IB oral exam, I talked about the troops led by Cao Cao[3] and Liu Bei[4]. I talked about the famous battles fought near my hometown and the weapons used by different generals during those battles. The whole test was recorded and sent to UK. I received full mark for the IB Advanced Chinese oral exam! Because of the extraordinary mark I got for my project, at the grad, I was awarded the "Chinese Language Achievement Scholarship." I felt so happy to get the scholarship since that means a lot to me. I think I am lucky. Only in this program could I receive such an award! For sure it is an honour for me. But

[1] *Romance of the Three Kingdoms* written by Luo Guanzhong in the 14th century, is a Chinese historical novel based upon events in the turbulent years near the end of the Han Dynasty. It is acclaimed as one of the *Four Great Classical Novels* of Chinese literature.

[2] Three Kingdoms Period: 220–265 AD.

[3] Cao Cao (155–220 AD): one of the central figures of the Three Kingdoms Period.

[4] Liu Bei (161–223 AD): a powerful warlord and the founding emperor of the State of Shu during the Three Kingdoms Period in ancient China.

it went far beyond that. When I received the scholarship presented by our principal, all my classmates, all the parents and the teachers gave me a big hand. It seems that the award helped me understand the value of what I brought from my country.

My Chinese teacher and my ESL teacher in elementary school are good consultants and mentors to me. They understood me and supported me. They know my feelings and my background. They helped me with my social and academic literacy skills. They helped me change from an angry lonely immigrant boy into an award receiver, into a high school grad, and into a university student. They are teachers who let me know the importance of keeping my Chinese and learning my English. They showed me the meaning of the honor of these two languages. They made me bilingual. I would always appreciate and remember their support, their understanding and their caring. They are role models to me if I become a teacher in the future.

After I transferred to education, I started thinking about how to be a good teacher. I realized that Canada and China, both worlds reinforce who I am: A student on the journey to becoming a teacher, English or Chinese. This helps me a lot during my student teaching practicum in two high schools.

During my first practicum, the IPT (Introductory professional term) field experiences, I taught Chinese bilingual classes and Chinese classes for beginners in a high school. In my second practicum, I taught general science in a monolingual program. At first I didn't realize that the gap between a teacher and a student was so spacious. It was really nerve racking when first I stood in front of 30 students. Then I used what I learned in the course called "Classroom Management" I took in the university. I applied the stuff in both bilingual classes and in the monolingual classes. It worked. Eventually I took control of the classroom and adapted into the role of a teacher. The initial teaching experience provided me the opportunity to begin to develop pedagogical expertise and a professional identity.

Being a student teacher in the Chinese language art class, I always encouraged those high school bilingual students to be open to the Canadian

culture. I suggested them to interact more with the students from various cultures and to understand the differences between the cultures. I also introduced some of the pop games to my students. I told them about *Dynasty Warriors*, a game based on the plot of *The Three Kingdoms* series. I also showed them how to play *Suikoden*, a game based on the plot of another most famous Chinese classic *The Water Margin.* From these games, some of my students became interested in learning Chinese history and culture. They got a better understanding of love and hate, ties of friendship, kindness and enmity, etc. in the Chinese culture. Some of them told me that they became interested in Chinese history and wanted to learn more. The pop cultures helped stimulate the students' eagerness and engagement in learning about their target language and culture. I am so happy about this.

In the monolingual program, I taught general science 10 and 20. With the new "no zero mark" policy in place, it's hard for some teachers to motivate some of the "problematic" students. Instead of criticizing them, I brought in stories after class about education in China, and ancient Chinese folklore to motivate the students about learning. I told them about Confucius and his students. I choose the stories because they outlined the traditional expectations of a student in China. I told them that about 2500 years ago, Confucius taught principles of proper conduct that embraced high ethical and moral standards. My students understood most of the stories. Some of them were very intrigued by them. They asked me a lot of questions. They wondered why these traditional expectations are still used today. I told them that Confucius teachings and wisdom became standard scholarly education in old China and became a tradition in Chinese culture. It consists of education, wisdom and ethics. And this Confucian tradition persists in China, even today. They loved my stories. And they were fascinated by the differences between China and Canada. Through the stories, I showed them my expectations and gave them my support. I built good relations with them. It seemed so fast for my practicum to end. I have had so much joy with my students, as both a Chinese language teacher in the bilingual program and as science teacher in the monolingual program. Many happy moments, exiting moments, and

some embarrassing moments! After the practicum, I have developed my interest into becoming a language teacher,

What I learned most from the practicum is that language is not just a fixed form. It is also a tool. And language teaching, especially L2 teaching is not just grammar texts, or teachers' monologue instruction. It is a meaningful relation between language and people. It is a kind of classroom dialogue between teachers and students. It is a culture exchange and sharing. It is the experience of learning related to meaningful and profound change in the lives of the learners. You help your students to see a new culture. You lead them to a wider world. I definitely felt connected to them and we enjoyed the classes together through exchange and sharing. As what my Chinese teacher and my ESL teacher in elementary school did for me, I will do the same for my future students. I also learned that there are many individual differences in a classroom, and as a teacher, it is our goal and our job to accommodate the best we can for the students, to provide an enjoyable and welcoming learning environment for them.

Education is very important because an individual can have a wide and deep impact on others. With my career goal set, I think I will be bridging the eastern and western worlds through my efforts in teaching.

Summary of Datong's narratives

In this chapter, Datong's story was told in his voice describing his linguistic and culture experiences after he came to Canada. From his story, and in regard to the findings on his L1 maintenance in L1 and acquisition in L2, it is depicted that the social and academic assets formed in the Chinese-English bilingual program in EPSB have brought positive impact on and are beneficial to Datong in many different aspects: 1) L1 maintenance and development, 2) L2 acquisition, 3) identity formation and 4) the acculturation process. From his social and linguistic experience, it could also be seen that natural L1 input and practice at home plus planned formal L1 education at school would lead to a desirable L1 literacy maintenance. To some degree, Datong's case provides a typical example of the third group of immigrants mentioned by Yoshizawa Meaders (Prescher,

2007) who make themselves "respectful and open to the new environment" (Prescher, 2007, p.192) while enjoying retaining their own cultural identity. Reasons for such identity formation and benefits caused by such formation will be discussed in detail in chapter eight.

In the next chapter, issues and themes from both linguistic findings discussed in chapter 4 and from the participants' personal narratives presented in chapters 5, 6 and 7 will be discussed comparatively.

CHAPTER EIGHT
L1 MAINTENANCE AND ATTRITION: HOW AND WHY

In the previous three chapters, through the windows of the voices of three young adults from China, this study addressed their perceptions of the internal and external reasons for their current proficiency in Mandarin. The participants' attitudes towards their heritage language use and incidents that led to their identity formation were outlined. This section seeks to explore through a cross case analysis the relevant socio-cultural and psychological factors influencing participants' L1 maintenance and attrition. The data show a diverse range of experiences during the years of the participants' life transition in Canada, and L1 maintenance and attrition from a social psychological perspective. Although it is difficult to generalize about L1 maintenance and attrition in young adults from China based on such a small number of participants, much can be said about their personal accounts in relation to the literature presented in chapters 2.

Although there are some commonalities among the three participants, it was mostly the differences that are salient and which invited in-depth analysis. As discussed in Chapter 4, over the years of English immersion in Canada, the English ability of the three participants developed progressively and at a fast pace. This rate of acquisition in English confirms the trend of the L2 development of young immigrants noted by many researchers. As for their heritage language maintenance, although the three participants have all experienced some L1 attrition, the degree of attrition is significantly different. Yan showed more attrition while Jinhong and Datong showed less. In certain L1 skills, such as vocabulary and writing skills, Jinhong and Datong even showed growth. The reason(s) for these differences emerged through careful comparisons of the three individuals' self perceptions of their language learning and cultural experiences. The socio-cultural and psychological factors the participants felt affected their L1 maintenance and attrition fell into the following themes:

1) Linguistic and social environment in the school setting

2) Exposure to L1 and opportunities of L1 use

3) Attitude towards maintaining L1 and losing L1

4) Parents' role

5) Identity formation

Linguistic and social environment in school setting

One of the most important factors mentioned by the three participants for their L1 attrition is the linguistic and social environment in their school settings. Being new immigrants in an English-speaking country, they needed to learn English in order to integrate into the larger community. All three participants, whether in ESL classes (Jinhong and Datong) or in mainstream classes (Yan), recognized that as children without English, they would not be able to participate in the English-speaking world. They were all very well aware of the vital importance of mastering English as quickly as possible. Good English was, to them, a key to academic success and to being accepted by mainstream society. Therefore, all three participants worked very hard to learn English at school.

However, since the three were schooled in different programs, there were differences across the participants in terms of the degree of English dominance power, or the powerful pull of English at school, which affected their L1 maintenance, especially in their initial years in Canada.

In Yan's case, she encountered strong assimilative pressure at school, almost as soon as she landed in Canada. Her case confirms the findings of many researchers (Ramires, 2000; Soltero, 2004; Soto, 1997; Toohey, 2005; Tse, 2001; Wong-Fillmore, 1991, 2000, Zhang, 2008) that in North America, until recently there has been a lack of understanding regarding bilingualism and the importance of maintaining minority languages. As a nation, the Canadian language policy is different from that of the US which "has emphasized language shift and pressured the immigrant children to assimilate into the mainstream langue and culture as soon as possible" (Zhang, 2008, p. 5). However, Yan's story confirms the findings of some researchers (Kouritzin, 1999; Li, 2002; Lowe, 2005) that in Canada there still exists the practice of assimilative pressure in some mainstream

monolingual school settings.

To Yan, the experience of being pulled out of her age group by the school administration and being placed in a lower grade because of her lack of English was hurtful and made her "subject to degradation" (Toohey, 2005, p.12). The position she was offered in her school community were "subordinate to that of other children" (Toohey, 2005, p.12) and this position had a negative impact on her. As Andersen (1982) suggested: "The apparent inadequacies of certain pidgin languages convince the linguistically naïve person that the user of these languages is also inadequate" (p.111). Yan's inadequate ability to express herself in English was viewed by school administrators and teachers as a personal inadequacy and as a handicap. Her speaking Mandarin with a Chinese friend at school was viewed as inappropriate conduct that needed to be dealt with through a parent-teacher conference. The message the school delivered to Yan was that her previous educational background in China was not only useless and of no value, but it was also related to misbehavior. The staff at Yan's school viewed bilingualism as a typical "language-as-problem" orientation mentioned by Ruiz in 1984.

Since acceptance is a powerful feeling that can alter a child's state of mind towards his/her own culture, public opinion could make a child less responsive to his/her native language (Reisz, 2001). Yan's natural reaction to this condition was to make an effort to transition from her mother tongue to mainstream English as quickly as possible. To Yan, learning English meant everything because being an outsider was painful, especially for children of her age. School was a large part in Yan's life and "doing well at school" has always been emphasized as the most important values in Chinese culture. In addition, peer group pressure is an important influence on a child's psyche (Harris, 2009). Acceptance is a powerful feeling that can alter a child's state of mind (Reisz, 2001). Although Mandarin was the language she had been using in all her previous life and the one spoken in her family, not to use Mandarin with her classmates at school and with her parents at home was a special requirement imposed by her teacher and the principal. Yan thus had to confront a social environment that devalued her first language and regarded the use of L1 at school as problematic. From such a view she learned

that "in the social world of school, English is the only language that is acceptable" (Wong-Fillmore, 2000, p.208). The cultural knowledge and first language (L1) linguistic abilities that Yan and her friends brought to school "have little instructional relevance" (Cummins, 2009, p. 262).

Gaining mainstream acceptance, both from her age group and the teachers and the principal, therefore became Yan's top priority. Baker (2002) argues:

> Suppression of language minorities, particularly by the school system, may be seen as economic, social and cultural wastage. Instead, such languages are a natural resource that can be exploited for cultural, spiritual and educational growth as well as for economic, commercial and political gain. (2002, p. 374)

Although there does not appear to have been an "ethnic evasion" (Tse, 1998, 2001)[1] or "language rejection" (Hinton, 2009) phenomenon in Yan's case, the psychological stigma she experienced at the onset of her schooling in Canada must have had a negative effect on her interest in and efforts to maintain and develop her heritage language: She lost interest in maintaining her L1. She stopped expressing herself in any written form in Mandarin. She felt embarrassed about the food her mother cooked and the clothes she brought from China. In the process of her acculturation, she was torn between the cultural values at home and those of the school which represented the host country. Such school practice may have taught Yan, as Toohey (2005) points out: "to limit her attempt to appropriate the linguistic as well as other resources of her community" (p.15).

Unlike Datong who had teachers as consultants to provide help when he felt confused and frustrated, Yan had no one to turn to in choosing between the two different cultures and different languages. She was on her own. Yan's stories suggest that there are hidden assumptions in the decisions made by her school in which their experience and feelings have been somehow less important than assimilating as soon as possible in the dominant society.

[1] Tse (1998) notes that some language minority group members go through a stage in which the desire to integrate into the target culture is so strong that there is apathy toward or even rejection of the heritage culture and language. Tse refers to this stage as Ethnic Ambivalence or Ethnic Evasion.

After reading Yan's stories, it is not hard to explain the linguistic findings discussed in Chapter 4: among the three participants, Yan's L1 competence is the least well developed. It might be safe to assume that the linguistic and social environment in Yan's school setting, through peer pressure and school misconception, had a negative impact on her L1 maintenance and attrition: for seven years, she paid no attention to her L1.

Jinhong's case is different. She did not have as much pressure to speak English exclusively only in elementary school as Yan did, but her father demanded that she speak English only outside of the house. To her, learning English involved "a certain 'urgency', in the sense that the language is necessary to sustain basic necessities" (Noels, 2009, p. 298). Her L2 English study was very utilitarian focused. In her high school community, she experienced some discriminatory encounters from the "higher identity positioned" mainstream girls. She was made to feel "different" and "subordinate," and her accent or even silence was ridiculed. Yet again, she was not able to receive any help or support from her fellow immigrant friends or from teachers as Datong did in the same situation.

In addition to going to regular school, Jinhong also went to a weekend Mandarin class run by a church in the Chinese community to maintain her language skills in Mandarin. She enjoyed this very much. However, like weekend Chinese schools which are characterized by insufficient funding, out-of-date teaching practices, lack of age/level appropriate tasks (He, 2008; G. Li, 2006; M, Li, 2005; Xiao, 2008; Zhang, 2008), children in her class had difficulty learning Mandarin in this church, and the Mandarin class closed eventually because of lack of students. Although Jinhong could not continue her Mandarin study which she enjoyed so much and which helped enhance her self-confidence as a newcomer, it helped her to some degree keep her interest in L1 maintenance.

Her high school experience left a negative impression on her. The inferior status of immigrant visible minorities in the school setting and the strong pull of western culture made her feel frustrated and stressed. Because Jinhong's father constantly demanded that she make only "Canadian friends" with whom she could

practice English, her belief was strengthened that knowing English and assimilating into Canadian society would bring prestige and acceptance in society. She definitely felt the "urgency" of learning English. However, the reality of being rejected by her mainstream school classmates made it impossible for her to satisfy her father's expectations. She felt friendless, helpless, and, like Yan, had to deal with everything on her own. She had no one to turn to for help. Noels (2009) points: "This utilitarian focus (of learning L2), possibly combined with discrimination encounters with the target language community, can potentially undermine the learner's desire to engage in a more personal way with that community" (p.298). This is exactly what happened to Jinhong who had no interest in studying English from other than a utilitarian focus. Ogbu (1988) suggests that "subordinate minorities usually react to their subordination and exploitation by forming ambivalent or oppositional identities as well as oppositional cultural frames of reference" (p.176). This is exactly what Jinhong did. Being a child raised in the Chinese culture in which Confucius ideology on education is the root, she did not resist by "not learning" what the schools taught; in fact, her marks in school were always good. Instead, on the one hand, she chose to develop an attitude of belittling the dominant culture: "I think they (Canadians) don't really have a culture" (English interview transcript, 2005) and on the other hand, she chose to hide in her original culture and language, being reluctant to embrace the new culture, the new language, and the new surroundings. Deep in her mind, Jinhong was eager to cross the boundaries and function within the dominant culture as she described in her "chess board" metaphor. However, the "internal opposition and identity crisis and external opposition or peer and community pressures" (Ogbu, 1988, p. 176) made her decide not to do so.

This explains why Jinhong maintained her L1 in a competitive way while being reluctant to take on her L2 English as part of her identity. Therefore, as she described: her English has "holes" in it and was "shaky."

Unlike Yan and Jinhong, Datong went to an English-Mandarin bilingual program school. Datong's experience in the program clearly shows that the social

and academic assets formed in the Mandarin-English bilingual program in EPSB were beneficial in many respects.

First, operated by the public educational system, the bilingual, bicultural and biliteracy character of the program made the school setting a legitimate place to maintain heritage language and culture. As Harris (2009) argues, children's ideas about how to behave and their attitudes towards a language are influenced greatly by identifying with their peer group. Students in bilingual schools enjoy and take pride in learning both languages, and in keeping both cultures while at the same time studying hard to meet the requirements of the Alberta curriculum in all subjects and to be good Canadian citizens. Thus a positive learning environment for students' learning English and Mandarin, and for engaging in Canadian and Chinese cultural events was provided to Datong and his classmates.

Secondly, the bicultural environment in the Mandarin-English bilingual program helped to bridge the cultural values between home and school, between the heritage culture and host culture. It provided a cultural space in which immigrant students could adjust to the new school system. Through different cultural activities in the program, the culture conflict, culture shock and forced assimilation experienced by many young immigrants such as Yan and Jinhong were thus greatly reduced. Students in this program were not required to resist speaking their heritage language as Yan was asked to do "in order to position themselves fittingly in the English speaking world" (He, 2008, p.118). Datong, by comparison, learned how to respect and enjoy the new culture and at the same time to appreciate his original heritage. It is reasonable to assume that this environment helped Datong form and develop a balanced bicultural identity and become a bi-cultural advocate, which was shown clearly in his two practicum courses. Datong's interview data indicates that he had the strongest cultural and linguistic sensitivity, and his self-perception of his status in this multicultural environment was the most positive among the three participants. He felt culturally and linguistically comfortable among both old-generation Chinese and newly immigrated young Chinese, while Yan felt "stupid" and "embarrassed" because of

her L1 attrition. Datong was not a "redundant chess-piece outside the chess board" as Jinhong described herself. He was a full participant.

Thirdly, the staff in the bilingual program could provide support when Datong felt confused and sought help in his new educational environment in the host country. The ESL and Mandarin teaching in his school, the attitudes and practices of his teachers and administrators toward his home language, affected positively his L1 maintenance and development. The Mandarin teachers in the program were certified educators and language specialists, unlike most teachers in community weekend language schools, who are primarily volunteer parents without formal language teaching training and experience (Li, 2005; Zhang, 2008). Datong's two Mandarin teachers, one in elementary and the other in high school, in fact played important roles in helping Datong through different services: such as providing consultation to help him to build social relationships with his classmates, recognizing Datong's contribution to the class study of Chinese literature, etc. As Toohey (2001) suggests: "Recognizing the expertise of children might assist them in speaking from powerful and desirable positions with other children" (p. 267). Understanding both eastern and western cultures, the teachers could function as culture interpreters and consultants to Datong. Among the three participants, Datong is the only one who had opportunity to receive such help and consultation.

Fourthly, the bilingual program provided opportunities for Datong to establish a solid network including bilingual speakers. Datong met his bilingual classmates everyday. They all spoke or were learning to speak his mother tongue. This gave Datong opportunities to communicate and interact with his peers in the school setting using his first language, either making friends eventually or having disputes at the very beginning. The program played a critical role for Datong in building his long-lasting peer network. As Datong mentioned, many of his classmates remained friends with him through junior high and high school, even in university. At school, he did not have to avoid speaking Mandarin in order to try to fit into the environment like Jinhong, or to "be a well behaved good student" like Yan. He was encouraged to mingle with his classmates using his Mandarin. Even

though Datong was not initially good in English and not familiarized with the practice and resources in school community environments, he "was able to claim …a more powerful position when engaged in an activity" (Toohey, 2001, p.272) in which he was experienced and expert: speaking Mandarin.

Since peers have enormous influence over opinions, decisions and actions of immigrant students (Chumak-Horbatsch, 1999; Harris, 2009; Man, 2006; Toohey, 2001; 2009; Tse, 2001), the presence of Mandarin language in his school may have determined to a large extent his seeing L1 as a resource, a tool, and an asset. This may also have given Datong the opportunity to maintain positive attitudes toward his L1 and C1 while holding positive attitudes towards English and Canadian culture.

Lastly, the bilingual environment, the school ecology Datong was in and the program itself ensured that Datong's linguistic and cultural background were valued rather than devalued. He was encouraged and required to continue his L1 study, while learning and acquiring his L2, English. The additive bilingualism practice in the bilingual program provided him with positive "heritage educational support" (Man, 2006, p.222). According to Landry, Allard and Henry (1992, 1996), the presence of opportunities to use the L1 in a variety of social, cultural, economic, and political contexts, along with the language competencies of minority group members and their desire to use the language are two important aspects on which L1 use depend.

Many elements could have influenced Datong's social and linguistic behaviour. It is, however, reasonable to assume that the bilingual education program played an important part in his life culturally, psychologically and linguistically. Heritage language programs in Canada are a type of enrichment bilingual education (Cummins, 2009; Freeman, 1998; Lowe, 2005; Pufahl, Rhodes & Christian, 2000). In contrast to the "language-as-problem" orientation (Ruiz, 1984) illustrated in Yan's case, the orientation of these programs in Canada is "enrichment", "language-as-right" and "language-as-resource" (Cummins, 1995). Freeman (1998) points out that in language planning terms, these enrichment-type bilingual programs can be understood not only as examples of language acquisition

and language maintenance planning, but also as status planning. They officially designate the minority language as "a legitimate language of instruction for *language majority students*. This move functions to elevate the status of the minority language not only for the language minority students but also for language majority students at school" (Freeman, 1998, p. 6).

Datong's case supports Freeman's assertions. His experience suggests that the bilingual education programs can provide an "enrichment-purposed," culturally and linguistically inclusive environment for young Chinese immigrants. In this environment, young Chinese immigrants' L2-C2 acquisition and L1-C1 ongoing acquisition and maintenance are compatible goals recognized in the school curriculum. Here, students' L1 and C1 are not seen as disadvantages. Instead, they are valued as essential to academic success.

The participants' experiences indicate that school and classroom environments play a significant role in how young immigrant children perceive their first language and culture. Findings from the interview data suggest that genuine respect toward their cultural and linguistic backgrounds demonstrated by teachers and school administrators is extremely important to students' successful adjustment in their new learning environment. As Brown and Kysilka (2002) point out, "Effective teachers are proactive about establishing a healthy socio-emotional environment in their classrooms" (p. 101). Soto (1997) mentions, "The human relations and communicative patterns children observe in the 'world of childhood' can have a long-lasting impact on how they regard themselves, their family, and their nation" (p. 37). Cummins (2001) also argues, "human relationships are at the heart of schooling. The interactions that take place between students and teachers and among students are more central to student success than any method for teaching literacy, or science or math" (p. 1).

However, many teachers are not well prepared for teaching diverse students. The narratives of the three participants showed completely different practices with regard to immigrants' L1 and C1 in three school communities, although all of them were public schools with certified teachers and administrators, and with the same Alberta curriculum. In Yan's school community, use of her L1 was devalued by

school authorities as "misbehaviour" and "a problem," and as "barrier in becoming a full member of the society" (Lee & Oxelson, 2006, p.466). In Jinhong's high school, some "*underlife*" (Gutierrez, Rymes, & Larson, 1995, cited by Toohey, 2001), some unhealthy school discourse, was not noticed and examined and therefore no efforts were put in place to deter and deal with these issues. Different from the school settings of Yan and Jinhong, in Datong's bilingual program, both his language and heritage culture were valued and celebrated by the whole school community as resource to benefit the life the society, and he was provided opportunities to contribute his experiences and expertise to this school community and to the society.

The results of the different practices indicate that only when students' feelings, emotions, and rights to their own views and culture are taken into account and respected by teachers and administrators at school, only when a culturally and linguistically inclusive environment for young Chinese immigrants is provided, can students' bilingual and bicultural competence develop rapidly and with ease.

After examining K-12 teachers' assumptions and beliefs about heritage language maintenance through surveys and interviews, Lee and Oxelson (2006) concluded: "unless teachers believe in the benefits of bilingualism and understand the adverse effects of heritage language loss, it is unlikely that the needs of heritage language speakers will enter into the interest span of teachers" (p. 466). Therefore, to prepare our teachers to understand the role of heritage language in the lives of young immigrants, the role of teachers' attitudes towards their students' heritage culture and languages in their every day teaching practices, and the role they play in creating healthy, productive school settings, is critically important.

Exposure to L1 and opportunities to use L1

The three participants' experiences also indicate that the lack of frequent contact with Mandarin speakers and exposure to Mandarin media including Chinese books, Mandarin TV, writing in Chinese and Chinese cultural activities are factors at the socio-psychological level that influence students' use of L1 and

their language behaviour (Man, 2006). In this study, although the three participants all had a Mandarin-language and cultural environment at home, the opportunities for contact with their parents and grandparents were limited. A typical day is as Jinhong described:

I leave home early in the morning to attend class and spend the whole morning there. In the afternoon, when I get home from school, except during dinner time, I would usually sit in front of my computer doing assignments: writing papers, finishing required readings, preparing for mid-terms, or finals—all in English of course. (Mandarin interview transcript, 2003).

Over the weekends both Jinhong and Datong worked in hotel banquet sections where English was the only working language allowed according to hotel regulation. Datong says that the time he spent with his grandparents was very limited. Only during the summer did he have time to talk with his grandparents.

Yan had even more limited opportunities for exposure to her L1. When she recalled a typical day in her high school and university years in Canada, she said, "In a week, maybe I use Chinese for 2–3 hours. That's it." So other than communicating with her parents for approximately 2–3 hours a week, she "had nothing to continue the language" (English interview transcript, 2003). Two to three hours a week means less than half an hour a day. And the discourse during that limited time might possibly consist of only everyday conversational Mandarin. At the same time, Yan was being exposed to many hours of English daily, including conversational language contact with friends and classmates as well as academic English input from various textbooks and teachers' classroom instruction.

Although all three report limited use of L1 at home because of the lack of time, the participants experienced different proportions of exposure, both in limits of time and range of speakers. Yan had only one classmate who spoke Mandarin in her elementary school, and the school forbade her to speak Mandarin with this friend. Therefore, Yan's interpersonal contact with Mandarin speakers at school was almost reduced to none. Jinghong had several Mandarin speaking friends at her elementary school. She also joined the Taiwan Students' Association at university and went to Mandarin class in her church where she could find more Mandarin speakers, although the frequency and stability of contact with them was not high.

Her frequency of using L1 at school(s) was higher than Yan's. Being in the bilingual school, Datong had the highest frequency of using his L1. First, all his classmates and his Mandarin language teachers were Mandarin speakers. The frequency of contact with them was also very high: He met his Mandarin teachers and his classmates every school day. The stability of the contact was high, too. Datong stayed in the program for more than seven years. In addition to this, the bilingual program also guaranteed him with high quality contact. He received a lot of help from his Mandarin teachers: "I have my Mandarin teachers I could reach out for help when I was confused" (Mandarin interview transcript, 2006). The recognition he obtained because of his achievement in Mandarin study from the program and his school left an impressive and positive impact on him.

The three cases showed different findings in regard to contact with media. Although Yan enjoyed reading contemporary works in Chinese as a course requirement in university, she did not read Chinese that often. She seldom watched Mandarin movies except during her visits to China. Instead, English TV programs were a major part of Yan's language time-allocation. She stopped writing in Chinese, even stopped writing letters to her grandparents when she found writing Chinese became more and more difficult for her. As she lost a certain amount of her original competence in Mandarin, first, as Andersen (1982) pointed out, her inadequate linguistic performance passed unnoticed and did not interfere with communication. As she got older and her Mandarin was not reinforced, she started getting negative feedback from her conversational partners, such as extended family members in China and friends of her parents. She became less willing to communicate in Mandarin. She felt restricted by her limited vocabulary to express sophisticated meanings as Zhang (2008) mentions in her study. Therefore, it seems reasonable for Yan to make the conclusion: "I am immersed in the English environment. I cannot avoid the loss [of Chinese]" (English interview transcript, 2003). Her case may be representative and typical of many new immigrant children.

Jinhong had more contact with the media. She enjoyed reading Chinese magazines and books her father borrowed for her from the library. She enjoyed listening to the Chinese story tapes her mother bought her and kept listening to

them everyday. She kept writing her diary in Chinese because "There is so much emotion and feeling and meaning and everything in Chinese" (both Mandarin and English interview transcripts, 2003). Chinese is the language that she chooses to express her feelings. Expressing her feelings in Chinese remains very enjoyable for her. However, after she went to university, she stopped writing in Chinese because of time limitations. Therefore, the frequency and stability of contact with media were reduced.

Datong had the highest frequency of contact with the Mandarin media among the three. Before university, the situation was much better for Datong, who had the opportunity to study in a bilingual program. Mandarin for him was not only a hobby but also part of the curriculum at his school. He enjoyed writing both Chinese and English so much that he opened a journal website. Datong's reading of classic Chinese novels and writing hobbies were encouraged both at home and at school. He found such experiences enjoyable. Being in the program for more than seven years, he also had more opportunities to watch Chinese movies, listen to or learn Mandarin songs, and attend different Chinese cultural activities. This rich HL environment offered by the program through instruction, content learning, auditory and visual language materials, and the use of interaction with teachers and schoolmates were responsible for Datong's well maintained and developed L1. Although after he became a university student, his contact with the media was also reduced because of time limitations, Datong continued to have the most frequent contact with the Mandarin media and diverse Chinese cultural input among the three. In his case, home and school L1 literacy practices were closely matched. Such contact with media has helped him to be constantly exposed to different styles of Chinese literature and Chinese art. Datong's case confirms the Diverse-input Hypothesis (He, 2008) assuming that the degree of success in L1 maintenance correlates positively with the extent to which individuals have access to rich and diverse Chinese cultural input.

Practice makes perfect. It is known that oral fluency in L2 "involves the ability to rapidly retrieve from memory appropriate linguistic knowledge and routines, to perform in a smooth manner in the face of distractions and to perform

without disruption when confronted with the unexpected" (Ranta & Lyster, 2007, p. 148). The results of this study indicate that to maintain fluency in the L1, young immigrants who are immersed in an L2 environment should also be offered opportunities to maintain and develop their L1 automaticity which "requires repetition with consistent associations between stimuli and the learner's cognitive responses" (Ranta & Lyster, 2007, p. 149). Without this development, without practice, the fluency or automaticity declines as has been shown in Yan's case. However, Datong's access to a variety of L1 reading materials, resources, a wide range of classroom learning activities, teachers' feedback, and rich cultural activities in the bilingual program provided him with critical opportunities to develop and maintain fluency.

In summary, findings from the current study show that level of development, maintenance and attrition of L1 to a large degree depend on the amount of exposure to L1 and accessible opportunities to use L1. These findings are consistent with Vygotsky's (1962) social development theory and his 'zone of proximal development' (ZPD) framework which indicates that children's attempts to acquire knowledge are mediated by formal and informal interactions with members of society. The connections between people and the cultural context in which they act and interact are critical factors influencing the level and degree of L1 maintenance and attrition.

Attitudes and motivation toward maintaining and losing L1

Attitudes and beliefs toward L1 maintenance and multiculturalism are the factors at the psychological level that affect minority students' L1 use (Man, 2006).

All the three participants of the study confirmed that they hold positive attitudes towards their home language, which contributed to their Mandarin language maintenance. They did not only recognize their positive attitudes towards the Mandarin language and being bilingual, but also recognized their positive experiences of benefiting from being bilingual. These benefits included

different degrees of social and communicative advantages, cultural advantages, economic advantages, and cognitive and intellectual advantages.

First, the three participants all reported enjoying the feeling of having their L1 Mandarin available to communicate with family members and friends, and English as an L2 to use at work, school and in the larger society.

Yan felt that being bilingual or trilingual made her who she was and has enhanced her self-confidence. It also made her feel that she had a much wider experience in cultural appreciation. Jinhong felt that she was lucky, because being bilingual has given her a "better understanding of everything", and "a different perspective" to the way she looked at things and did things. She indicated that she has gained a lot more appreciation for her L1 and her heritage culture. Datong claimed that being bilingual made him "feel better and more confident."

In language study, all three participants borrowed from their Chinese literacy in their English literacy development. Both Jinhong and Datong mentioned that they thought more creatively in their English language-arts studies through the application of their knowledge of Mandarin language and culture. At the same time, the more advanced language abilities learned in their English language-arts classes, such as the use of figures of speech or the presentation of inductive and deductive reasoning, in turn helped them in their Chinese writing, which can be seen in their writing samples. Yan felt that learning other languages such as Spanish and French became much easier after learning English. All of them see being bilingual or multilingual as a functional and practical tool in their linguistic and daily lives. They bring language and literacy skills gained from L1 and L2 to understanding, exploring and interpreting their socio cultural and literary world.

At the time of the study, Yan was the only participant who had experienced economic advantages, as an articling lawyer and as a salesperson in her part-time job. Jinhong and Datong both show clear recognition of the potential advantages of bilingualism in their future teaching careers. Yan's attitudes and effort toward maintaining and developing her Mandarin changed when she experienced personal rewards in her work. She became more motivated to learn

and use Mandarin when the language proved to be useful in increasing her "employability and social mobility" (W. Li, 2007, p. 19).

Genesee (1987) asserts, "to learn another group's language may influence one's perception of oneself or of other groups insofar as one is acquiring a salient and distinctive characteristic of another group" (p. 101). In this study, all three participants expressed their feelings on being bilingual to be positive in the process of their language development in the new country, including their L2 acquisition and L1 maintenance/attrition.

The following table illustrates the varying benefits that bilingualism brought to them.

Table 11 Benefits of Being Bilingual Mentioned by Three Participants

Benefit/Participant	Yan	Jinhong	Datong
Cultural	1. Perceived herself as having a much wider experience in cultural appreciation 2. Became more sensitive to cultural differences 3. Enjoyed literature from both cultures	1. Gained greater appreciation for her L1 Mandarin and her heritage culture 2. Enjoyed literature from both cultures	1. Gained better understanding and more appreciation of both cultures 2. Had more tolerance to Differences 3.Enjoyed literature from both cultures
Economic	1. Obtained more clients as a sales person and an articling lawyer	1. Wll lead to future teaching career	1. Will lead to future teaching career
Personal	1. Gained greater self-confidence 2. Developed a new identity of being culturally and linguistically hyphenated: a Canadian-Chinese	1. Gained greater self-confidence 2. Gained a better understanding of who she is 3. Became more understanding of newcomers	1. Gained greater self-confidence 2. Became more understanding of others (both minorities and the majority)
Cognitive	1. Greater sensitivity in communication	1. Gained a different perspective on the way she looked at things, the way she thought and how she did things.	1. Gained greater sensitivity and flexibility in communication
Intellectual	1. Made learning other languages easier	1. Helped in using different techniques in writing	1. Understood the criterion and the principle of writing and learned different writing styles
Relational	1. Maintained relations with parents, extended family members and friends 2. Developed relations with clients and across societies	1. Maintained relations with parents and friends	1. Maintained relations with parents, extended family members and friends
Physical & emotional	1. Felt very good	1. Felt good	1. Felt good

When asked whether they would send their children to school to learn Mandarin, they all answered with a definite "yes":

> Yan: I want them to learn Chinese because I want them to learn about their culture and heritage. Because it's a part of them. I know that it's important to me, and that I would like them to be able to relate to myself and other family members in China. (E-mail interview transcript, 2006)

> Jinhong: If I ever have children, of course they will be Chinese related. Of course they will learn Chinese! (English interview transcript, 2005)

> Datong: The language identifies who I am. I want to keep it. If I have kids, I think I'll speak dialect at home, or I will go to Mandarin…. If in the future my kids are in school, I want them to learn Chinese. I can't really say for how many generations I can keep it, but I'll try to the end. (English interview transcript, 2006)

In this study I do not have any data suggesting that the participants see their L1 or bilingualism as problematic or negative. Although the three participants' life experiences after immigrating to Canada are different, all of them at the present time treasure their home language and desire to maintain it. Although all three participants hold a positive attitudes towards their L1, when they were asked what it means to lose one's mother tongue, their answers were considerably different.

Yan thought that language loss was a natural phenomenon that could not be avoided. "Gradual loss is going to set in eventually, it happens very often" (English interview transcript, 2003). So she did not feel that bad in general when I first interviewed her. But she mentioned that when she was with older people and young intellectuals from China, she felt "stupid" because she no longer knew the necessary vocabulary. She expressed a lack of confidence in her L1 ability, embarrassment, and her sense of not wanting to take the risks of expressing herself in situations where her self-confidence was at risk. When I interviewed her in 2006, she told me that she regretted that she did not put more effort in maintaining her Mandarin. From the inconvenience of not knowing Mandarin well enough to work as a student lawyer in Vancouver, she realized the importance of her heritage language maintenance. That's why she decided to go to Beijing University to upgrade her Mandarin.

Differing from Yan, Jinhong thought it was deplorable for one to lose his/her mother tongue: "I think they lost everything! To me, it's just a shame!!" (English interview transcript, 2005). She would not make friends with Chinese girls who were too "Canadianized." She thought they were even more unacceptable than Canadian girls. In contrast, Datong had many friends who had lost their Mandarin communicative competence. Some of them had gone from being Mandarin monolinguals to more or less English monolinguals. Datong simply communicated with them in English. He argued that it was not appropriate to judge those who had lost their Mandarin because everybody had a right to hold his or her own opinions: "I can't say anything about that" (English interview transcript, 2006).

These different attitudes toward language loss may be partly responsible for the different motivations and different efforts in participants' maintaining and developing their L1. Although the three participants all held positive attitudes toward being bilingual, it is easier to simply think positively about maintaining one's L1 than to seriously consider the consequences of losing the language and to actively try to avoid such loss.

On the one hand, they all considered Mandarin as part of their heritage and part of who they were. They wanted to keep close links with their family members in Canada and in China. They all clearly knew that the Mandarin language would play a great part in their future careers and lives. They all recognized that "Chinese has a chance of becoming a language of economic and social advancement (Man, 2006, p. 223). However, the level and the nature of motivation of the three participants could be different.

Based on Deci's motivation orientation theory that Noels and her colleagues' (2000) have applied to language learning, Jinhong and Datong held a very strong intrinsic motivation in maintaining their L1. They appeared to have a passion for the Mandarin. They both enjoyed writing in Chinese so much that they opened personal journal pages on the internet. Despite the fact that they did not take any Mandarin courses at university at the time of the interviews, and that they had both shown some L1 loss, their passion for the Mandarin language was

evident. This passion made their motivation long-lasting and their Mandarin learning and development more enjoyable and more satisfying. Reading, writing and communicating with Mandarin-speaking individuals helped them build larger vocabularies which stimulated even more of their pleasure and interest in maintaining and developing their L1 literacy. To Jinhong, the Mandarin language was beautiful. She was delighted to read prose works and poems in Chinese. Datong called himself "a *Jinyong* fan." In Jin's works, he found the enjoyable history, philosophy, value and aesthetics. The pleasurable feelings that they obtained from Mandarin language and literature are found very apparent in the data.

In addition to their intrinsic orientation, they also held certain degree of the most self-determined type of extrinsic orientation: integrated regulation (Noels, 2001; 2009). Maintaining and developing their heritage language were viewed by them as "an aspect of self-concept" (Noels, 2001, p. 48). As Noels (2009) points out:

> Integrated regulation is the most internalised and self-determined form of regulation; in this case, the activity fits in with other goals, beliefs and activities that a person already endorses, such that performing the activity is a realisation and expression of the self. (p. 298)

Both Jinhong and Datong also held the more self-determined type of extrinsic orientation: the identified orientation ((Noels, 2001; 2009). They both expressed the possibility of being Mandarin language teachers in the future.

Yan's case is different. In the first seven years in Canada, she received no further Chinese literacy education both at school or at home. After seven years' of keeping basic everyday L1 practice at home only, she started thinking of developing her Mandarin competence in university. Her motivation to develop her Mandarin literacy competence could be said to be of external regulation in nature, the least self-determined type of extrinsic orientation (Noels, 2001, 2009). She took the class because of credit requirement and because she was familiar with the course content. She was somewhat interested but had no passion to develop it. She was lacking the necessary driving force to continue the long and often tedious

learning process. Her motivation at this stage was on a short-term basis. As Noels (2009) points out, "As long as that contingency is present, a student would engage in language learning; once removed, that engagement would desist" (p.297). After the assessment interview, Yan was placed in a class where she experienced a sense of embarrassment with those high school graduates who had just come from Taiwan. She felt uncomfortable in the class and she did not enrol in any more Chinese literacy classes at university. However, after she felt the big inconvenience of being deficient in Mandarin at her work as a student lawyer in her China town office in Vancouver, her motivation to develop proficiency in Mandarin moved to the next stage: introjected regulation, the somewhat more internalized regulation ((Noels, 2001, 2009). It can be concluded that only after she realized the usefulness of Mandarin in her work did she seriously consider improving her Mandarin. She identified this time with Mandarin learning because she consciously evaluated Mandarin as important and meaningful. In order "to avoid failure" and to regulate her "feelings of self-worth" (Deci, Egharari, Patrick, & Leone, 1994, cited in Noels, 2001, p.48), Yan made the decision to take courses at Beijing University, where she enjoyed opportunities to receive content education in law in a Mandarin immersion setting. This was a great leap for her linguistic development since at this point she felt the need to develop her L1 and this decision of putting more effort in her L1 maintenance and development emanated from the self, from her feeling of volition and self-determination. After she was hired because of her Mandarin ability and started working as an articled lawyer, her motivation to develop Mandarin moved to the "identified regulation" (Noels, 2001, 2009) stage. At this point she recognized fully the value of mastering Mandarin to be extremely important for her career and to some degree for her self identity, although her motivation was still utilitarian in nature. According to Neols, "with identified regulation, one consciously engages in an activity because it is consistent with a goal that is personally important" (Noels, 2009, p. 297). By combining her simple yet fluent Mandarin with her competence in English and her communication strategies, she has managed to become successful in her job. But more than once she mentioned that she wished her

Mandarin were better so that she might be more efficient in her work. Yan's case provides evidence that in L1 maintenance/development, young adults may re-establish their motivation and deepen their understanding about their L1 and culture and therefore may enhance their career opportunities. Her case shows an alternative route for L1 maintenance and recovery. It suggests that language maintenance is a dynamic process as learners may find their needs for using L1 at different stages of their life for different purposes. It also raises the question of how well one's L1 needs to be maintained as a bilingual's language use changes with life changes and so does his or her level of language proficiency.

Parents' role in L1 maintenance and attrition

Families are considered by many researchers to be crucial social networks (Zhang, 2008; G. Li, 2002; Duff, 2008), and parents are vital partners in their children's education. The findings of this study confirm that the impact of parental involvement on children's linguistic lives and the differing degrees of this involvement through the effort they put in and concrete actions they take are related to helping them either maintain, develop or decline the proficiency of their L1.

Although during the interviews, three participants all indicated that their parents played important roles in their L1 maintenance, the differences in L1 competency suggest that the L1 can be maintained and developed only when varying oral or written literacy activities are available both at home and at school. When parents, families, and the communities of the participants emphasized the need and the importance of maintaining and developing the L1, and more importantly, when parents took concrete steps to create a rich language and culture environment for their children, or introduce them to such an environment, a positive influence on young Chinese immigrants' motivation, efforts, and their perception of Mandarin language and culture was fostered.

First, parents' persistence in using L1 at home (as shown in Jinhong's and Datong's cases) and their efforts to support their children's L1 maintenance did not only provide a basic authentic linguistic environment for the participants to maintain their L1, but also fostered their children's positive attitudes toward

bilingualism. To differing degrees, the parents of my participants succeeded in passing on their positive attitudes and values to their children regarding L1 maintenance and literacy development. They emphasized the value of the language through both their beliefs and their actions (Li, 2006).

However, their approaches were different. Datong's parents, for example, translated their beliefs into the decision to send him to a local bilingual school. They also used Mandarin at home exclusively. Together with the grandparents, they provided Datong with significant daily L1 exposure at home. The parents also discussed with the teachers the policy reform relating to Pinyin vs. Zhuyin and simplified vs. traditional characters that was going on at that time. With all these practices, they sent Datong a reinforced message that they considered his maintenance and development of Mandarin language and culture to be very important.

Jinhong's parents did not send her to a bilingual program. However, the literacy practice of Jinhong's family members (her father and uncles) in the home setting was influential to her L1 literacy life. Jinghong's father created a rich literacy environment which involved Jinhong in a variety of literacy activities such as reading books, listening to the tapes at bedtime, writing articles, reciting Chinese classics, and discussing different literature topics and classics at regular family literature gatherings with her father and uncles. Jinhong's L1 literacy life in the new country was continually influenced by the literacy values the family has brought from Taiwan. All these activities provided a high level of Chinese literacy input to Jinhong.

In her narratives, Yan expressed appreciation to her parents for the Chinese books they bought and borrowed from the library and the opportunities to go back to China during summer time. However, Yan's parents put comparatively fewer concrete planned steps in place, or less effort and commitment to help Yan become involved in more literacy activities which might have benefited her L1 maintenance and development. The "Chinese only in the house" policy was changed into a "mixed" language under the assimilation pressure from Yan's school authorities and as Yan's L1 proficiency declined. The many examples of

involuntary code switching found in the script of her Mandarin interview provide evidence for this.

The relationship between the efforts taken by the parents of the three participants and L1 proficiency in this study indicates that the more literacy activities young immigrants are involved in at home, and the more commitment the parents take in helping their children maintain L1, the less vulnerable the children's L1 is to attrition. The findings of this study confirm claims made by other researchers (Guardado, 2002; Kouritzin, 1999; Li, 2002; Liao & Larke, 2008) indicating that parental attitudes and L1 literacy practice at home are one of the important factors influencing children's L1 maintenance, and that language attrition or loss will occur in homes where parents lack a strong commitment to their children's L1 education and development.

Yan's case also implies that the natural L1 input children get from everyday life at home is not enough for desirable L1 oral and literacy development. In addition to the natural input that parents provide to their children, planned L1 educational activities should also be provided and community resources should be available. Otherwise, the level of the L1 cannot be improved. This is true even for students who arrive after developing literacy in their L1.[1] In this study, such activities included borrowing L1 books from the libraries (parents of Jinhong, Datong and Yan), buying L1 story-tape sets (Jinhong's mother); teaching children Chinese literature and discussing issues of Chinese literature (Jinhong's father), and sending children to additive bilingual schools (Datong' parents). Without these planned L1 educational activities, the L1 of immigrant children will not be maintained or developed to a desirable level. This finding is consistent with some existing findings that parental input cannot by itself ensure the development of L1 (Chinen & Tucker, 2006; Li, 2006; Liao & Larke 2008). Data from this study also support the assumption on three dimensions of language proficiency by Cummins (2001): (1) conversational fluency, (2) discrete language skills, and (3) academic

[1] Cummins states that "students who arrive after developing literacy in their L1… are less likely to lose their L1 than students who arrive at younger ages…. Students who arrive between ages 8 and 12 have the best prospects for developing proficient bilingual and biliterate abilities" (2001, p. 81).

language proficiency.[1] The most desirable L1 maintenance outcomes are derived from natural L1 practice at home *plus* planned L1 educational activities taken at home or at school or at any place where a systematic higher level of L1 input is available.

In many cases, planned L1 education at home is a great challenge to immigrant parents who are busy at work (Li, 2002; Zhang, 2008). A challenge also comes from the fact that the systematic higher level of L1 input needed as children progress through school requires that parents have knowledge of what and how to teach (Zhang, 2008). Topics such as higher-order thinking skills in the L1, making inferences and synthesizing information to draw conclusions, developing skills to establish the meanings of words and phrases through contextual use, and so on, are important and they need to be provided in parallel with English if comparatively balanced bilingualism is desired. Literacy activities that foster *all* language skills are also essential and should be carried on constantly. All of these language skills can be obtained through sufficient resources, adequate literacy environments and professional educators. The data on the literacy practice in Jinhong's home reveal that, as challenging as it is, constant L1 educational and high level literacy activities at home are still possible and effective.

As for those parents who are not able to provide systematic L1 tuition at home due to a lack of time, a lack of resources, or ability, L1 education at school, usually available through additive bilingual systems, is a good alternative (Baker, 2000; Garcia, 1997; Li, 2006). Datong's case illustrates the advantages of such a "strong form" (Garcia, 1997) of bilingual education.

Outside the home, the three participants' parents also played different roles in their children 's L1 maintenance. Jinhong's father sent her to a Mandarin language class in a Mandarin church and Datong's parents sent him to the bilingual program. These two environments provided them with more heritage cultural environment

[1] For more information on the three dimensions of language proficiency, please refer to chapter 3: The three faces of language proficiency, in Cummins' "Negotiating identities: Education for empowerment in a diverse society" (2001).

within the community in which Mandarin and Chinese culture are cherished. This "heritage educational support factor" (Man, 2006, p.222) Jinhong and Datong experienced might have helped them to hold continued interest in their L1 and sustained development in both their intrinsic and self regulated motivation in maintaining and developing Mandarin.

In addition to the schooling environments, both Jinhong's and Datong's family members and the ethnic groups they are associated with---the Taiwanese Students Association and the church her family attends in Jinhong's case, and the bilingual school, the pingpong and Chinese musical instrument club in Datong's case, displayed very positive attitudes toward Mandarin language and accorded it an important role. The social settings provided a large proportion of L1 input in their life. Since the ethnolinguistic vitality (Allard & Landry, 1992) was strong in the communities (associations, church and bilingual schools), there were many opportunities for them to use Mandarin language and to enforce their positive attitudes toward their L1 and C1 maintenance and development.

However in Yan's case, she was seldom exposed to L1 interactive activities. The only chance to communicate in Mandarin with her classmate Xiao at school was viewed as a hindrance to her fast-track to assimilation (Li, 2006) and was banned by her school community in which languages other than English and French had very low prestige. Outside school, Yan also lacked cultural or religious support which are "important sociostructural variables that contribute to ethnolinguistic vitality" (Man, 2006, p.215), hence her reduced motivation to maintain and develop her L1 in the first years in Canada.

The findings of this study therefore suggest that different quality and quantity of parental practice and arrangements both at home or outside the home to some degree correlate with the success or failure of L1 maintenance and development.

Identity and L1 maintenance and attrition

The factor of "identity" relates to cultural, social, ethnic and linguistic identity here. It is widely seen as "a cognitive construct, a life-story which is built on memories" (Prescher, 2007, p. 194). Baker (2000) points out:

> Having 'ethnic identity', seeing oneself as Cuban, Chinese, Latino or Latvian, is essentially a self-perception. It depends on people attributing to themselves a group identity that collectively expresses historical roots and cultural continuity. It is a belief in belonging. (p. 58)

To gain a comprehensive understanding of the processes of identity negotiation and acculturative change, and its relationship to L1 maintenance and attrition, this study basically used qualitative inquiry method. In the personal narratives of my participants, it could be seen that all three of them associated the Mandarin language with their identity and considered it as a part of who they were. The participants' stories in this study demonstrate that "language is almost always present in identity formation and identity display. Language is an index, symbol and marker of identity" (Baker, 2001, p. 51).

Secondly, from the detailed narratives of my participants, I found cultural and ethnic identity are contextualized, complex, and dynamic, neither fixed nor measurable. Some of my interview questions asked how the participants perceived their ethnic belonging in a percentage form to outline an approximate situational picture of the participants' identity orientation. As Torres (2006) claims, "Identity development maps do not always have a straight route" (p. 136). However, by putting the way in which my participants view themselves (Chinen & Tucker, 2006) in the context of their individual life situations, I found the connections between their identity formation and their L1 maintenance and attrition.

Thirdly, analyzing my participants' personal narratives, and following Yoshizawa Meaders' model of identity formation by migrants (Prescher, 2007), the three participants can be categorized into three different "phases of adjustment": Yan could be categorized as one of those immigrants who assimilated as quickly as possible because of stressful assimilation pressure. Jinhong can be categorized as one of those who "tend to hold on to their original culture, language and identity" (pp. 192-193) and who "have no attempt to adapt to the new circumstances" (p. 196). And Datong can be categorized as one of

those who “tried to maintain their original culture and identity" (p. 196) and the same time is “open to the new environment” (p. 192).

In the following segment, I will first present the analysis of the three individuals’ narratives in regard to their identity formation development and L1 attrition. After that, I will present a cross-case analysis to understand the larger whole.

a) Yan

Yan linked her language with self-identity during the interview. When talking about her cultural belonging, Yan always considered herself a Chinese-Canadian, a blend of both. In fact, she viewed herself as 70% Canadian and 30% Chinese during my first interview, and then later revised this figure to an equal 50%–50%. This change in the numbers may either indicate her changing self-perceptions or it may reflect the situational nature of self-identity, which may be dependent on the interview context and that particular moment in her thinking. This also demonstrates the complexity of categorizing an individual within certain acculturation patterns. However some general characteristics can still be identified.

On the surface, Yan has not rejected her L1 and first culture. On the contrary, in many ways she identifies herself as Chinese and demonstrates her passion for her heritage culture. However, it is likely that it is because of the loss or “arrested development” (Guardado, 2002) of her Mandarin language that she considered herself 30% Chinese and 70% Canadian at the time of our first interview. When she said “I don’t want to think so [that she had lost some of her Chinese identity], but I know so when I have conversations with my other friends who are more immersed in the Chinese culture,” she felt that she had no choice but to think she was less Chinese. In these words, I hear the frustration, the sense of regret, about not having sufficient words and proficiency to precisely convey the ideas she wanted to in her first language. She felts handicapped.

Yan experienced the frustrations of being different and having to deal with cultural conflicts and various challenges immigrant children confront. Among the

three participants, she was the one who experienced directly what Cummins (2001) describes as "a form of 'ethnic cleansing'" (p. 13) in her elementary school in which her homeroom teacher and the principal asked her to behave herself, not to speak Mandarin to her friend from China. She was also placed in a lower grade and asked not to speak her L1 to her parents at home. Potowski (2007) says:

> It is generally agreed that when people feel that their languages and cultures are valued, they will be more likely to claim themselves speakers of the language and members of the cultural group. On the contrary, when a language is stigmatized and the cultural inheritance is ridiculed, people will be less willing to be identified with it, whether they are heritage speakers or L2 learners. (p.198)

Yan's linguistic and educational backgrounds were devalued as a "problem" (Ruiz, 1984). This is exactly what Brian experienced in Kouritzin's study: "My teachers told my parents not to speak Korean at home, to speak English as much as possible, and I guess that's when I first started to lose my language" (Kouritzin, 1999, p. 112). Yan received such messages and suffered hurtful lessons in this completely new environment at a very young age, and this identity negotiation was "interwoven into all teacher-student interactions" (Cummins, 2001, p. 12). The interaction seems to have impacted the change of Yan's attitudes toward the value of her L1 and her culture.

Yan's sense of self was determined to no small degree by her sense of the school community to which she felt a sense of belonging. She was eager to become an equal member of the dominant school community as soon as possible. Although she was never ashamed of her Chinese heritage, she turned her attention away from Mandarin and Chinese culture. She assimilated into the mainstream quickly and picked up English over a short period of time. Although her claim of 70% Canadian and 30% Chinese was by no means an accurate assessment of her ethnic identity, it could be representative of either her self-conscious or subconscious perspective on what she felt most comfortable with.

Yan did not reject Chinese culture, yet her level of motivation to develop her Chinese literacy was not high in her school years. She did not consider developing her Chinese literacy a top priority, and she did not see an immediate

need for it at the time I first interviewed her. In addition to this, Yan has spent little time trying to find out more about Chinese ethnicity: its history, its values or its ideology. Among the three study participants, Yan maintained the least of her Mandarin. Because of her loss of Mandarin, Yan was reluctant to make friends with recently arrived Chinese university students since she did not want to feel bad or embarrass herself by being "stupid" in "intellectual conversation in Chinese." Yan's inner world is complex with contradictions and remains unfixed. Despite her choosing to identify with mainstream culture, Yan still enjoys Chinese culture, traditions and customs especially since she graduated from law school. She is proud of her Chinese background, and she has the intention of being both Chinese and Canadian.

In 2007, when she saw herself as 50% Chinese and 50% Canadian, she was not only making for herself a declaration of what her self-concept was at present, but also making for herself a declaration of what she wants to become in the future. She had started to realize the significance of self-reflection in the process of bicultural orientation. Her case reflects a dynamic, forward-pointing conception in identity formation. Yan's is a typical case just as Lowe (2005) mentions: "Immigrant youth are often conflicted: torn between their want to integrate completely and as they get older (particularly after high school), their desire to make their culture and language a part of their identity" (p. 60-61).

b) Jinhong

Jinghong considered herself to be 100% Chinese. This indicates that she felt a strong attachment toward the Chinese ethnic group and a strong sense of belonging to this group. She retained a strong sense of pride in the long Chinese history and in the beauty of the Mandarin. She was typically influenced by Confucian principles that "focus on ideals such as respect for elders, deferred gratification, respect for authority, the value of discipline and educational

achievement, self-control, and familial responsibility"[1] (Ariza, 2006, p. 43). She did not like those Chinese or Asian students in her high school who were keen to develop their Canadian identity (Bell, 1997, p. 98), but she felt OK with those who are "Chinese in English" (Bell, 1997, p. 99). Although Jinhong has been in Canada for many years, she still considers herself an outsider in Canada.

Jinhong's cultural psychological captivity might come from the fact that in high school she experienced, and was angered by discrimination from the dominant culture and society. She was not willing to adapt by accepting and making the best of the situation. When describing the first stage of cultural identity, Banks (2006) says:

> Individuals who are members of groups that have historically been victimized by discrimination… as well as members of highly visible and stigmatized racial groups, such as African Americans and Chinese Canadians, are likely to experience some form of cultural psychological captivity. The more that a cultural group is stigmatized and rejected by the mainstream society, the more likely its members to experience some form of psychological captivity. (p. 138)

Jinhong experienced exactly such a form of psychological captivity. She mentioned the reasons that she felt she had to hold such attitudes toward the dominant culture: (1) personal observation and experience of racial slurs, and the way she was treated in high school and society; (2) the powerless status of minorities in society; (3) being insufficiently proficient in English; (4) the short history and weaker foundation of the dominant Canadian culture compared with the long history and strong foundation of Chinese culture; and (5) the different lifestyles, values and attitudes toward people, school, parents, and so on, in the dominant society.

Living on the margins made Jinhong angry. She was very puzzled by the looks of impatience and disdain from the girls in her high school. She was in tears

[1] For more information about the cultural background of Asian students and about the Chinese Confucian tradition that has greatly influenced Asians, please refer to chapter 7: Asian Americans/Indians, in Ariza's "Not for ESOL teachers: What every classroom teacher needs to know about the linguistically, culturally, and ethnically diverse student" (2006).

when she mentioned what those girls said to her, “Hey, what’s your name? Are you deaf? Can you speak?” When she said “I just tried to avoid them as much as possible. Because I know they made me feel different,” I heard the powerlessness and helplessness which must be experienced daily by her and her Asian friend at school. She had no Canadian friends. Her experience of the strange new land could be seen as one of alienation, loneliness and anger. She called herself “A redundant chess piece outside of the chessboard.” As Toohey (2005) argues, school settings “are sites in which it is possible to be assigned a ‘damaged’ or ‘marginalized’ identity, and the assignors of this identity include other children, teachers and subjects themselves” (p. 13). As Jinhong struggled to challenge and change her feelings of subordinate status and being “out of place” within the society, she utilized and reinforced her love of Mandarin and Chinese culture, as well as her disregard and resentment towards the dominant language and culture as “strategies of resistance from the margin” (Watford, Rivas, Burciaga & Solorzano, 2006, p. 128). By enforcing the beauty of Mandarin language and the richness of the long history of China in her mind, Jinhong developed a feeling of “invulnerability” “facing what may seem like *insurmountable* barriers” (Watford et al., 2006, p. 128).

As a child with divorced parents, Jinhong was closer to her mother, who provided her with caring, understanding and love through different ways. The story tapes her mother bought her when she was a young child still accompanied her every night. Unfortunately, Jinhong’s mother lived in Taiwan. And her father was strict and authoritive (which is not unusual in Chinese families). Except for requiring her to memorize the classic Chinese poems and make English-speaking friends at school, there was little communication between father and daughter. This family relationship should be taken into account when scrutinizing Jinhong’s self-identity, attitudes toward English and Mandarin, and toward Eastern and Western cultures.

Jinhong’s self-identity has definitely had a strong impact on her maintenance of the Mandarin. To her, the Mandarin language was first of all a sanctuary for escape from the ongoing pains of feeling isolated, ignored and

disrespected, and from the reality of daily struggles to win recognition and acceptance. The only arena in which Jinhong could hope to position herself favorably was in Chinese language and cultural "nationalist discourse" (McKay & Wong, 1996), where her status as a "Chinese" allowed her to make derogatory remarks about the dominant culture.Working on her Mandarin language was a way of enjoying the self that was closely related to her comfortable and secure past, to her most dear one who was on the other side of the planet: her mother, and the self that she feared would lose its meaning and richness in the new cultural environment. By sticking with her Mandarin language and perceiving Chinese culture vitality to be higher, she could keep her pride: her pride in her ability to master the ultimate art of language, her pride in keeping her profound cultural roots, and her pride in being unique and different. Enforcing the value of knowing Mandarin she could define, reclaim and consolidate her sense of identity and dignity, and she could defend and empower herself.

Jinhong's case indicates that the degree of success in L1 maintenance does not necessarily "correlate positively with the extent to which the learner has created a niche (linguistic, social, cultural) in the English-speaking community" (p. 117) as He (2008) assumed in her Enrichment Hypothesis. Jinhong could be said to be very successful in her L1 maintenance or even development, and her enthusiasm and commitment in developing L1 was also high and strong. However, she still had not found her own place in the dominant environment as she mentioned in her "chessboard" narrative. She was far from seeing herself "as linguistic and social equals to others" (p. 117) in the country where immigrant children are provided, at least on paper, with opportunities to feel free to ground, to find affiliation with and to enrich their experiences in both dominant and heritage cultures.

c) Datong

Datong had positive personal and cultural identities. Datong considered himself 60% Chinese and 40% Canadian. He enjoyed being with both Chinese people and people of other ethnic groups. He had a great deal of pride in Chinese

culture and his Chinese ethnic background. At the same time, he held positive attitudes toward other cultures and ethnic groups in Canada. He had a strong sense of belonging to both the Chinese and the multicultural Canadian society. He was able to function in both cultures beyond superficial levels.

Like Jinhong and Yan, Datong also experienced being different in a new country, a new culture and a new language environment. Datong experienced temporary exclusions by some of his classmates, disputes and fights at school, and by the policy existing in the Chinese Bilingual Program at the time which rejected the written style of Chinese characters he had learned in China. However, he eventually benefited from the larger welcoming environment of the Mandarin bilingual education system, which valued and promoted Mandarin language and culture alongside mainstream Canadian culture. Datong went through a transitional period and reconnected his past and present through the continuation of his Mandarin-language education in Canada.

Datong succeeded in achieving equilibrium in his sense of self through years of Mandarin-English bilingual education. In describing the bilingual programs in Alberta, Canada, Lowe (2005) points out: "The programs expect a lot from their students, but also provide them with the environment to meet those expectations" (p. 75). The bilingual education programs may provide a broader space for young Chinese immigrants like Datong to negotiate their cultural, linguistic and ethnic identities. Datong's adequate cultural and multicultural sensitivity may have stemmed from his bilingual learning environment, which provided more choices for students. These increased choices and flexibility can be helpful to students in nurturing their bicultural, cross-culture or multicultural awareness. His self identity was obviously in contrast with the high level of dominant-culture orientated self identity held by Yan and the resentful attitude toward most aspects of the dominant society held by Jinhong.

As Torres (2006) says, a bicultural orientation supports a high level of ethnic identity, and fitting into a dominant environment should not necessitate losing a sense of pride in one's ethnicity. From Datong's stories, we can see that students in the bilingual program perceived their ethnic validity through learning

about and participating in many Mandarin language and cultural activities, such as the celebration of their festivals and the learning of their ethnic customs and traditions. Meanwhile they are also exposed to Canadian school culture and Canadian multiculturalism. The Alberta curriculum and many Canadian educational practices give Mandarin bilingual students the opportunity to participate in Canadian society and to function in its social, cultural and political system. It is through this bilingual and bicultural environment that Datong experienced opportunities to engage his identities through his L1 Mandarin and L2 English and developed his bicultural identity. The interactional support from the school, the meaningful relevant tasks plus a positive and secure community setting provided Datong with a powerful learning environment (Verhelst, 2006) in which he had the opportunity to acquire and learn his L2 English, and to maintain and develop his L1 Mandarin at the same time. This is the kind of learning environment that Yan and Jinhong were not able to get in their schools.

Datong's case indicates that a bilingual education program provides a broader space for young Chinese immigrants to negotiate their cultural, linguistic and ethnic identity. The feasibility of more choices and greater flexibility might be very helpful for students in nurturing a bicultural, cross culture or a multicultural awareness. The high level of western oriented attitude held by Yan, and the resentful attitude towards everything western held by Jinhong might both come from their respective no-choice situations.

In the process of identity formation, Datong worked hard to make the best of his situation through his resilience and multiple adaptations. His experiences, his effort, and the unique bilingual learning environment shaped him as a person with the psychological characteristics and skills needed to participate successfully in the Chinese community as well as in other communities (Banks, 2006). The journal he wrote indicated that he recognized and understood both positive and negative attributes of Chinese culture. His cross-cultural awareness[1] and bicultural identity emerged over the years. This is the "healthy sense of cultural identity"

[1] Cross-cultural awareness is an understanding of world cultures, especially in light of similarities and differences (Brown & Kysilka, 2002, p. 7).

(Banks, 2006, p. 140) which gave Datong a strong desire to function effectively in both cultures.

In my interviews, I also noticed that Datong always listened attentively and was very empathic toward his listeners' needs in communication. He has formed a healthy linguistic sensitivity. This linguistic sensitivity has led him to the goal of becoming a language arts teacher himself, either in English or in Mandarin. He understood what it felt like to be different. He admired and appreciated the interactional support he was able to obtain from his teachers. He wanted to create space for such discourse and for a collaborative atmosphere in the social context of his future classroom. Culturally, he has flourished and has succeeded in shaping himself into a person who identifies with both English and Mandarin languages and both Eastern and Western cultures. Banks (2006) writes:

> Individuals within this stage have a commitment to their cultural group, an empathy and concern for other cultural groups, and a strong but reflective commitment and allegiance to the nation-state and its idealized values, such as human dignity and justice. (p. 140)

Being a student teacher, Datong was functioning beyond the superficial level through teaching. His understanding, appreciating and sharing of the values of Chinese and other cultures in Canada, his multicultural perspective has helped him to live a more enriched and meaningful life.

Datong's story shows that to be successful academically and socially, young immigrants need not disconnect from their culture and language (Ramiriz, 2006): "Retention of continuity of cultural experience within the heritage language culture is necessary" (Baker, 2000, p. 24). What they already have, their culture and their language(s), could enforce their inner abilities to achieve success in the future. Landry, Allard and Henry (1996) point out:

> ideally, the bilingual development of minority group members should be additive in that it would reflect (1) a high level of proficiency in both the communicative and cognitive-academic aspects of the mother tongue and the second language, (2) the maintenance of a strong ethnolinguistic identity and positive beliefs toward one's own language and culture while holding positive attitudes toward the second language and the group's

> culture, and (3), the opportunity to use one's first language without diglossia, that is without one's language being used exclusively for less valued social roles or domains of activity. (p.446)

In the ongoing process, some temporary L1 decline occurs, given that Datong had less time for his L1 and C1 involvement once he entered in university. However, a vision of why he should maintain and develop his L1 and C1 kept him going, regaining lost ground and developing new competencies. Datong seems to be the one who has achieved the comparatively ideal bilingual development.

In sum, "forming and performing social and linguistic identities is at the heart of the development and maintenance of any language" (Potowski, 2007, p.198). This study supports the claim. Yan's assimilation into the mainstream was not without cost, nor was it free of contradictions. Her Mandarin proficiency is the lowest among the three. She would have loved to have had much stronger Mandarin language skills when she found out that these skills were valuable for her career. By re-evaluating her ethnic identity from 30% Chinese to 50% Chinese, she may not necessarily be adjusting how she saw herself at the time or deciding who she would like to be in the future, but she is more likely to be pondering what she has lost.

To Jinhong, the Mandarin language was enjoyable and was her sanctuary, the world in which she felt secure. This world of her own and her resistance to Canadian cultures provided a strong motivation for her to maintain and further improve her language skills. Although negative social experiences forced her to find refuge in the world of Mandarin, her first language did contribute to position her as outsiders in the dominant society and serve as an resistance strategy to the "underlife" in school discourse and empowering agent to her vulnerable self-image and confidence.

Datong's first-language maintenance and further growth through bilingual education is a strong example of how a first language can help in identity formation. Although he experienced an identity crisis, he overcome it more easily

than Jinhong did likely because he was in a bilingual learning environment that supported both his L1 and L2 development and his bicultural identity formation. The positive L1 maintenance experience in return gave him greater cultural understanding, respect of differences, and multicultural thinking.

The experiences of the three participants show that identity formation is contextual and that it is natural and psychologically healthy for individuals to *renegotiate* their linguistic and cultural identities in the social and educational context. In this process of enculturation, young immigrants' past is often in conflict course with their new reality. Despite the overt and covert forms of marginality young immigrants may experience in the new country, they are eligible, capable and expected to be participants and contributors rather than remaining outsiders and observers. Only when young immigrants have become what Jinhong calls a "chess-piece on the board" can they enjoy the chess game and win in the real game of life.

The study also indicates that in the process of young immigrants' identity formation and language development, families, schools and community play very important roles. Because of their initial English deficiency, they were not able to have their needs noticed or their voices heard. All three participants experienced this hard phase of adaptation to a new life in Canada. During the time young immigrants feel lonely, excluded, vulnerable and frustrated, a support system is crucial for them since the journey of immigration is long and hard, with numerous difficulties and challenges. The stories told in this study show that when teachers are empathetic, flexible, and care for students' well-being and individual differences, they can play a vital part in immigrant students' identity formation and in the process of their becoming bilingual and bicultural.

This study also assumes that the cross-culture awareness and a balanced acknowledgement of both the heritage culture and the dominant culture, of bilingualism and of multiculturalism were essential in healthy linguistic development, in both L1 and L2. Datong's case indicates that to foster young Chinese immigrants' maintenance of a high level of ethnicity and at the same

time to achieve a high level of acculturation, creating bicultural environments as that of in the additive bilingual education program is a desirable route.

Baker (2000) points out, "Identities are never static or permanent, they are becoming rather than being, never singular and rarely unified" (p. 23). In discussing the phenomenon of managing the need to make choices regarding two distinct cultures among Latino/a students, for those students whose cultural orientation was defined through these choices, Torres (2006) points out that "identity changes as a result of experiences or time" (p. 137). Cummins (2001) also discusses the dynamic and multi-dimensional nature of identity:

> Identities are not static or fixed but rather are constantly being shaped through experiences and interaction. There are multiple facets to our identities. Some of these are difficult or impossible to change (e.g., gender, ethnicity). However, other facets are more malleable or subject to modification as a result of our experiences (*e.g.*, core values, political affiliation, sense of self-worth in relation to intelligence, academic achievements, talents, attractiveness, etc.) (p. 16)

The data for each participant confirms these claims. Their identities, their world views and their degrees of passion toward their L1 and C1 did not remain static. For Yan and Jinhong, it seems that the older they became, the closer they gravitated toward their heritage culture. As identity development maps do not always have a linear route, how the three participants' identities and identity development affected their L1 maintenance and attrition is complex, but each case carries important implications.

The findings of this study revealed an intricate relationship between identity formation and language maintenance. Their development of L1 (maintenance and attrition) and L2 had a great impact on their world, and mediated their experience of seeing, understanding and re-creating the world. In these three cases, we see that: one may suffer considerable loss of L1 but still succeed in one's career in the mainstream society; one can substantially maintain the L1 but feel lost in the new life in a new society; and one can achieve comparatively balanced development in two languages and cultures and enjoy being bilingual and multicultural. What do we learn from the three cases?

No matter whether successful or not in the three participants' L1 maintenance and in their social and professional lives in the new society, all three youths had a desire to maintain their home language and culture. They would feel incomplete as people with an inadequate L1. Furthermore, no matter whether their motivation is intrinsic or self-regulated extrinsic, they can all benefit from their L1. Their L1 supports them in many different ways, as a communication tool in their professions, as a soothing light in the darkness of the lonely world, and as a source of personal dignity, pride and identity. The personal narratives of my participants also confirm the findings of other researchers who indicated that life experience connected with the notion of L1 attrition, "can be seen as an emotional event that can have considerable impact on the individual's life and may result in an alteration of the existing identity system" (Prescher, 2007, p. 192).

What will their L1 maintenance bring to them in the future? For all of them, it means more career opportunities. For Yan, the recovered interest in her cultural heritage and identity may further grow to help her achieve the equilibrium that she had been missing and regretting. For Datong, further development of his bilingual and bicultural self provides him a full bloom in his potential for more self realization. To Jinhong, I hope her development of literacy in both English and Chinese would open up to her a much broader world, a world of more mutual understanding, cultural appreciation and social participation, and finally boost her life and help her step out of the deep valley of social marginality.

In this chapter I have provided a cross-case analysis to aggregate multiple and mixed data sets under the themes generated by their prominence in the individual cases. The major findings of the cross–case analysis are:

1. School and classroom environments play a significant role in how young immigrant children perceive their first language and culture. Genuine respect toward their cultural and linguistic backgrounds demonstrated by teachers and school administrators appears to be extremely important to students' successful adjustment in their new learning environment.

2. The exposure to Mandarin and opportunities to use the language are factors at the socio-psychological level that influence participants' use of their L1 and their language behaviour. The higher frequency of contact, better quality of contact, and more stability in contact with the Mandarin language are associated with L1 maintenance of the participants.
3. A positive attitude toward L1 maintenance and bilingualism among all the three participants was found to encourage them to maintain their L1. However, their much deeper understanding of the consequences of language loss may have had an even greater impact on the participants in motivating them to maintain and further develop their L1 Mandarin. When they connected language loss to their self identity, maintaining their L1 became vitally important. Forming and performing cultural and linguistic identities is at the heart of the participants' L1 maintenance and attrition. The findings of the three cases indicate that, supporting the point of Noels (2001a; 2009), it could be further assumed that intrinsic and self-regulated extrinsic motivation is also more powerful than less self-regulated motivation in L1 maintenance.
4. The finding of the study suggests that when parents and families of the participants emphasize the importance and the need to maintain and develop their L1, and more importantly, when parents take concrete steps to create a rich linguistic and cultural environment for their children, young Chinese immigrants' positive attitude and motivation to maintain their language culture is fostered. The most desirable L1 maintenance and development outcome results from natural L1 practice at home *plus* planned L1 educational activities taken at home or in the school system.

In this chapter, the findings of a comparative cross-case analysis are reported for understanding of the similarities and differences of single cases in order to get a whole picture of the phenomenon of L1 maintenance and attrition presented over the cases. In the concluding chapter, implications and suggestions for further research will be presented.

CHAPTER NINE
CONCLUSIONS AND IMPLICATIONS

The individual case findings and the cross-case analysis reported in the previous four chapters provide a picture for understanding both social and psychological sides of L1 maintenance and attrition of the three participants. In this final chapter, the findings of the study will be summarized and the research questions posed in Chapter 1 will be answered. Following the implications of this study, suggestions for further research will be proposed.

Limitation of the study

(1) This study was conducted over a limited period of time. In measuring criterion variables, the strength of the research on language maintenance and attrition increases over a longer period of time. Therefore, longitudinal studies (developmental research studies) would be ideal for allowing careful study of contextual variables over time (Oxford, 1982). However, as Kenny (1996) points out, "Longitudinal studies are generally not considered practical for study in first language loss because the loss of one's first language is a much longer process than is often the case with second language" (p. 30). Because first language attrition is a slow process, the necessary time interval between measures is much larger than most research initiatives can afford to take into account (Fase, Jaspaert & Kroon, 1992).

(2) This study is limited in its number of participants. Although each of the three selected cases has a different relationship with the phenomenon of L1 maintenance and attrition, and the cases provide fairly good opportunities to learn about the complexity and diversity across contexts, the findings of this study cannot be generalized phenomenon of L1 maintenance and attrition among other young adult immigrant groups from China.

(3) The English translation of the Mandarin interview transcription may cause readers to understand the narratives somewhat differently due to the differences between the two languages and cultures.

(4) The measures of language competence are limited to the basic grammatical aspect in most cases.

(5) "There are advantages and disadvantages to being an insider to a community" (Lanza, 2008, p.76). Being an insider of the community to which my participants belong, and with my own life history as an immigrant to Canada, an English language teacher in China, and Mandarin teacher in Canada, the presentation and the interpretation of data in this study reflect who I am as a researcher (Fontana & Frey, 1994; Li, 2002). At times, my own values (Li, 2000), my own way of looking at the data (Li, 2002), some biases (Fontana & Frey, 1994; Li, 2002), and my taking for granted as an insider of the community group (Lanza, 2008) might be identified.

Summary of the study

Linguistic aspects of L1 maintenance and attrition

Linguistically, the findings show that the most well-maintained grammatical competences of all three participants are phonology, storage of vocabulary and basic sentence structures. For Jinhong and Datong, the lexical feature is very well maintained, while for Yan it is maintained only to a satisfactory degree. As for language skills, listening comprehension, reading, and speaking are the three best maintained. These strengths enabled the participants to demonstrate good basic interpersonal communication skills (BICS) (Cummins, 2000b). As for cognitive/academic language proficiency (CALP) (Cummins, 2000b), the three participants demonstrated different levels in Mandarin. Linguistically, Jinhong and Datong displayed better expressive abilities and higher-order thinking skills (Cummins, 2000b) in Mandarin than Yan, while Yan and Datong demonstrated greater abilities and skills in English than Jinhong. Of all three, Yan has developed the least in Mandarin skills overall. However, from the Chinese literature she has read and the level of listening comprehension in her Chinese communicative activities, I could still see some development of her L1. With the data analyzed and discussed, it seems reasonably safe to conclude that the maintenance of the participants' L1 Mandarin has been a positive experience

for all three. And based on their high levels of L2 proficiency, it also seems fairly clear that the maintenance of L1 neither interfered with L2 acquisition nor diminished their academic development.

In the socio-cultural section, the findings demonstrate that the participants all consider being able to maintain their L1 as something that is enjoyable and beneficial for their mental health: their cultural identity, ethnic identity, and self-image formation, their awareness of well-being, their construction of self-confidence and their acculturation process. At the same time, the maintenance of their L1 has also provided them with potential academic, cultural, social, economic and career achievements or success. In this study, the three participants all expressed appreciation to their parents for their constant support throughout the long process of L1 maintenance. At the same time, the participants all stated their willingness to continue maintaining their first language and heritage culture into the next generation.

Linguistically, this study shows that the participants' L1 skills did not decline at the same rate. The grammatical competence showing the biggest decline in all three participants is orthography (the ability to write Chinese characters). For Yan, lexical features (the ability to use Chinese word combinations), has also declined notably.

When their intuitive sense of their L1 loss was affirmed through various tests, the three participants, especially Jinhong and Datong, were embarrassed. Jinhong and Datong even felt shocked that they were not able to retrieve some of the words from their Chinese literacy repertoire. When they mentioned that their Mandarin competency in academic areas ceased to grow after they came to Canada, they thought that this might bring a potential disadvantage in their future careers. To compensate for this "arrested development" (Guardado, 2002), they all stated that they plan to upgrade their proficiency sooner or later. As for the reasons for their loss, "low frequency of L1 use", the "strong pull of English" and "environmental factors" came out as the top three. Although they each hold a different attitude toward L1 attrition, from the data scrutinized it can be concluded that to the participants, L1 attrition is a negative linguistic, cultural and social

phenomenon. Among the three, Yan was the most worried about the attrition since the inconvenience caused by her L1 attrition has been strongly felt in her work already as an articling lawyer. Yan's case shows that instrumental motivation of developing/maintaining L1 and concrete actions taken generated from such motivation can be powerful and effective in helping attriters to recover and further develop their L1.Yan 's case after 2003 could be considered as a successful case.

Socio-cultural factors and L1 maintenance and attrition

Socio-culturally, I investigated what language loss or attrition means to the three participants, the reasons for their L1 attrition and how this happened to them. Herdina and Jessner (2002) point out:

> Language attrition is a gradual and much less spectacular process than abrupt complete language loss…. Language attrition is not observable because, at least at an early stage, it expresses itself in the form of an increased scatter of performance. As long as there is no explicit performance measure, this increased scatter will go unnoticed. (p. 96)

From the findings I have observed that the participants' ethnic identity formation and reformulation, the degree of passion toward one's L1-C1 and L2-C2, have a great effect on the cognitive/affective disposition toward L1 maintenance and attrition. It is assumed that these are decisive factors that lead to different attitudes toward L1-C1 maintenance and to different degrees of L1-C1 involvement in the L2-C2 environment. This study also finds that cross-cultural awareness and a balanced acknowledgement of both heritage culture and the dominant culture in terms of bilingualism or multiculturalism are essential in the healthy linguistic development of both L1 and L2. Another factor that has a major effect on the participants' motivation and on their efforts in maintaining and developing their L1 Mandarin is their attitudes toward language loss. The findings confirm that intrinsic and/or more self-determined extrinsic motives (i.e., identified and integrated regulation) are more sustained motive than less self-determined motives (i.e., external and introjected regulation) (Noels, 2001, 2009)

in the process of L1 maintenance and development. Frequency of L1 use, including interpersonal contact such as everyday communications with Mandarin speakers such as classmates, teachers, parents, and frequency of contact with Mandarin media such as Mandarin TV program and Chinese language books are factors that influence L1 maintenance and attrition on the socio-psychological level and on L1 lexical and literacy levels. The participants also indicated that parents' and teachers' attitudes toward L1 maintenance and their practice in supporting their children on this issue make a great difference.

From the findings, it could be assumed that it is possible to obtain comparatively balanced English and Mandarin bilingual results given the necessary commitment and "powerful learning environment" (Verhelst, 2006, p.199). This study supports what Wong-Fillmore (2000) points out that language loss is not a necessary or inevitable outcome when children acquire a second language.

This study shows that the level and type of proficiency in both languages has not remained static for these bilingual young adults. They have changed over time as their linguistic environments or other social and cultural factors changed. Although the L1 experiences the participants had in China are relatively similar, the contrasts in the degree of attrition and the amount maintained or developed by the various participants are significant. The analysis of both the social and linguistic data allowed me to explore the reasons for these contrasts and to develop a better understanding of the process of young Chinese immigrant adults' L1 maintenance and development. These results also seem to substantiate the claim by certain researchers (Baker, 2002; Chinen & Tucker, 2006; Cummins, 1993, 2000b; Li, 2006; Potowski, 2007; Wong Fillmore, 2000; etc.) that enrichment programs designed to promote bilingualism provide students with greater access to bilingualism, biliteracy and bicultural orientation, as well as greater possibilities for the development of cultural awareness and sensitivity, open-mindedness and flexibility toward others and their opinions, and for becoming less prejudiced against other cultures and races.

Implications

Although the scope of the present study and the small number of cases are not conducive to generalization, the narratives of the three participants on their linguistic, social, cultural and educational experiences relating L1 maintenance and attrition have opened descriptive painting before us. It is hoped that this study will be of value in influencing pedagogy, awareness of and attitudes toward L1 preservation in the public, and in policy-makers at different levels: school administrators, teachers, parents, and young immigrants. I hope this study will challenge us to examine present practices concerning L1 and L2 language ideologies, and to build a vision for the future that generates optimal learning opportunities for the increasing number of linguistically diverse young people in this society. We may not be able to provide immediate solutions to all of the concerns being raised; however, I hope that the following implications will aid in making certain solutions possible.

Improved public awareness

First, better public awareness of the value of heritage languages and bilingualism, and informed support from the public (based on this study's results on heritage-language retention) are important for young immigrants. This is to say that support from the L1 community is not enough; appropriate support and understanding need to come from the mainstream community as well. The three cases in this study show that "functioning in a new cultural context is a difficult experience" (Brisk, 2006, p. 105). A lack of information and awareness, a lack of support from the public on L1 maintenance accompanied by certain policy-makers' limited views on language, bilingualism and the general public's continuing attitude of considering immigrants' heritage languages as a "problem" (Ruiz, 1984) rather than a "resource" (Ruiz, 1984), serve to devalue the cultures and heritage discourses in which immigrant children live, and thus the precious past experiences these immigrant children bring to our educational institutions.

Consequently, immigrant children's motivation and attitudes toward maintaining their heritage languages and cultures may decline rapidly, as was the case for Yan

Although in Alberta there is comparatively long and strong bilingual education tradition and there are many bilingual schools, the "heritage language devaluation phenomenon" still exists in some mainstream schools.

Ovando describes such a language policy as schizophrenic:

> On the one hand we encourage and promote the study of foreign languages for English monolinguals, at great cost and with great inefficiency. At the same time we destroy the linguistic gifts that children from non-English language backgrounds bring to our schools. (Ovando, 1990, p. 354, cited in Baker, 2002, p. 374)

Through Yan's case, it is found that the "language as a problem" orientation is still a part of the "hidden curriculum" (Brown & Kysilka, 2002, p. 171), especially for those teachers with no training in L2 acquisition.

The findings in this study also show that the two conflicting principles of this language policy, namely "a subtractive policy of language assimilation for language minorities and an additive policy of foreign language study for mainstream English monolinguals" (Shin, 2006, p. 143) are also being practiced here. From a school point of view, Yan's experience could be seen as a success story: she succeeded in achieving English literacy (Wong-Fillmore, 2000; Li, 2006). However, the price she paid for her success was that she lost a great deal of her L1 capabilities. Her loss suggests that to society, ontology is still a challenge, since HL pedagogy, including research associated with the attrition, maintenance, and growth of heritage language proficiency, is still an emerging field which has just begun to be recognized as a field in its own, and heritage language as valuable national and personal resources (Brinton & Kagan, 2008; He, 2008; Kondo-Brown, 2006; Li & Duff, 2008). In the past few decades our society has experienced changing demographics. Therefore the basic belief systems on immigrant students' L1 and C1 education might need to be carefully re-examined from the perspective of bilingualism and bilingual education. As Toohey and Derwing (2008) point out: "Students' first languages and their cultural knowledge are resources that are too often squandered by schools. Rather than most of the

adjustments being made by immigrant students and their families, educational institutions must make significant changes" (p.191).

The bilingual Mandarin language program in Edmonton has been recognized as one of the largest and most comprehensive educational programs in the Chinese language outside of China (Harding, 2006). However in Canada, only one other public school board – Calgary School Board – has adopted Edmonton's model. In the Vancouver School Board, although there is one elementary school that offers a Mandarin bilingual program, they teach Mandarin only on a limited basis from grade 4 to grade 7, and the program is designed for students who "are fluent in English and have strong English reading and writing skills"[1]. According to Patricia Gartland[2], director of School District No 43 (Coquitlam), Canada, in December of 2009, the district just approved the proposal to start an English-Mandarin bilingual program in the district in 2010. This will be the second school board that has adopted Edmonton's model. In Ontario, according to provincial law, only English and French can be offered as a bilingual or immersion program (Derwing & Munro, 2007; Harding, 2006). "Bilingual heritage-language programs that are found in the Prairie provinces do not exist in Ontario" (Cummins and Danesi, 1990, cited in Derwing & Munro, 2007, p102). For example, there are about 20,000 students learning Mandarin in Toronto. Students take Mandarin classes in public schools which offer Mandarin program only as an after-school or part-time credit course, or they can go to weekend private schools to learn Mandarin without credit. Such policy might send the message that "non-official languages have little value in the modern world for Canadians" (Lowe, 2005, p. 141). However, "Ontario still holds close to its tradition of marginalizing non-official languages and is wary of making any change to the status quo" (Lowe, 2005, p. 141).

Datong's experience in the additive English-Mandarin bilingual program in Edmonton indicates that Alberta/Prairies model of bilingual programs are not

[1] Retrieved on June, 30, 2009 from http://jamieson.vsb.bc.ca/Mandarin%20Bilingual%20Program.html

[2] Patricia Gartland made the announcement on the directors' forum of the 4th Confucius Institute Conference held in December 11-15, Beijing, China.

only helpful for mainstream students who want to be bilingual and bicultural, but also ideal for new comers like Datong who want to maintain their heritage language and culture while acquiring L2 and the dominant culture. The Mandarin classes in this program are integrated into school days and thus are viewed and applied as "official" "legitimate, valuable and worthwhile" (Lowe, 2005, p.110). Derwing and Munro (2007) mentioned:

> Bilingual programs in heritage languages (that is, languages other than French and English) have not been developed extensively except in a few Prairie cities, most notably Edmonton, where for twenty years there have been several successful programs. Currently, students can have subject matter taught 50 percent in English and 50 percent in Arabic, Mandarin, Ukrainian, Polish, German, Hebrew, or Spanish. (p.102)

With Datong's story in mind, I recommend that those provinces or cities that have not already started such bilingual educational practices should take initial steps to pass enabling legislation to make such programs possible in their provinces and cities as School District No 43 (Coquitlam) recently did. To take the steps, however, concrete federal government support should be provided in encouraging provinces to incorporate heritage languages into education, while strengthening the status and use of the official languages, as applied in the Albert/Prairie model. Fortunately, Canada does have a national language policy that recognizes and actively supports non-official languages, and "all provinces acknowledge, at least on paper, that first language maintenance is important" (Derwing & Munro, 2007, p. 100). These are the potential and foundation to achieve a Canada of real multiculturalism. Students' first languages and their cultural knowledge are resources that are too often squandered by schools. Rather than most of the adjustments being made by immigrant students and their families, educational institutions must make significant changes.

Beyond linguistics

Examining the connection between the socio-cultural and the linguistic findings of this study suggests that issues of L1 maintenance and attrition among young adult immigrants, as with issues of L2 acquisition, are not confined to

abstract linguistic systems or forms. If immigrant families are to raise children and schools are to educate immigrant students into bilinguals in the context of a dominant L2, the development of L1 proficiency of children in the L2 environment must be embarked upon within a given social context. According to cognitive development theories, learning is a process of constructing knowledge through the interaction of thought and experience (Carrasquillo & Rodriguez, 2002). Considering L1 language education in the L2 environment simply as abstract teaching of linguistic systems or forms, especially by teachers and by educators, is not only naive but also narrow-minded. In the teaching and learning process, this will fail to capture the way in which students experience the world and may cause psychological, cultural and even physical impediments to the development of their well-being. However, the "linguistic system only" model is now still a major concern challenging the orientation of international Chinese language education (Xu, 2008).

Teachers are essential components of language education; their attitudes, beliefs and actions greatly influence those of the students and thus reverberate into the larger school environment. Educators should take into account the ways we can foster and confirm the balance between knowledge and things that are beyond knowledge, to provide adequate space for students' cultural and physical experiences in language learning. The mechanistic language-view should be turned into respect and consideration of students' feelings as a whole. Real language learning, whether maintaining and developing L1 or acquiring L2, emerges from taking the wholeness and integrity of the language and the individual into account.

Building constructive classroom ecologies

As a Mandarin-language teacher and a researcher, I think one of the most important implications for teachers and teacher trainers stemming from this study is that we teachers should value students' linguistic and cultural backgrounds, thereby building sensitive and constructive classroom and school ecologies. "Any learning a child encounters in school always has a previous history" (Vygotsky,

1978, p. 84). Acceptance of students' cultural background will help them establish an identity "that is rooted in their culture group but extends beyond it into the new social group" (Brisk, 2006, p.105). Schools should be caring communities, committed to eliminating barriers of injustice rather than enforcing these barriers. Scott, Straker and Katz (2009) point out:

> Today we know a great deal more about language diversity and education than we did three decades ago; yet many of the recent educational policies threaten to lower the access of non-mainstream students to their language, to high-quality instruction, and to equitable educational opportunities. (p. XVII)

The linguistic and cultural backgrounds of young immigrants are valuable resources that will not only help to facilitate their own learning, but will also contribute to a richer and more interesting curriculum for all students. Instruction and school environments that do not respect immigrant students' cultural and linguistic backgrounds will lead to the self-devaluation of these students and will decrease their passion for maintaining and developing their L1 and C1. The scars left on Yan's young heart by the hurtful linguistic experiences that she encountered in her schooling, and the resistance strategies Jinhong applied to empower herself in the new land because of lack of understanding and support had negative impact on their cognitive or linguistic development, and in their process of acculturation. This study allows these young immigrant individuals through their stories to challenge our school settings and educational institutions "that claim to value diversity, but do little to create or maintain environments that are welcoming" (Watford et al., 2006, p. 129) for students like Yan and Jinhong. Their stories should be considered as lessons for every teacher involved in educating language-minority students.

To meet the linguistic and educational needs of newly immigrated children, varying language options are provided by the school system. Yan was sent to a regular mainstream school, Jinhong attended an ESL program and Datong went to an English-Mandarin bilingual program. It is not my intent to generalize the impact that different programs have on all immigrant students on the basis of such a limited set of data. However, some characteristics of bilingual

education[1] versus that of ESL and mainstream education can be addressed. Datong's bilingual proficiency competence is the most outstanding of the three. In addition to this linguistic behaviour, he appears to be the most positive, most flexible and most at ease in navigating two distinct cultures. In addition to placing students in a position to realize the usefulness and status of their L1 first hand, researchers (Baker, 2002; Brisk, 2006; Cummins, 2000a) argue that additive bilingual programs also benefit students who have low-level L2 competence, and the non threatening linguistic environment positively contribute to their L2 development. Datong's experience in the bilingual program and his development in English provide additional support for this claim. In order to foster young Chinese immigrants' achievements of high level of acculturation—in order to nurture their bicultural competencies and enable them to participate more effectively, and to contribute to a greater degree to both cultures—an additive bilingual education might be a desirable route.

Building collaborative power

Parents are partners in education. This partnership concept acknowledges that neither families nor schools alone can educate and socialize children for their functions and contribution in society. In helping our children to maintain and develop their L1, families too, play a vitally important role that can not be over estimated. The three cases in this study speak loud in this aspect. Therefore, to exclude families from various cultures, to ignore the role they play and deny their contribution to their children's linguistic development, and sometimes to treat them as part of, or as a cause of their children's problems in school, is not only destructive, but will also negatively affect children's wellbeing. Unfortunately, my participants show us the existence of this phenomenon in the educational

[1] Bilingual education here refers to additive bilingual education in Canada Tse (2001) defines additive bilingual education programs as follows: These programs are designed to help students become fluent and literate in two languages by maintaining and developing the native language while students learn English. By the time students exit the program, they should have both conversational and academic facility in two languages. Long established in other countries, these programs appear to produce consistently good results when the proper support and resources are available. (2001, p. 36)

institutions. It is important for educators to facilitate the involvement of parents in our programs, because again, comprehensive and real language learning, especially in L1 maintenance and development, emerges from a constant collaborative teacher-parent partnership.

As we know, teachers at school and parents at home are the most powerful influence on students' behavior and learning. Therefore, both teachers' and parents' attitudes toward the L1 maintenance, the practice and actions they take, affect children substantially. To obtain an advantageous attitude, to provide desirable L1 exposure in oral and written forms, to create a comfortable and non-threatening language learning and acquiring environment, it is extremely important for both teachers and parents to attain certain knowledge on bilingualism and the language acquisition process, to familiarize themselves with children's learning and cognitive styles, to set high expectations on bilingual and bicultural competence for the young immigrant children, and to provide assistance to help them reach those expectations.

Collaboration is also needed in enabling our children to take pride in who they are. This identity issue is something invisible yet essential for their linguistic life. What kind of identities are they negotiating in our schools, classrooms and at home? What images of citizenship do they form throughout our educational system and our parenting practice at home? How do we develop a vision for their linguistic and social future? How do we invest and reinvest in the formation of their global citizen identities? How do we cultivate our children's bicultural and bilingual awareness and foster their multicultural and global concepts in the classroom and beyond? These are great challenges that require us to confront them passionately and scientifically. Once they are dealt with through solid collaboration, we will see that the rewards will be well worth the efforts.

Effective linguistic practices in maintaining L1

This study suggests the following implications for L1 maintenance and development from a linguistic perspective: oral exposure does not automatically

lead to literacy. Reading and writing require not only oral exposure but also print experience and mapping between speech and print. Oral exposure facilitates the association of sound with meaning, but it does not necessarily support the association of symbol with meaning and meaning with symbol. Without these two latter associations, the development of reading and writing skills is hampered. These findings also suggest that the home environment of heritage students may not provide them with as much literacy exposure as it does oral practice. Background knowledge of Chinese, a language with notoriously difficult orthography, may not support reading comprehension or vocabulary learning if that knowledge does not include sufficient exposure to the script system.

1. Talking to children in L1 at home may facilitate L1 maintenance by providing enriching opportunities for children to practice their L1 regularly. This will also help to instil cultural pride within families and keep close relations with family members. Hhowever, oral exposure at home does not automatically lead to L1 vocabulary learning and literacy maintenance and development if it does not include sufficient exposure to the script system and writing activity.
2. Recreational reading in L1 helps to build a larger literate lexicon repertoire and helps to keep a close link to L1 culture.
3. Recreational writing in L1 helps to build a stronger ability to recall words with clarity and accuracy from L1. It also helps to enhance writing abilities in L2.
4. Desirable L1 maintenance and development may be obtained when planned L1 educational activities (at school and/or home) are added to natural L1 practice at home.
5. To young adults as the participants in the study, conversational fluency of L1 depends on the frequency of contact to which L1 is continued to be spoken and exposed. The development of L1 lexicon and literacy competence depends on lexical access and diversity and on the quality of L1 contact and exposure. Attrition of L1 phonology and syntax, and

comprehension of L1 might depend less on frequent activation, therefore are less vulnerable to attrition.

6. Additive bilingual programs provide a systematic higher level of L1 input and provide a higher level of L1 maintenance for young immigrants through their bi-cultural school contexts, curriculum, pedagogical styles, literacy perspectives, and resources. In addition, such programs promote young immigrant students' appreciation of their L1 and C1 as well as their cross-cultural or bicultural awareness.
7. Collaborative efforts are necessary in promoting L1 maintenance, development and continued learning—from the communities within classrooms to schools, local L1 and mainstream communities, and L1 and mainstream communities within the country and abroad.

Future research

Additional research is suggested on the following aspects:

1. L1 maintenance and attrition among Chinese immigrant children in the preschool or early school years.
2. The impact of L1 attrition and loss on young Chinese immigrant students who barely have any linguistic L1 competence remaining.
3. Factors that affect how young Chinese immigrant students situate, negotiate and develop their identities and adjust to the L2 and C2 environment.
4. Effective pedagogical practices and institutional support for both L1 maintenance and L2 development in young Chinese immigrant students.

Concluding remarks

The purpose of this study was to investigate the experiences of young immigrants from China to Canada in reference to their L1 maintenance and attrition. The stories told by my participants, however, have made me think in a new way as a bilingual and bicultural inquirer and researcher. They are valuable

and relevant to my life as a teacher in the classroom. They have made me notice different life stories that I, as a heritage language teacher, was not familiar with. They have helped me to gain insights in "the broader human condition" (Cole & Knowles, 2001, p. 11). They have helped me understand the situation that my participants were put in as young Chinese immigrant children in Canada. They have provided me with meaningful explanations of the many decisions my participants made as child immigrants or decisions that were made for them, and which I, as a language teacher and researcher, had never considered. They have helped me in that I wish to explore in much more depth the *what*s and *why*s of the complexities of young immigrants' lives in educational, community and social contexts.

Listening to their stories and learning things of which I had previously been completely unaware has allowed me to make numerous connections between myself and my students, and to classroom teaching and learning. I feel a greater obligation to consider the various kinds of input my students provide me daily in my teaching life. I have become more passionate in searching out further venues of exploration as a communicator, a facilitator, a decision-maker, a language and culture advisor, a mentor, a learner, a friend, and in the many other roles I have had to ponder as a teacher.

Among the three participants, Yan's relative weaker L1 development and attrition was the most serious. However, there are many more cases in which L1 attrition and loss is much worse than that of Yan. In the process of finding my participants, I spoke to about ten other young adults who met all the established parameters for this study. However, those young adults did not become my participants. There are three major reasons for this. First, some of the young adults thought their Mandarin was too weak to talk to the researcher in Mandarin during the interview. They felt uncomfortable having their speech data in Mandarin recorded and analyzed: when Datong asked his friends whether they wanted to be participants, they answered *no* because they did not want to embarrass themselves with their poorly maintained Mandarin. Second, a certain number of young adults from China denied that they could speak Mandarin and

even that they came from China. One said that he was from Singapore and the other said that he was American. These two "were keen to stress their Canadian identity" (Bell, 1997, p. 98). Thirdly, the parents of some of these young adults did not allow their children to participate; they were afraid of "losing face." To Chinese, "formal education is valued and academic success is related to family integrity. Success brings honor and prestige, whereas failure incurs shame" (Ariza, 2006, p. 44). In one case, I talked to two young adults (a brother and a sister) over the phone and they were both very willing to help me; we had even settled on an interview time. However, after about half an hour I received a phone call from their parents telling me that they could not participate because they were too busy with their basketball and swimming. I felt this was just an excuse.

I hope that in the future researchers will give this population closer attention, which they deserve.

To me, this study is the start of a new journey as a Mandarin language teacher and a researcher. Through this study I have also invited my participants to start new journeys toward bilingual and bicultural competence as Chinese immigrants, as Canadians, as future professionals and as young global citizens.

I hope this study will be of value in influencing other parents' and teachers' awareness, concern and attitudes toward preserving heritage. If we choose to develop our children into bilinguals rather than monolinguals, both parents and teachers need to think about what we can do to generate optimal opportunities for preserving L1 in the process of L2 acquisition. How should we provide good-quality L1 input to our children at home and in schools? How should we create and build up an encouraging, effective, and cooperative three-way home-community-school learning environment? In what ways does our practice in school setting highlight the immigrant learners' membership in the human community and how do we respect and appreciate the differences they bring to this country from the perspective of human community? What roles should parents and teachers be playing in our children's long journey toward bilingualism and biculturalism? How are we to orient ourselves, prepare ourselves and present ourselves for this long journey?

This study greatly impressed these challenges upon me. I welcome these challenges!

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APPENDIXES

Appendix I: Questionnaires

A Questionnaire for self-assessment of Mandarin and English

Note: Please read each of the following statements carefully and circle the correct answer**.**

1. Easily and fluently 2. Fairly well but with some difficulties
3. With a lot of difficulties 4. Not at all

A) Ideational function

1. I can tell my most important academic accomplishments to my friends.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
2. I can do a presentation on or talk about my learning strategies.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
3. I can express my appreciation to people who helped me.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
4. I can describe a typical day of my life as a student.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
5. I can talk about what I look for in my study.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
6. I can describe my favourite movie or television show.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
7. I can describe a recent vacation in China.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
8. I can think quickly and clearly in an impromptu-speaking situation.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
9. I can provide quick feedback to inquiries.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4

B) Manipulative function

1. I can use words that precisely and vividly carry my message to others.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
2. I can show my assertiveness and confidence in a debate.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
3. I can use good vocabulary to enhance conversation.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
4. I know how to start small talk in order to establish a good comfort level while conversing with others.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
5. I can approach new social situations and interest others on a certain topic.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
6. When I encounter a criticism, I know how to calm the critic down and allow my message to get through.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
7. I can tell powerful stories to make my points.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
8. I can advocate a point of view with conviction and sincerity.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
9. I can convince other people to study Mandarin or Spanish.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
10. I can generate other people's emotional commitment to my point of view.
    In English: 1 2 3 4 In Mandarin: 1 2 3 4
11. I can establish common ground with people who oppose my view and then promote my own beliefs without hurting them.

In English: 1 2 3 4 In Mandarin: 1 2 3 4

12. I can present my message fairly.
    In English: 1 2 3 4 In Mandarin: 1 2 3 4
13. I can direct and instruct other people to do a project.
    In English: 1 2 3 4 In Mandarin: 1 2 3 4
14. I can share my opinions on something in different types of relationships.
    In English: 1 2 3 4 In Mandarin: 1 2 3 4

C) Heuristic function

1. I can use good rhetorical devices to add power to my point.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
2. I use good facial expressions and good body language when talking.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
3. I can add impact to my speech such as props or humour that would help me to enhance my message.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
4. I can chair a meeting of the Chinese Student Association in my school.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
5. I can present facts, formulae and rules clearly and effectively.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
6. I can use sufficient language in problem solving and critic thinking.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
7. I can provide strong supporting ideas to my point of views.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
8. I can make statements about my satisfactions and dissatisfactions.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4

D) Imaginative function

1. I can use similes or metaphors to help make powerful points.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
2. I can bring people together in shared desires.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
3. I can build enthusiasm in my audience.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
4. I can lift up my audience with my words and inspire them to achieve certain goals.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
5. I enjoy poems and am able to explain them.
   English: 1 2 3 4 In Mandarin: 1 2 3 4
6. I read novels and short stories with no language obstacles.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
7. I can understand movies.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4
8. I can understand different kinds of TV shows.
   In English: 1 2 3 4 In Mandarin: 1 2 3 4

B. Simple questions on your Mandarin only

1. I can ask daily questions to my parents.
   1 2 3 4
2. I can answer my parents' daily questions
   1 2 3 4
3. I can describe what I saw and experienced to my parents and friends.
   1 2 3 4

4. I can understand my parents and their friends' conversation.
   1 2 3 4
5. I can read and understand Chinese newspapers.
   1 2 3 4
6. I can read information in Chinese websites.
   1 2 3 4
7. I can write a simple letter or email in Chinese to my friends.
   1 2 3 4

Appendix II: Research participant informational letter

Dear Prospective Research Participant,

I am a doctoral student in the Department of Elementary Education at the University of Alberta. I will conduct a study on young Chinese immigrants' first language loss and maintenance for my dissertation. I appreciate your interest in participating in this research project. The purpose of this research study is to gain a better understanding of the experience young Chinese immigrants have during the process of losing and/or maintaining their first language, Chinese, while acquiring their second language, English, and what meanings they gain from this process.

The study will involve a small group of four participants: two male and two female Chinese young adults who immigrated to Canada from China or Taiwan during their childhood. Each participant will 1) be interviewed once in English and once in Chinese, 2) be asked to complete a self-evaluation questionnaire in English, and 3) conduct a short English-Chinese and Chinese-English translation task.

Both interviews will be audio-taped. All information gathered from the interviews, story telling, questionnaire, and translation task, either on tapes or in written form, will be treated confidentially. It will be kept at all times in a secure area. Only the present researcher will have access to it. The collected data will be kept for five years and then destroyed. Any information that identifies you and your family will be destroyed at that point. You will not be identifiable in any publications and presentations as the results of this study. Your research participation is totally on a voluntary basis. You have the right to choose to respond or not to respond to any question in interviews and in the questionnaire. You also have the right to withdraw from the study anytime without being asked any questions. The report of the study will be shared with you. You have the right to disagree with any of my interpretations of your words and acts and ask me to take off the part of writing that concerns you. If you have any questions about this study, please contact me by phone or email.

If you agree to participate in this study, please complete the attached consent form for prospective participants and email me. Times for interviews and other tasks will be arranged accordingly.

Your participation and cooperation in this study is very much appreciated!!!

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Appendix III: Questionnaire for interviews

Part I

I would like to talk to you about your own personal language experience, when and how you learned a second (or third) language, in what sequence, etc.
Your name will be kept confidential, and there is no testing involved.
If you don't mind, however, I'd like to tape our conversation as an aid to memory for myself.

1. Where were you born?
2. Where did you spend your childhood?
3. What languages were spoken in your country?
4. What do you regard as your native language?
5. What language(s) was (were) spoken in your neighbourhood?
6. Which was the first foreign language you learned?
7. Where did you start and how long did you learn…?
8. Where and under what circumstances did you learn…?
9. When you learned … at school, what did you study (ESL)?
10. What kind of textbooks did you use?
11. Did the teacher speak in English only?
12. Do you remember what kind of homework you had to do?
13. Do you remember what you had to practice, what was really difficult for you?
14. Did you have any contact outside the classroom/your home with speakers of Chinese?
15. Which other languages have you studied or tried to study?
16. Which of these languages have you maintained to the present? And how much?
17. Could you tell me how well you know these languages now and when you were at your best? If you had to describe your knowledge of …which of these statements would be most appropriate?
    Interviewer: Ask about the different stages of language learning:
    Elementary Intermediate Advanced
18. Are you satisfied with your achievement in English? (Or other languages)?
19. Some people say they have a gift for languages, others say they haven't. Would you regard yourself as strong or weak in languages?

Part II

1. When did you notice that your Chinese was declining as your English was improving?
2. What do you think is (are) the reason(s) for your loss of Chinese?
3. Do you think there is a pattern for the loss?
4. Do you think your family has made efforts over the years to keep your heritage language Chinese strong?
5. Do you think you have made efforts over the years to keep your heritage language Chinese strong?
6. Did your homeroom teacher understand Chinese?
7. Did any of your classmates understand Chinese?
8. Did they give you help in study and in everyday school life? In what way?
9. Do you speak English or Chinese at home to your parents?
10. Do your parents speak English or Chinese to you at home?
11. Do you prefer speak English or Chinese to your parents at home?
12. Imagine that you had the opportunity to work in a Chinese company, do you think your Chinese is strong enough to work for them?
13. When did you realize that your Chinese is getting weaker?
14. Which language skill got weaker first, listening, speaking, reading or writing?
15. Do you think there is need for children to learn their heritage language? Why?

Part III

1. In what way did you maintain and lose your Chinese language after you immigrated to Canada?
2. How do you view the maintenance and loss?
3. How much your parents and teachers were involved in your maintaining Chinese?
4. In what aspects your maintaining is challenging?
5. What are the effects of L1 maintenance and attrition?
6. What do you think and feel about your cultural and ethnic identity in the process of your linguistic development?

Appendix IV: Translation sheet

Please translate the following into English or Chinese:

Rank I

1. **爱好**
2. **抱**
3. **别**
4. **船**
5. **点**
6. **飞机**
7. **姑娘**
8. **花**
9. **交**
10. **开玩笑**
11. **连….都**
12. **面包**
13. **女儿**
14. **跑**
15. **人**
16. **试卷**
17. **提**
18. **为**
19. **小时**
20. **一下儿**

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21. **convenient**
22. **service**
23. **appreciation**
24. **factory**
25. **past**
26. **change**
27. **technique**
28. **dumpling**

29. often

30. experience

31. teacher

32. bread

33. easy

34. condition

35. hope

36. news

37. sure

38. art

39. opinion

40. music

Rank II

1. **保守**
2. **表情**
3. **参与**
4. **车厢**
5. **出事**
6. **打岔**
7. **挡**
8. **订婚**
9. **罚款**
10. **封建**
11. **阁下**
12. **关怀**
13. **航行**
14. **缓慢**
15. **给予**
16. **建交**
17. **紧密**
18. **聚集**
19. **空军**
20. **里程碑**

Rank III

1. **包裹**
2. **弊病**
3. **补偿**
4. **菜单儿**
5. **常用**
6. **充当**
7. **垂头丧气**
8. **大厦**
9. **提防**
10. **冻结**
11. **发扬光大**
12. **分清**
13. **附和**
14. **更换**
15. **雇员**
16. **过问**
17. **狠毒**
18. **荒地**
19. **激情**
20. **兼任**