

RESTRUCTURING FRENCH IMMERSION
- ADDRESSING SOME CRITICISMS

by

WAYNE MACINTYRE

A thesis submitted in partial fulfilment of the
requirements for the degree of
Master of Arts (Education)

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ABSTRACT

French immersion is widely considered the most successful second language learning program ever used in a school setting. This view is tempered, however, by a number of criticisms: it does not produce native-like speakers, it is elitist, and consequently is not enjoyed by all students, it is costly and it has caused divisions in communities where it has been implemented. These criticisms suggest that French immersion is an unfair educational practice. The purpose of this thesis is to examine French immersion and the criticisms made against it. A literature review of second language acquisition theories and variables was conducted. This review includes a discussion of the following: the genesis of French immersion in the public school system, the reasons for considering French immersion a successful second language learning program, selected theories and variables influencing second language learning, and the criticisms against French immersion. Based on this review, a model for evaluating and restructuring French immersion is proposed. This proposal suggests that: 1) early French immersion is not necessary in order for students to achieve a high level of competency in French, 2) whereas early French immersion begins at age 5, the optimum age for L2

learning is just before the onset of puberty, between the ages of 10 and 12, 3) intensive French programs offered to students in the optimum age range for language learning help students achieve a level of French competency similar to that offered in French immersion, and 4) a restructuring of French language instruction is needed in order to offer a high level French program to all students, thereby encouraging them to reach their potential in French while simultaneously re-establishing a sense of fairness in the delivery of French second language education.

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CHAPTER I

INTRODUCTION

Today, perhaps more than ever before, students need a well rounded education so that they will be prepared for today's world. Part of this education includes second language learning. In Canada the dominant second language offered in schools is French. Some parents rush to line up for the child's enrolment in a French immersion program. Others do not choose the immersion option for different reasons such as uncertainty about the child's first language development, uncertainty about the child's ability to cope with learning a second language, unwillingness to support a program they feel is elitist, or inability to enroll in French immersion past the enrolment date. For these parents a second French program is mandatory in most Canadian schools - core French, commonly referred to as the regular French program.

French immersion began as an experiment (pilot project) in second language learning and has been studied intensively. In order for researchers to determine the success of French immersion, they concentrated on analysing the performance of students. This involved comparing French immersion students first with core students and subsequently with French native speakers. The results of the comparisons left little doubt that French immersion was a superior second language learning program.

Although comparisons were carried out for the specific purpose of determining the success of the French immersion program, the results indicated that those students

not enrolled in French immersion received a "second rate" French program.

Consequently, it did not take long before bad feelings between French immersion and English stream parents arose amid claims by English stream parents that French immersion students enjoyed an almost private school status in the public system -drawing the 'best' students and receiving more financial support.

Similarly, as students neared the completion of the program, criticisms of their proficiency levels arose. Though considered to be more proficient in French than core students, immersion students did not attain native-like levels of competency, as many hoped for and expected. These criticisms, that French immersion is elitist and produces students with levels of competency lower than expected, provided the impetus for this thesis.

Though French immersion impacts on all Canadian students, it does not affect them all equally. In order to address the notion of equal French education for all students, it is necessary to examine French immersion within an academic and social framework. This examination begins with a brief introduction to the evolution of human language which progresses to the birth of French immersion in the public school system. Following this, reasons for the success of the French immersion program are presented. Selected theories and variables associated with second language acquisition are then discussed in order to form a basis for suggesting modifications to the French immersion program. These theories and variables include the critical period for second language learning, phonology, the development of interlanguages, the monitor model, acculturation, cognition, and the optimum age for second language learning. This

discussion leads to an examination of criticisms raised against French immersion. Using the criticisms as a springboard, suggestions are offered for a restructuring of French immersion. The proposed restructuring includes methodological features of French immersion as well as features of a second language learning program currently in use in the province of Quebec. Such a revamping merits consideration, given the realities of 20th century life in Canada, as the final chapter highlights.

CHAPTER II

FROM LANGUAGE ORIGINS TO FRENCH IMMERSION

Archaeologists have unearthed sufficient information to be able to provide a reasonable theory of human development. Conventional theory suggests that from the moment hominids realized they were more secure living in groups, their system of communication began to expand and develop. While leading a rather solitary existence in the trees, our ancestors were relatively safe from many dangers that plagued earth-bound creatures. They did not need advanced communication. When they left the safety of the canopy, they headed for open grasslands in search of sustenance. During this time they realized how helpless they were, standing alone against earth's ferocious creatures. This helplessness forced them to cooperate in order to better defend themselves. Cooperation in turn gradually led to the development of a more complex system of communication, a system which became language. For hundreds of years linguists have studied this aspect of human evolution in an effort to understand the development of speech/language. With the aid of archaeological and biological information, they offer theories which reach into the distant past in an attempt to explain the history of human communication.

A major breakthrough in the understanding of speech and language production occurred in the 19th century. A Parisian surgeon named Paul Broca routinely performed postmortem autopsies. He observed that those persons who had speech disorders also

had brain damage in the left hemisphere, the implication being that the brain played a major biological role in the development of speech. Broca's findings brought a greater depth of understanding and encouraged more research into linguistics. One of the spin-offs was research focussing on gestures and speech.

Gestures are one type of communication. Prior to using speech for communication, theorists believe that our ancestors gestured. Stevenson (1979) feels this occurred to avoid revealing one's presence to a predator. Kimura (1979) finds that the structural limitation of the vocal tract hindered oral communication. This limitation thus favoured manual communication. McNeill (1985) suggests that speech may have actually sprung from the physiological structure controlling gestures. He maintains that, as a result, speech and gestures respond to the same internal forces simultaneously, thus revealing two views of the same communicative process; speech and gestures both relay the same message. This suggests that the speech centre owes its development to the gesture centre. It is perhaps for this reason that speech is always accompanied by movements (Kendon, 1980, cited in Falk, 1992).

Exactly when hominids began to use speech as a primary means of communicating is unclear. Research suggests some possible time frames. By comparing fossils of the vocal tract with the bones of modern humans, researchers can estimate the likelihood that speech was possible for early human forms and how that speech may have sounded (Lieberman, 1984). For example, Arensburg, Tillier, Vandermeersch, Dugay, Schepartz and Rak (1989) compared a hyoid bone fossil¹ with

¹The hyoid is a small, semicircular bone which supports the larynx.

that of a modern hyoid bone. They found that:

...there has been little or no change in the visceral skeleton (including the hyoid, middle ear ossicles, and inferentially the larynx) during the past 60,000 years of human evolution. (p. 785)

The authors conclude that the morphological basis for human speech was fully developed during the Middle Palaeolithic. The speech mechanisms of *Homo sapiens* would therefore have been similar to those of modern humans.

Butzer and Isaac (1975) step back almost 400,000 years in their analysis of the Steinheim skull. They find the palate of the Steinheim skull well within the human range. This analysis is further supported by Laitman, Heimbuch and Crelin (1978) who find the basicranial line² of the Steinheim skull closer to *Homo sapiens* than to Neanderthals.

Other linguists leap more than one million years into the past in search of the beginnings of human speech. Bickerton (1990) suggests that *Homo erectus* most likely developed a rudimentary form of language known as protolanguage³ (which leads to true language) some 1.5 million years ago. He bases his theory on the fact that *erectus* used fire and made tools. These activities could not have been as advanced as they were with *erectus* without the use of language/speech. Falk (1992) places the capability in the

²The basicranial line is related to the functional aspects of the supralaryngeal airways.

³Simply stated, protolanguage is a rudimentary form of language. In it there is no fixed relation between expressive needs and formal structure; it is difficult to determine who did what to whom. A sound or call representing "tiger" in protolanguage carries with it a stimulus acting to alert or alarm. In a true language, such a reaction need not always occur (Bickerton, 1990).

hands of *Homo habilis*, the ancestor of *erectus*. His reason is based on the fact that *habilis* appears to have had a Broca's speech centre in the brain. This area is necessary for producing speech.

Although it is uncertain exactly when hominids/humans acquired the power of speech, it does appear to have developed gradually. This development follows the theory of evolution. Archaeologists believe that the primates evolved into various species leading to *Homo sapiens sapiens*. Linguists similarly believe that language evolved with them. As a result, a "funnelling effect" occurs when looking toward the past such that before a creature *a* evolved, there must previously have been a creature *b*, before that a creature *c*, and so on. Similarly, before advanced language could exist, more rudimentary forms must have existed. Following this line of reasoning one arrives at a "first" family, and by inference, a "first" language.

Archaeologists believe that early human forms originated in Africa. Geneticist research supports this theory. Studies in the field of genetics indicate that some groups of people existed before others. Analysis of the genetic structure of blood protein of aboriginal people (Cavalli-Sforza, Piazza, Menozzi & Mountain, 1988) reveals that Africans were isolated longer than any other group, suggesting that they are the oldest known human stock.

There is also evidence suggesting that languages may have a common origin. Greenberg (1987), Ruhlen (1987) and Shevoroshkin (1990) believe they have isolated dozens of words which many of the world's languages have in common. These include aboriginal languages which are believed to be the oldest languages and therefore

represent a closer linguistic link with the past. For example, the words *tem* in Indo-European, *tum* in Uralic, and *ttum* in Afro-Asiatic languages all mean 'dark.' Likewise, the words *kuni* and *kuna* in Amerind and *küni* in Nostratic (a linguistic phylum including Afro-Asiatic, Altaic, Uralic and Indo-European languages) refer to 'woman.' *Kuni*, *kuna* and *küni* survive in modern English in the word *queen*.

It is unlikely that common words appear coincidentally in so many different languages. Although languages borrow from each other, they tend to borrow words for things or ideas they don't have (Wright, 1991), not for those which are basic and "stable", such as *finger* or *tongue*. And it is just these sorts of words which are recognizable in numerous languages. It is therefore reasonable to assume that these words existed in a common language ancestral to aboriginal languages implying the possible existence of a "first" language⁴. Thus it appears that both genetic and linguistic evolution have occurred simultaneously (Cavalli-Sforza, Piazza, Menozzi & Mountain, 1988).

As language developed our ancestors became more mobile. Bickerton (1990) and Falk (1992) believe that the power of speech allowed our early *Homo* ancestors to migrate. As they migrated, they established "communities." These communities began to develop their own ways of communicating. Hence languages developed in different milieus, under different circumstances and for different reasons. Gradually, the systems of communication became so varied and unrecognizable that the groups could no longer easily and effectively communicate with each other.

The difficulty in communicating continues. The number of languages spoken

⁴This first language is referred to in the literature as Proto-World or Mother Tongue.

today is estimated to be near six thousand (Krauss, 1992). The potential for misunderstandings is vast. Were communities to remain isolated, the problem of communication between groups would not exist. This, however, is not the case. Because of advances in the area of transportation and communication technologies, members of one group frequently come into contact with members from other groups. Marshall McLuhan's (1967) "global village" is a reality. People can now visit any part of the globe with relative ease and speed, if not in person, than at least through such media as film, television, telephone and radio. As a result, the earth appears to have become smaller.

This "shrinking" of the world causes some to respond negatively to their neighbour's customs, attitudes or manner of speaking. The inability of members of different groups to communicate with each other can give rise to negative feelings. It is common that where communication is lacking, so too is understanding and appreciation for another culture.

Many Canadians find it difficult to understand another language or culture, even when they exist side by side as English and French do in Canada. These two groups co-exist, but have difficulty interacting with each other, particularly on a political level. This in part is due to the language barrier between them. As a result, both communities tend to remain isolated. In Canadian political jargon the expression "the two solitudes" refers clearly to this isolation.

Misunderstandings and intolerance have resulted from these two solitudes being physically so close but linguistically and culturally so far apart (Canada Royal Commission on Bilingualism and Biculturalism, 1967-70). This has made governing

difficult. In an attempt to create a more cohesive country the federal and provincial governments have introduced a language program designed to help bridge the gap between the two solitudes. This program is called French immersion.

It would be erroneous to believe that the concept of immersion begins with the development of the French immersion program. Immersion is as old as the mingling of individuals between cultures. When a member of one community marries into that of another, whose language and customs are different, immersion occurs.

This form of immersion may be such that the newcomer is left to learn the target language on a "sink or swim" basis. Linguists refer to such a situation as *submersion*. In submersive situations, the language learner struggles to learn the language without formal, structured assistance, and on a trial-and-error basis. Examples of this are abundant in Canada. It is common to find foreign students in a regular English stream program in a grade level typical for their age. Many of these students have no special classes to help them learn the language. They must survive in this new language as best they can.

Other language learners do receive assistance in a structured and coached environment. This experience offers support to the language learner and lessens the intensity of the "sink or swim" experience. Linguists refer to this language learning situation as *immersion*⁵. Thus, the term "French immersion" implies that students learning French do so in a structured environment. It is the incorporation of this

⁵ It is this meaning which is referred to in the research literature. Consequently, it is the meaning referred to in this work.

structured environment into an educational setting that distinguishes French immersion from other language programs. In this sense, French immersion is a recent educational development.

French immersion grew out of what might be called the "dark ages" of second language learning theory. Prior to 1960, some linguists (Jones & Stewart, 1951; Johnson, 1953; Levinson, 1959; Saer, 1923) felt that encouraging a child to learn more than one language was dangerous. Their feeling was that the learning of a second language (L2) could negatively affect the child's cognitive, linguistic and socio-affective development. They depicted bilingual children as being hampered in their performance on intelligence tests when compared with their monolingual counterparts. The bilinguals were most noticeably less competent on verbal tests. The implication of this research was that children should be well grounded in a first language before attempting to learn another. Thus, informed parents were hesitant to offer their children a second language prior to the child receiving a good grounding in the first (Rowan, 1963). As a result, children were discouraged from learning a second language at early ages. The issues of whether - and when - to offer children second language instruction are discussed in greater detail in chapter four.

After 1960, a new age in language learning began. Research (Peal & Lambert, 1962; Lambert, 1967; Landry, 1978; Lieberman, 1984) appeared indicating that bilingualism, even at an early age, offered no threat to a child's cognitive development. This research indicated that bilingualism contributed positively to the child's cognitive, affective and linguistic development. Peal and Lambert (1962) suggested that the

bilinguals had "superior intelligence" which sprang from their experience with two languages. This experience, they felt,

...seems to have left him [the bilingual] with a mental flexibility, a superiority in concept formation, and a more diversified set of mental abilities, in the sense that the patterns of abilities developed by bilinguals were more heterogeneous. (p. 20)

Parents who wished to raise bilingual children found support in the new research. Not only did it do away with the notion that bilinguals were at risk intellectually, it suggested that bilingualism could increase intelligence. This change in attitude toward raising bilingual children later influenced the development of the first public school French immersion program in Canada.

Before the publication of research supporting bilingualism, some schools in Canada were involved in offering their students immersion-like experiences. The negative research regarding the intelligence of bilingual children did not alter the views of the educators in these schools that bilingualism was beneficial. The two languages involved in the "bilingual" classes were French and English.

Although such classes did exist, they were not widely known throughout Canada. After the rise in popularity of French immersion, some of these schools suggested that they had offered the first immersion classes in the country. The Ontario Institute for Studies in Education (OISE) investigated the claims of several school boards claiming to have offered "immersion-like" classes. It released its report in the "Bilingual Education Project Staff" (1976). A brief description of the results follows.

In 1953, in the Michipicoten Roman Catholic School and Public School Board in

Wawa, Ontario, Anglophones belonging to the French parish of St. Joseph offered English classes to French and English students as well as to students of mixed marriages. These classes were held in the basement of the chapel. School inspectors at the time noticed that the administrative signs were in English and that the French children were in a strongly anglicised environment. In spite of the strong presence of English, Ouellet (1990) found no support for the OISE report that an immersion-like program was underway in this school.

Another school, the Toronto French School, claimed that it was the first school in Canada to have an immersion program. The founder of this private school, Mr. W. H. Giles, strived to have school standards equal those of European countries. The OISE investigators found that this school did offer an immersion program. However, the school administration did not use the term immersion. It preferred to use terms, such as *programme bilingue*, *classe de type international*, or, *centre de bilinguisme*, in reference to the immersion-like program (Ouellet, 1990). Although the administration used other terms to represent the "immersion" experience, this program had a powerful effect on the development of the French immersion program. According to Stern (1968)

The Toronto French School is a bold venture. It is the result of the personal enterprise of an energetic enthusiast, its founder and President, Mr. H. Giles. The school has pioneered one form of immersion program for English-speaking children in Canada, and the pattern it has developed has been widely followed, e.g., by St. Lambert and by others. (pp. 99-100)

Most Canadians associate the birth of the French immersion program with Montreal. This is understandable since there are three schools in this city which also

claim to have offered the first "immersion" courses in Canada. An organization known as Canadian Parents for French (1985) suggests that Cedar Park School in the West Island area of Montreal first inaugurated a pilot French immersion class in 1958. De Lorenzo and Gladstein (1984) maintain that the first immersion "pilot" class was implemented in 1965 at the Margaret Pendlebury School in St. Lambert. Most researchers, however, feel that the first immersion program in a Public School appeared in 1965 in the St. Lambert Elementary School, in the Protestant School Board on the south shore of Montreal (Ouellet, 1990).

The first public school French immersion program arose because a concerned group of English-speaking parents in St. Lambert became involved in "alternative" foreign language instruction for their children. These parents felt that the French language instruction their children were receiving was ineffective (Lambert & Macnamara, 1969). After years of language study, the students continued to be unable to converse well in French. These parents were aware of the research showing positive results for students learning a foreign language at an early age in a bicultural and bilingual milieu, such as Montreal. They felt that an education in French, beginning in the youngest grades, would be beneficial for their children, both intellectually and linguistically. They also felt that this would be a politically wise move, for they were aware that non-French speakers may some day feel stronger economic and social pressure to learn French (Stern, 1968). In order to improve the quality of French their children were receiving in school the parents felt that a restructuring of the program was necessary.

In 1963 the St. Lambert parents proposed to the Minister of Education the creation of a bilingual school in St. Lambert (Ouellet, 1990). They suggested that the Department of Education run a bilingual program as a "pilot" project, i.e., on an experimental basis. The purpose of the pilot project was to determine whether this method of instruction would produce more successful and competent language learners than did the "regular" program. To that end, the parents organised a committee known as the "St. Lambert Bilingual School Study Group" (SLBSSG). This group specified the goals of such a program. These were to produce balanced bilingualism, to create better job opportunities for their children, to support national unity by closing the cultural gap between the Francophones and Anglophones, to offer their children cultural enrichment, and to develop more effective second language teaching methods. In order to offer the Department of Education a sound rationale for the implementation of such a program, the SLBSSG enlisted the services of Wallace E. Lambert from the Department of Psychology at McGill University. His role was to inform the committee of the advantages and possible disadvantages inherent in such a program. With his guidance, the Department of Education agreed to the pilot program in 1965. This program began what is now known in Canada as French immersion.

One of the first difficulties to overcome was the naming of this fledgling program. Although many early reports used terms, such as the "All French Program," "So-called Immersion" and "Home-School Language Switch," Dr. Lambert considered another possible name. He approached the Berlitz language school in New York. There he asked for the rights to use the term "total immersion," a term used by Berlitz as a

marketing aid. Berlitz agreed and upon receiving the funds requested, turned over the rights. Gradually, other names became less popular until eventually the term French immersion remained. To this term Dr. Lambert added the descriptors *early*, *middle* and *late*. These continue to be the most common ways of referring to the French immersion program.

The fact that French immersion originated in Montreal is understandable. Four major forces were at work in the early 1960s. First and foremost, the parents of the St. Lambert community were displeased with their children's French education program. Had the program produced relatively competent French speakers, parents may not have felt the need to change the system so dramatically. Second, the parents were greatly influenced by their location. They were surrounded by a French culture. They therefore had a reliable method of judging their children's French progress. Thus, their expectations for their children were greater than they would have been in a completely English milieu. Third, the academic resources they needed for support were available principally through Dr. Lambert and the Department of Psychology at McGill University. He and his department encouraged the parents of St. Lambert to pursue their dream of a bilingual education for their children. Should the parents have felt uncertain about or daunted by the major educational adjustments they were proposing, they would not have acted as swiftly and as forcefully as they did. With Dr. Lambert's hand on the "pulse" of bilingual research, the parents proceeded. Fourth, the Quebec and federal governments supported the experiment. In 1960, in their electoral platform the Quebec Liberal Party promoted the use and preservation of French (Ouellet, 1990). Two years later at the

federal level, Lester Pearson established the Bilingual and Bicultural Commission, a body set up to explore and promote bilingual and bicultural activities. The absence of any of these factors would certainly have delayed the development of French immersion.

There are in Canadian schools several types of French immersion programs. These programs may vary in the amount of instructional time students spend in French or in the clientele they serve. Some French immersion programs are meant for both Anglophones and Francophones while others have a majority of non-Anglophone students (Ouellet, 1990). Still there remain five common FI programs: early immersion, middle or progressive immersion, late immersion, early partial immersion and continuing or maintenance immersion.

The most common French immersion program is early immersion (Harley, 1986). It is provided for majority Anglophones students. It begins in grade primary and continues to the end of secondary school. Its students pass through three main phases while in the program (Genesee, 1978, cited in Ouellet, 1990). The first is the total immersion phase. In this phase French only is the medium of instruction. It continues until the end of Grade 2. From Grades 3 to 8 the students go through the bilingual phase. French is maintained but more instructional time is dedicated to English. In the consolidation phase specific subjects are taught in French. As students progress through the immersion program they gradually hear more English, until in Grades 9 to 12, only 40 to 50 percent of the instructional time is in French. Students are encouraged to speak only French in this program except where courses are offered in English.

Middle or progressive immersion begins in Grade 4 and continues to the end of

secondary school. Unlike early immersion, students in this program are permitted to use their mother tongue during their recess and at lunch time for the first six weeks. The students receive instruction in course subjects in French on a gradual basis, hence the name progressive. By Grade 7 the students receive a minimum of 50 percent of their instruction in French.

Delayed or late immersion begins in Grade 6, 7 or 8 depending on the preference of individual school boards. The year before entering this program, school boards request as a minimum that students take and successfully pass core French. Late immersion then continues to the end of secondary school. This type of program is more intensive than early or progressive immersion. Students receive instruction in subject areas from the beginning. From Grades 6 to 9, 60 to 80 percent of instruction time is in French.

The distinguishing feature of the early partial immersion program is that 50 percent of instruction time is in each language. Students begin this program in Grade primary and continue until the end of secondary school. School Boards may vary their program slightly from this pattern. For instance, in the Elgin County Board of Education in Ontario, students begin in regular English Kindergarten. The bilingual program then begins in Grade 1. By Grade 9, 40 percent of instruction is in French. The remaining 60 percent is in English (Swain, 1978).

Although French immersion uses French as its principal language of instruction, it is not a French school. In a French school, the majority of parents and children are French, the subjects are taught in French and one of its principle goals is to promote

French culture. The French language is maintained through all levels of instruction.

French immersion has a different clientele and a different focus. The majority of students in immersion programs are Anglophones, as are their parents. English is used in later years in the immersion program sometimes reaching 60 percent of total instruction time. The reason that English is used is because it is necessary in order to support the students' mother tongue. Thus the focus of immersion programs is not exclusively the promotion of French. Rather, the emphasis is on the acquisition of language (Canadian Education Association, 1992; Ministère de l'Éducation, Nova Scotia, 1992).

This focus on language raised fears among the parents of potential French immersion candidates. They worried that a well-rounded education would be forfeited in the program's efforts to teach French. They suspected that although the students' competency in French would improve, it might do so at the expense of other skills across many subject areas. In short, they wondered if immersion could be successful in teaching French and at the same time preserve an equal educational footing with the regular English program.

CHAPTER III

THE SUCCESS OF FRENCH IMMERSION

The first group of immersion students in the St. Lambert 'experiment' graduated from the program in the late 1970s. Researchers closely monitored the progress of these students throughout their education. Swain and Lapkin (1982, 1986) claimed that French immersion was a successful program for teaching the language as well as the content in all subject areas. Krashen's (1984) analysis of the French immersion program led him to state that French immersion was "... the most successful program ever recorded in the professional language teaching literature" (p. 61). Researchers such as Swain, Lapkin and Krashen have made this claim because no other language program has received the results found in French immersion (Safty, 1989).

The fact that French immersion has spread from the St. Lambert region to every province across Canada is also testimony to the level of success it has enjoyed. By 1990, some 241,000 students were enrolled in immersion programs across Canada (Statistics Canada, 1989-90). There were times during this expansionary phase when the demand for the program outweighed the supply. Because of this, parents sometimes lined up hours in advance of the registration time in order to secure enrollment of their child in the program.

Typically, initial French immersion classes were held in the neighbourhood school. One classroom was dedicated to the French immersion students. As students

progressed through each grade level, new French immersion students arrived in their place. This cycle repeated itself until the initial students reached their final year leaving behind a school containing French immersion at all grade levels.

As the demand for French immersion grew, so too did the demand for space. As a result, it became commonplace to house French immersion students in separate schools known as *immersion centres*. French immersion parents were agreeable to this because they believed that the student would be in a more authentic French milieu, where French was used not only in the class, but also on the schoolgrounds and in the school corridors (Lapkin, Andrew, Harley, Swain, & Karnin, 1981).

Although it is common to find French immersion in a separate school, it is not the only method of housing the program. There are still schools in which French immersion classes exist beside regular English classes. The students in the French immersion classes still follow their own curriculum, but English is more prevalent outside the classroom than is the case in an immersion centre. This mingling of the English and French immersion programs is referred to as *dual tracking*. Dual tracking occurs when there is not enough demand to warrant establishing an immersion centre or when there is no space available to accommodate greater numbers of immersion students.

Regardless of the physical environment offered to French immersion students, both parents and researchers consider French immersion to be a success (Burns & Olson, 1983; Canadian Education Association, 1992; Reich, 1986; Safty, 1990; Swain, 1983). This degree of success can be examined by comparing the goals set out in the immersion program with the results of research relating to French immersion.

As previously mentioned, the St. Lambert Bilingual School Study Group listed five goals of a general nature. Additional goals appeared in concert with French immersion as the program developed. All of the goals are in line with the goals and objectives found in school boards across the country. Genesee (1979) states that the "...goals of the immersion program are the same as those of the regular English program, with regard to development in the academic areas, development of native language skills, and cognitive development" (p. 92). The document *Public School Programs* (Nova Scotia Department of Education, 1991-93) specifies the following aims of public education:

1. To develop competence in effective written and oral communication, with emphasis on clarity and precision in the use of language.
2. To develop competence in the understanding and applications of the basic concepts of mathematics.
3. To develop knowledge and understanding of history and geography, particularly of Canada, but also of other areas of the world, so that the students may be aware of the cultural diversity of their country and of Canada's relation to other countries and peoples, and have a basis upon which to assess contemporary values.
4. To develop the habits and methods of critical thinking and reasoning and to foster the natural desire to learn and understand.
5. To develop the ability to communicate in both official languages.
6. To provide opportunities in school programs and activities for students:

- (a) to be creative and to exercise originality and imagination.
- (b) to have their curiosity encouraged and to develop knowledge, understanding and appreciation of themselves, their fellow human beings, their environment, and the relationship of the three.
- (c) to acquire habits, attitudes and intellectual skills that will be helpful in employment and in training for employment.
- (d) to develop knowledge, habits, attitudes and skills related to achievement and maintaining good health and physical fitness.
- (e) to develop civic, social, and moral responsibility and judgement.
- (f) to develop knowledge, habits and skills related to appropriate uses of science and technology. (p. 11)

Thus, according to Genesee, the goals of French immersion are the same as those for English stream students as prescribed in such government documents as the Public School Programs.

In the *Forward of Public School Programs* (Nova Scotia Department of Education, 1991-1993) the Minister of Education states that there are other teaching guides related to the aims and goals found in the educational system. One such guide deals specifically with *early* French immersion (Ministère de l'Éducation, Nova Scotia, 1992). Although they are more general in meaning, they are specifically tailored to the French immersion program and maintain the spirit of the goals set forth by the St. Lambert Bilingual School Study Group. These goals are as follows:

- donner l'occasion aux élèves d'acquérir une compétence fonctionnelle en français oral et écrit, permettant de

communiquer sur le plan personnel et professionnel;

- assurer un développement normal de l'anglais, à l'oral et l'écrit;
- assurer l'apprentissage des connaissances scolaires enseignées en français ou en anglais et permettre un développement cognitif et affectif normal;
- favoriser une meilleure compréhension des Canadiens de langue française et des Francophones en général ainsi qu'une appréciation de leurs cultures, tout en développant chez les élèves intérêt et respect pour leur propre culture. (p. 2)*

With the goals of French immersion clearly outlined research related to the success of its students can now be examined. One of the areas of investigation focuses on the success of French immersion students when compared to core French students. Typically, core French classes are set up to teach French language skills during one class period 3, 4, or 5 times per week, depending on whether the students are in elementary, intermediate or secondary school. The hours of instruction are thus fewer and more spread out than is the case in French immersion. Swain and Lapkin (1982) find that early, early partial, and late immersion students perform better than core students in two measured areas: *test de compréhension auditive, niveau B*; and *test de mots à trouver, niveau D*. Indeed, it appears as if core French students cannot keep up with the immersion students. By Grade 3, French immersion students perform well beyond the level of the core students.

Owing to the difference in linguistic proficiency between core French and immersion students, Swain and Lapkin (1982) find it more reasonable to compare immersion students with their Francophone peers. Reporting on the results of the *test de*

compréhension auditive, niveau B; and *test de mots à trouver, niveau D*, the authors indicate that of a possible maximum score of 22 on the *test de mots à trouver, niveau D*, Grade 8 immersion students scored 15.0 while their Francophone peers scored 14.5. Similarly, on the *test de mots à trouver, niveau D*, the immersion students obtained 19.9 while their Francophone peers scored 19.6 of a possible 41. The authors conclude by stating that these results "suggest that Grade 8 early immersion students achieve native-like performance on the two French tests for which Francophone data are available" (p. 42).

Using early immersion students as a reference point, Swain and Lapkin (1982) compare the results of early partial and late French immersion. With respect to early partial immersion, the authors find that by Grade 8 students perform as well as Grade 7 early immersion students. Having administered the same two tests to a different group of immersion students, the authors note that Grade 8 early partial immersion students scored 13.0 on the *test de compréhension auditive, niveau B* while the Grade 7 early total immersion students scored only slightly better at 13.68. Similarly, on the *test de mots à trouver, niveau D*, early partial immersion students obtained 17.86 whereas early immersion students obtained a score of 19.90. It therefore appears that by Grade 8, early immersion students hold a slight edge over early partial immersion students in the area of language development.

The late immersion students did less well on both tests than the early partial immersion students. On the *test de compréhension auditive, niveau B* the Grade 8 late immersion students' average score was 8.82 while their score on the *test de mots à*

trouver, niveau I) was 13.60. Although these results indicate a measurable difference between the late immersion students and the early partial immersion students, it is important to point out that the late immersion students in this study had been in the program for only one year.

In spite of the lower scores, Grade 8 late immersion students still perform significantly better in all aspects of French than do core students (Barik & Swain, 1975). In some cases the Grade 8 late immersion students perform better than Grade 11 and 12 core French students on cloze tests and on tests of reading and listening comprehension (Swain & Lapkin 1982).

The performance of the late French immersion students however appears to improve with time. In previous research from Ontario, Swain (1978) notes that on a cloze test missing every seventh word from a reading passage of 425 words, Grade 13 late immersion students scored higher than Grade 6 Francophone unilingual, Grade 6 early total immersion and Grade 7 early partial immersion students. Swain is diligent in pointing out that there is only a 2 point spread between the early French immersion students and their Francophone peers, whereas a 6 point spread exists between the late French immersion students and their Francophone peers. Swain suggests that with regard to reading comprehension and vocabulary use, early French immersion students have a more native-like command of the language.

As well as promoting French linguistic skills, French immersion also provides its students with a strong academic background in English and other subject areas (Lambert & Tucker, 1972; Peal & Lambert, 1962; Tucker, 1981). Harley, Hart, and Lapkin (1986)

studied the effects of bilingual education on first language skills. In a longitudinal and cross-sectional study designed to determine whether first language (L1) skills are enhanced as a result of being in an immersion program, the authors find that the level of English vocabulary of the French immersion students is equal to that of their monolingual peers. Moreover, they note that French immersion students have a better understanding and usage of grammatical items in English than do their monolingual peers.

Many parents expressed concerns that their children's English skills would suffer, particularly given that early French immersion students receive no formal instruction in English for the first several years of their education. Research has shown that there is a lag during which students do fall behind their English stream peers (Swain, 1974). This is because they receive no formal English instruction before Grade 2, 3 or even 4. Swain and Lapkin (1982), however, note that students overcome this lag provided they have access to English courses between Grades 2 to 4. These authors further state that by the end of Grade 5 "immersion children perform as well as, or better than, their English-educated peers in all aspects of English language skills as measured by standardized tests" (p. 36).

Similar positive results appear in other academic areas of immersion students' education. Morrison and Pawley (1984) studied the achievement levels in math, geography and history for French immersion and English stream students in 73 classes. The results revealed that French immersion students often perform better in math than the English stream students, and equally well in geography and history. Bruck, Lambert

and Tucker (1976), and Edwards, Colletta, Fu and McCarrey (1979) found similar results noting that French immersion students perform on a par with their English stream peers in science courses. Reviewing research gathered from objective assessments, Swain and Lapkin (1986) found that "With few exceptions, immersion students have performed as well as their English-educated counterparts in academic subjects" (p. 2).

In addition to success observed in regular subject areas in French immersion, some researchers have performed tests on bilingual students to determine their cognitive development. Ben-Zeev (1977), Janco-Worrall, (1972) and Jacobs and Pierce (1966) have tested bilinguals from various cultures and found that they frequently outperform their monolingual counterparts on verbal and non-verbal tests. Swain (1981), Swain and Lapkin (1982), and Neufeld, Arnold, Flaborea, Paterson and St. Lewis (1992) similarly find that positive cognitive consequences are enhanced in the immersion setting. Moreover, these researchers found no evidence that bilinguals' cognitive development was inferior to that of monolinguals.

The success of French immersion also extends beyond linguistic, academic and cognitive domains. What might be considered positive "spin-offs" result from students' exposure to French immersion. One is students' psychological and linguistic preparedness for cross-cultural links with the Francophone community (Genesee, 1979). This preparedness is the result of a reduction in social distance between the English and French (Cziko, Lambert & Tucker, 1979; Genesee, 1977, cited in Swain & Lapkin, 1982). Both the preparedness for cross-cultural contact and the reduction in social distance arise directly from the positive attitudes which French immersion students

develop toward the target community (Genesee, Polich & Stanley, 1977; Lambert and Tucker, 1972; Peal & Lambert, 1962; Swain, 1972). The result of the students' exposure to French immersion is that a generation of children able to converse in French perceive French-speaking people in such a positive way as to help narrow the political "gap" between the English and French (Swain & Lapkin, 1982).

There are also economic advantages associated with French immersion. Students who have participated in the French immersion program stand a better chance of being employed in situations where bilingual candidates are sought. Since French immersion is considered to be superior to core French, French immersion graduates carry with them a certain linguistic prestige which benefits them in employment situations. The promise of career success is therefore a major attraction for parents considering, or currently taking advantage of, the immersion option (Burns & Olson, 1983; Lewis & Shapson, 1989).

French immersion has also had a direct impact on the development of French curriculum materials in the core program. The effect which French immersion had on the French program in general was to create a group of students whose skills were strong. The skills of core students on the other hand were considerably weaker (Swain & Lapkin, 1982) in comparison. The gap which developed between immersion and core students' linguistic abilities created great concern in recent years for educators and parents alike. The federal government promised to address these concerns. In 1985, more than 20 years after the appearance of immersion, the government established the National Core French Study (NCFS) (Canadian Education Association, 1992). The NCFS was

comprised of several educators whose task it was to make core French more successful. It made many proposals regarding core instruction. Several of these proposals were based on experiences observed in the immersion classroom. For example, the NCFS proposed that core teachers integrate content and language teaching (Lapkin, Harley, & Taylor, 1992, in press). Prior to the NCFS, French second language classes tended to consist of the teaching of linguistic utterances in nonmeaningful contexts, frequently lacking in theme and interest for the students (Bruck, 1984). To help overcome this weakness in the core program, the NCFS stressed the *communicative/experiential* approach to language teaching, an approach used from day one in the immersion setting. This approach stresses the use of French at all times in the classroom. It also promotes the development of themes suitable and relevant for the age of the students, and in which students can meaningfully contribute. In this way, core students have profited from the immersion experience.

French immersion is also successful in fostering and maintaining parental support (Burns & Olson, 1983). The Canadian Education Association (1992) states that "Immersion parents, by their very nature, are committed, enthusiastic and take an active part in their child's education" (p. 25). This enthusiasm is vital in the successful education of immersion students.

Because of the interest taken by French immersion parents, any claim of success must necessarily include their opinions. Cziko, Lambert, Wallace, Sidoti, and Tucker (1980) have surveyed the parents of the St. Lambert French immersion program and found that both parents and students were very pleased with the education offered

through immersion. This feedback is extremely important given that it was these parents who initiated the movement to improve the language instruction offered to their children.

In summary, it appears that French immersion has proven to be a successful approach to second language learning. The achievements of students in early, early partial and late immersion meet both the goals proposed by school boards, as listed in the Public School Programs, as well as the initial goals proposed by the SLBSSG (Swain & Lapkin, 1982). Ultimately, immersion students perform as well as their English stream peers in all aspects of the educational goals, with the added advantage that their command of the French language is significantly greater (Swain & Lapkin, 1982). It therefore appears that the claims made by Krashen (1984) and Safty (1989) are supported by research results.

These findings on French immersion were extremely positive. Researchers and educators such as Lambert and Tucker (1972), Swain (1983), and Lapkin and Swain (1984) rated French immersion as very good, and promoted it as a system in which students become highly proficient in their L2 without forfeiting any skills in other subject areas. Although they mentioned weaknesses in the program, these did not become the focus of attention. For instance, in considering the grammatical competency of immersion students, Harley (1984) stated that they have "... made great strides in grammatical competence although they still make a number of grammatical errors in speaking French" (p. 58). In the early 1980s, however, other researchers began questioning the degree of success of the program. They challenged the popular

expectation that sending children through the French immersion program automatically produced fluent bilinguals. They also attributed the highly positive results of the French immersion experience to the selection of students along academic and socio-economic lines.

The criticisms against French immersion merit close consideration. Prior to addressing them in greater detail, a discussion of how L2 learning occurs may be profitable. This would provide a yardstick by which to measure French immersion and the criticisms raised against it. It would also afford a basis for suggesting the possible restructuring of the immersion program as well as a re-evaluation of the place of French language instruction in the curriculum. To this end, a framework of selected theories and variables has been chosen for analysis.

CHAPTER IV

LANGUAGE LEARNING THEORIES AND VARIABLES

The Critical Period Hypothesis

There is a commonly held view that second language learning is for the young. Adults may feel they are over the L2-learning hill and frequently illustrate this by reviving the old adage "you can't teach an old dog new tricks." That such beliefs are still held by many adults is in part due to their experiences with second language learning. There are those who passed many years in a second language learning program, such as the one offered by the Canadian federal government to encourage its employees to learn French (Burns & Olson, 1983; Stansfield, 1989) only to find themselves incapable of communicating in that language.

The theory put forth by Penfield and Roberts (1959) supports the notion that the older one gets, the more difficult it becomes to learn a second language. According to their theory, there is a limited period for the acquisition of language, namely the first ten years of life. During the first ten years of life, they describe the brain as being flexible and retaining plasticity. After puberty, the biological patterns of the brain change rendering it more rigid. They further suggest that the language processing which initially occurs in both hemispheres gradually ceases in the right hemisphere. The result is that the left hemisphere specializes in producing and understanding language. The

implication is that once the left hemisphere adopts this specialization, learning language is no longer easily possible. Both theories form what is known as the *critical period hypothesis*.

The critical period hypothesis sprang directly from Penfield's work in the field of neurosurgery. While treating aphasic patients he noticed that when the left hemisphere of the brain was injured through disease or injury adults lost linguistic capability. At the same time he observed that children suffering from similar injuries or illnesses regained their power of speech. Thus he concluded that there must be a time period in which speech develops.

Several years later more research appeared supporting the critical period hypothesis. Lenneberg (1967) offered information demonstrating how well children recover from left hemisphere injuries while adults do not. His research showed that no subjects who had a left hemispherectomy after puberty emerged without aphasia. Similarly, when the right hemisphere of children was damaged, children experienced greater language disorders than did adults. His information was apparently describing the right hemisphere as the initial seat of language learning which gradually transfers its knowledge to the left hemisphere. This process, he felt, ends near the onset of puberty. Furthermore, Lenneberg (1967), and Lenneberg, Nichols and Rosenberger (1964) noted that Down's syndrome children follow a normal but decreasing course of language development which freezes at puberty. Lenneberg's research translated into support for the critical period hypothesis.

The notion that language development passed from the right to the left

hemisphere by a predetermined time was further promoted and modified by other researchers. Such hemispheric dynamics became known as *lateralization* or *cerebral dominance*. Krashen (1973) felt that by age five lateralization was complete though he did not claim this necessarily coincided with the critical period for language learning. Kinsbourne (1975) and Kinsbourne and Hiscock (1977) provided evidence that brain lateralization occurred by age three. Thus it appeared the critical period hypothesis and brain lateralization offered grounds for supposing that language learning had to occur within a given time frame.

Such theories had a direct impact for those wishing to learn a second language. It was logical to assume that if there was a time frame in which to learn the L1 then there was an equal time frame in which to learn an L2. Lenneberg (1967) felt that though adults could undertake to learn a second language they would find it more laborious and have to dedicate a more conscious effort than would be necessary as a child. Krashen (1975) analyzed the research in the field of brain lateralization and the critical period. Based on this research he made several predictions about language learning: 1) second language acquisition before puberty is similar to first language acquisition, after puberty it is not, 2) after puberty second language learning must occur in a formal (structured) setting, whereas prior to puberty, it may occur in a natural setting without formal instruction, 3) and native-like competence in syntax and semantics may not be achieved in a second language after puberty, and 4) foreign accents cannot be overcome easily after puberty. Such theories lent support to the belief that adults were beyond the optimum age to learn effectively a second language.

As time passed, criticism began to mount against the critical period hypothesis. Seliger (1981) found that approximately 35 percent of adult dextrals (which make up 89 percent of the general population) suffer no aphasia or if so, completely recover from left hemisphere lesions. This implied that a large section of the population had the potential for hemispheric plasticity beyond puberty. This in turn indicated that this percentage of people should experience little difficulty learning an L1 or L2. Harley (1986) found no evidence linking the ability of the damaged brain to regain language with the ability of the healthy brain to acquire a second language. Scovel (1988) pointed out that Krashen's contention that brain lateralization occurred by age 5 was unfounded, since Lenneberg's data demonstrated that subjects between the ages of 5 and 13 who had a left hemispherectomy emerged with little or no linguistic deficit. Dennis (1981) cited a case of an adult who was born with no corpus callosum but who could nonetheless pronounce perfectly well. Kinsbourne (1975) tested Lenneberg's lateralization theory using two criteria: that the right hemisphere was selectively damaged and that language was thereby affected. He rejected Lenneberg's theory on the grounds that Lenneberg did not have access to autopsies, neuroradiological or neurosurgical evidence and therefore could not prove that right hemisphere lesions did not also affect the left hemisphere. Furthermore, Kinsbourne claimed that "cerebral dominance for language does not develop; it is there from the start" (p. 248). This research thus suggested that language, or at least some parts of language like pronunciation, need not shift from the right to the left hemisphere.

Similar opposition to the critical period arose from other researchers. Whitaker, Bul and Leventer (1981) maintained that there were no known neurological correlates

for a critical period for language acquisition ending at puberty. A study undertaken by Snow and Hoefnagel-Höhle (1978a, 1978b) involving several age groups of English speaking subjects learning Dutch showed that the fastest second language acquisition occurred in the group representing subjects aged 12-15 years. Furthermore, they noted that all the subjects were similar with respect to those elements of Dutch which they found easy and difficult to learn. A similar study conducted in Holland (Snow & Hoefnagel-Höhle, 1982b) revealed that subjects past the critical period were capable of "picking up" a second language in a natural setting with little or no formal instruction (p. 95). The authors concluded that a critical period extending from age 2 to 12 does not exist.

Comparisons based on controlled studies involving children and adults also detract from the critical period hypothesis. Asher and Price (1982) found that adults have better listening comprehension skills than do children. McLaughlin (1981) and Harley (1986) find that adult language learners outperform younger ones on measures of morphology, syntax and vocabulary. One need only consider that Henry Kissinger arrived in the United States after puberty (Brown, 1987) as did Joseph Conrad (Scovel, 1988). Both mastered all aspects of English except for pronunciation. It is therefore unreasonable to believe that adults cannot attain native-like mastery of an L2 in morphology, syntax and vocabulary.

Other research detracting from the critical period exists which deals with first language acquisition. In Los Angeles, in 1970 a mother and her 13-year old daughter, Genie, walked accidentally into a family aid building while looking for a building offering

aid to the blind. Genie weighed 59 pounds, couldn't walk properly or stand erect, and made whimpering sounds instead of speech. An investigation of the family found that her psychotic father kept her isolated from the age of 20 months. He would strap her to a potty chair in a small room through the day. At night he would envelope her in a sleeping bag which had the same effect as placing her in a straight jacket. As a result of such isolation, Genie did not learn to speak.

Genie received a medical examination which found no neurological disease or brain damage. She was, however, functionally retarded. The linguist Susan Curtiss (1977) worked with Genie for several years and monitored her linguistic progress. Although Genie had difficulty acquiring syntactic skills and her linguistic development was very slow, she did acquire enough language to bring into question the critical period hypothesis.

Another case involving a so-called "wild child" arose in 1920 near Midnapore in India. A missionary named Reverend Singh (Singh & Zingg, 1942) discovered two "wild children." They had been raised by wolves. Although the younger child passed away, the older child, named Kamala, lived for 9 years at the missionary's orphanage. Kamala was approximately 8 years old when she was discovered. Thus she was at an age well within that suggested for the critical period for language learning. Although her progress was steady, it was very slow. As is typical in L1 learning situations, she could understand more than she could say. Still, at the approximate age of 16 and at the end of her life, Reverend Singh estimated her growth as a human child to be similar to that of a three- or four-year old. Thus, Kamala did not learn as readily as the critical period

hypothesis suggests⁶.

Nonetheless, the above research seriously challenges the critical period hypothesis. Evidence suggests that, provided an L1 has been learnt, adults can learn an L2. It appears, then, that learning an L1 after puberty may be more difficult than before puberty. The evidence is inconclusive mainly because of the problem of sorting out the variables involved in language learning. For instance, it is unclear what psychological effect such profound isolation had upon the feral children. Piper (1992) states clearly "... in accounting for these children's failure to acquire language, it is impossible to separate the effects of growing up isolated from normal human society from possible biological effects" (p.75). Thus, before an accurate understanding of the critical period can be attained, more research is needed.

Phonology

The call for more research, however, does not necessarily denote the demise of the critical period. Instead, it is experiencing a metamorphosis (Scovel, 1988). Olson and Samuels (1973) feel that the ability to learn certain aspects of language may be age

⁶Kamala's case appears to weaken the critical period hypothesis. It is unclear, however, to what degree she may have been mentally deficient prior to her exposure to language. Since all but the most severely mentally handicapped children learn language, Dr. Singh's description of Kamala, in addition to the fact that she survived on her own for an extended period of time, runs counter to our notion of how a severely mentally handicapped child would behave under similar circumstances. Unfortunately, a more accurate understanding of Kamala's mental processes is unattainable. Further examination of cognition and language development occurs in chapter four.

related. Piper (1992) suggests that there may be different types of cognitive ability employed at different times, e.g., before and after puberty. Seliger (1978), and Walsh and Diller (1981) similarly theorize that there may be many critical periods, successive and overlapping in nature, beginning and ending at different points during life. Bever (1981) argues that the critical period only occurs if people stop learning new linguistic features, which is apt to happen by puberty in the L1. He maintains that "... continuous acquisition can...delay the apparent critical period" (p. 194). Thus, on-going research continues to refine the critical period hypothesis.

Although research based on studies of syntax, morphology and vocabulary has been inconclusive, there is one area of language learning which does seem to point strongly to a critical period. There are learners who begin studying an L2 after puberty. The vast majority, no matter how hard they try, seem unable to acquire native-like pronunciation, even though they may master all other aspects of the second language (Scovel, 1988). Research in the area of phonology indicates that the ability to achieve native-like pronunciation diminishes as language learners approach puberty (Carroll, 1963; Fathman, 1982; Scovel, 1988). In addition to this, Seliger, Krashen and Ladefoged (1982) find that dialects of an L1 acquired after puberty are unstable and require continuous self-monitoring. Though improvement in pronunciation can occur for adults, Seliger, Krashen and Ladefoged feel that "... there are limits to the degree of perfection that may in general be expected from adult second language learners" (p. 16).

Several theories attempt to explain why acquisition of native-like pronunciation is so difficult after puberty (Bever, 1981; Walz, 1929; Schnitzer, 1978). They invariably

point toward some kind of "change" occurring near the onset of puberty. One of the most interesting theories is put forward by Scovel (1988) who contends that phonology is biologically determined. He likens the acquisition of speech to the imprinting behaviour found in other species, like birds. Just as birds have a critical period for learning their "song", so too, do humans for learning the group's way of speaking. The development of distinctive speech patterns provides identification which humans need to belong to a specific group. He also maintains that this critical period ends when humans are able to contribute to the gene pool, namely at the onset of puberty. By the time individuals enter puberty, Scovel suggests, they have phonological control of their group's language (Karmiloff-Smith, 1979). They no longer need imitate the phonological system of another's group and therefore lose the ability to do so.

Scovel's theory is based on two assumptions which both point to the distant past of human development. The first is that nature does not want one's gene pool to be "altered" by foreign genetic coding. The second is that nature is protecting the group from foreign threats; when one is recognized immediately by one's accent, one cannot infiltrate another's group. These assumptions form the backbone of Scovel's theory of phonological development which suggests that there is a biologically determined critical period for acquiring native-like pronunciation and that this critical period ends when humans are able to contribute to the gene pool.

There is evidence which indirectly supports Scovel's theory. One of the claims Scovel makes is that the individual is by puberty phonologically programmed to belong to a group. Olson and Samuels (1973) state that children model their speech on their

peers and, in the case of learning an L2 in the natural setting, tend to associate with their peers of the target language. Thus they tend to work at belonging to a group.

That children generally strive to adopt the pronunciation patterns of their peers is, according to Scovel, due to innate neurological programming. Anticipating the criticism that innate programming surely would have an effect on other aspects of human behaviour, such as the thinking process, Scovel (1988) asserts that "... a neurologically based imprinting constraint on human behaviour would affect only a highly complex physical phenomenon such as human speech and would not necessarily inhibit non-physical, mental behaviour" (p. 101). He maintains that this internal programming mechanism is dismantled near puberty when cognition begins to take over most language learning needs (Lenneberg, 1967; Seliger, Krashen, & Ladefoged, 1982). This "realignment" leads Scovel to claim that only pronunciation is affected by a critical period (personal communication, January 13, 1993).

Jakobson (1940) similarly believed that the ability to acquire a foreign phonological system diminished with time. He felt that babies were equipped to make the sounds needed in every language in the world. As children aged, however, they were stimulated by the specific number of sounds found in the language of their culture. They received no stimulus for sounds not produced in their language and so they gradually lost the ability to produce them due to the closing of an internal system for language learning (Bever, 1981; Walz, 1929).

At this point, one may wonder whether any second language learners exist who began their second language learning after puberty and who pass for native speakers.

They do. Oyama (1982a) claims, however, that they are rare and are comparable to the concert violinist or the person able to run the 4-minute mile. Similarly, Scovel (1988) feels that such people would amount to, at most, 1 out of 1,000. Selinker (1972) and Asher and Garcia (1982) place the number considerably higher than this. They believe that 5 percent of adult language learners can become absolutely successful language learners. Neufeld (1980) finds that approximately 50 percent of the adult English L2 learners he tested pronounced 10 utterances of up to 16 syllables long well enough to be considered native speakers. Brown (1987) cites anthropological work carried out by Sorenson who maintains that the Tukano tribes of South America can acquire a second language perfectly well, including pronunciation, well beyond puberty.

Flege (1981) on the other hand, feels that even when people develop a successful native-like pronunciation they can be detected using fine-grained acoustic analyses. Such analyses can isolate non-native from native speech by detecting what he calls voice onset timing (VOT). In measuring VOTs, instruments accurately determine such factors as the aspiration duration of the letter / t / , for instance, which is different in English and French. Because of the accuracy of such acoustic testing devices, he suggests that "...bilingualism is not possible at the phonetic level..." (p. 452). Flege's research results thus suggest that although L2 learners may sound like native speakers, they have been unable to adopt perfect native pronunciation. This supports the view of those who argue that phonological changes occurring near puberty prevent language learners from acquiring an authentic native accent.

In addition to the neurologically based theory supporting a critical period for

pronunciation, some researchers feel that affective variables equally contribute to the learner's ability to acquire pronunciation. Such variables appear in the form of self-consciousness, vulnerability, motivation to learn, desire to identify integratively and ability to overcome empathetic barriers. Krashen (1975), Seliger, Krashen, and Ladefoged (1982), and Taylor (1974) believe that when the levels of self-consciousness and the feeling of vulnerability increase, or when the level of motivation, the desirability to identify with the target group and the ability to overcome empathetic barriers drop, as tend to happen at puberty, the acquisition of pronunciation is negatively affected.

Guiora, Beit-Hallahmi, Brannon and Dull (1972) and Guiora, Brannon and Dull (1972) similarly find inhibition to be related to pronunciation. Their study on the effects of alcohol on the L2 pronunciation among adults reveals that those given alcohol pronounce better than those who do not. Critics charge that Guiora et al. do not account for the fact that the alcohol may have acted in a physiological manner by relaxing the muscles involved in producing speech. In another experiment, however, Schumann, Holroyd, Campbell and Ward (1978) and Campbell and Schumann (1981) find that subjects pronounce better under hypnosis. This offers further support for Guiora's claim that reduced inhibition improves pronunciation.

Yet learning a second language well before the age of puberty does not in and of itself guarantee accent-free speech. Asher and Garcia (1982) studied 71 Cuban immigrants between the ages of 7 and 19. Most had been in the United States for 5 years. Native English speaking high school students judged the tape recordings of mixed Cuban and American subjects and found none of the Cubans to have native-like

pronunciation. Seliger, Krashen and Ladefoged (1982) feel that such language learners may maintain an accent because they are in an environment where sufficient exposure to the target language is lacking, or because the subject learns an interlanguage (IL), a mixture of the two languages to which they are exposed. Lister (1987) finds support for the idea that pronunciation is affected by one's native language. He notes that as soon as students in French immersion classes begin to take classes in English, a noticeable English accent appears in their French pronunciation. Although the acquisition of pronunciation in an L2 is controversial, empirical evidence indicates that post-puberty L2 learners tend to retain a noticeable accent in their L2. The degree to which L2 learners can master the phonology of the target language may be due to a critical period. Such a critical period is not without influences of an affective nature. The acquisition of native-like pronunciation therefore depends on several interactive variables.

Interlanguage

The moment people learn their first foreign words they begin the development of a linguistic phenomenon known as *interlanguage*. Interlanguage is a linguistic zone between two languages. Brown (1987) refers to it as the "... separateness of a second language learner's system, a system that has a structurally intermediate status between the native and target languages" (p.169). Corder (1967) considers interlanguage a continuum along which language learners progress in their efforts to develop proficiency in the L2.

L2 learning, and hence the development of interlanguage, begins with the

language learner using vocabulary and little grammar (Ellis, 1985). Gestures and other extralinguistic communicative tactics may also be used (Krashen, 1982b). As the interlanguage develops, learners become successful at handling more features of the L2. The way in which learners handle the L2 permits researchers to study more closely features of the interlanguage. Nemser's (1971, cited in Ellis, 1985) analysis of the nature of interlanguage permits him to describe it using the following three assumptions:

- 1) at any given time the interlanguage is distinct from the L1 and L2 and is internally structured;
- 2) interlanguages evolve;
- 3) in a given contact situation, the interlanguage of learners at the same stage of proficiency roughly coincide. (p. 47)

The implication of Nemser's definition is that learners follow a structured and predictable order of development, a notion further elaborated upon by a number of researchers. Bailey, Madden, and Krashen (1974) studied the acquisition of English in 73 adult learners representing 12 different mother tongues and concluded that adults displayed a common order of acquisition for functors. This order was similar to that found for the same functors in child L2 learners. Fathman (1975) provided results from a study of 200 children aged 6 to 15 from diverse language backgrounds which indicated that no major differences occurred in the order of acquisition of English syntax and morpheme structures. Ellis (1985) cited several studies which indicated that learners from different L1 backgrounds processed negation, interrogatives and relative clauses in much the same manner. These suggested that there was a natural development route in

L2 learning. Having studied the language acquisition of 50 English speaking child and adult learners of Dutch, Snow (1981) stated that a "... comparison of older and younger learners on strategies for acquiring specific features of Dutch syntax reveals more similarities than differences across age" (p. 248). Dulay and Burt (1975) felt confident in offering a hierarchy of morpheme acquisition for L2 learners. This hierarchy broadly described the order in which morphemes were acquired. Bialystok (1984) supported the claim for a natural order by stating that interlanguage "... is generated by the same cognitive processes as those responsible for generating the child's first language" (p. 48). Harley (1991) compared Anglophone child and adult learners of French and found that "English speaking students of different ages pass through similar stages in their acquisition of different semantic domains in French" (p. 245). Brown (1973) observed that there was a sequence of acquisition in the child's L1. Thus, if cognitive processes were responsible for 'generating' language, it was reasonable to assume that interlanguages shared similar patterns of development.

The notion that language learners follow a similar path of development, however, has not gone unchallenged. Snow (1981) observed that adult learners seem to skip some phases altogether. However, in doing so they proceeded to a more advanced developmental stage consistent with the natural order of acquisition. Corder (1981) and Hakuta (1976) Wode (1976, cited in McLaughlin, 1981) maintained that L2 learners tested their linguistic hypotheses not within the context of the target language, as native speakers do, but within the context of the L1 which they already knew. This suggested that language learners attempted to organize the L2 based on their L1. Furthermore,

McLaughlin's (1978a, 1987) research indicated that L1 influence, particularly in a formal setting, affected the order of L2 acquisition. He noted that children, whose L1 had no articles, such as Korean, acquired them later than learners whose L1 did contain articles, such as Spanish. He concluded that learners from different linguistic backgrounds acquire different features at different times depending on the structure of their L1s. Similarly, Finnish children did not use rising intonation in question forming in English because they do not use rising intonation in their L1 (Keller-Cohen, 1979). On the other hand, learners who used rising intonation in their L1 (Japanese, Swiss German) also used rising intonation in English as well. The above data indicate that L1 interference will impact upon what features of the L2 will be acquired, if at all, and in what order.

There is enough research to question seriously the natural morphological and syntactical acquisition order (McLaughlin, 1984). What appears to be universal is the "...interplay of both developmental and transfer factors" (p. 124). Developmental factors are likely guided by universal strategies, cognitive mechanisms, salience and frequency regardless of the learners' L1. Deviations arise when syntactic and morphological items in the L1 are similar to, but not exactly the same as, those found in the L2. The easier it is to make a transfer of knowledge from the L1 to the L2, the more likely it is to occur. When a linguistic feature in the L1 is slightly different from that in the L2, errors result. McLaughlin (1978a) has observed that such errors occur more in a formal setting.

Similarly, interlanguage and natural languages share developmental features and processes. Both depend on creative processes (Bickerton, 1981; Hamayan, Markman, Pelletier & Tucker, 1978; Ravem, 1974). Learners move from simple to more complex

structures (Corder, 1981; Dato, 1970,1971, cited in McLaughlin 1984; Larsen-Freeman 1976; Piper, 1992). During the initial phases of L1 and L2 language development, learners fail to use inversion with question words (*What she is doing?*) (Brown, 1973; Ravem, 1974). L2 learners, like L1 learners, tend to remember linguistic items they understand (Ervin-Tripp, 1974) and both groups make errors of overgeneralization (*walk-walked*, and *go-goed*) (Ellis, 1985).

There are also differences between L1 and L2 development (Larsen-Freeman, 1976). Hamayan, Markman, Pelletier and Tucker (1978) noted that learners may differ from L1 speakers in the strategies they use during developmental phases. They illustrated this by noting that the development of French immersion bilinguals was different than that of unilingual Francophones. For example, they found that French native speakers use *pour que* + *subjunctive* more often than bilinguals. Felix (1978) similarly found that children learning German as a second language produced fewer multi-word utterances than German native speakers. He further observed that many syntactical features in the L1 did not occur in the speech of L2 learners who acquired the L2 in a natural setting without formal instruction, and that sentence structures in the learner's L2 emerged in an order different from that of L1 learners. Lightbown (1983) similarly noted that the acquisition of the plural which typically occurred early in the development of the interlanguage did not do so with the native-speaking French students in her study. Meara's (1984) study of Chinese L2 speakers learning English revealed that they stored and handled words differently than native English speakers.

According to Snow (1981) there are seven variables which account for these

differences:

- 1) Age of learner.
- 2) Cognitive stage of learner.
- 3) Learner's need for the language as a communicative tool.
- 4) Learner's metalinguistic knowledge.
- 5) Learner's attitude toward and relationship with the native speakers.
- 6) Learner's access to contact with native speakers.
- 7) The nature of the speech that learners hear from native speakers. (p. 235)

These variables may act alone or interact at any time thereby influencing the development of the interlanguage.

Linguists analyze errors of an interlanguage and posit theories regarding second language acquisition (SLA). One such theory is hypothesis testing by learners.

According to Faerch and Kasper (1983, cited in Ellis, 1985) language learners form hypotheses in three ways:

- 1) they use any linguistic knowledge at their disposal, such as L1 or L2 knowledge,
- 2) they induce rules from linguistic information they receive, and
- 3) they use a combination of (1) and (2).

In hypothesis testing, language learners test their assumptions about the nature of the language they are learning. The errors they produce from such testing are frequently errors of simplification; learners overgeneralize, ignore rule restrictions, fail to complete an application of rules, or maintain false concepts they have hypothesized (Richards,

1974a). Thus simplification facilitates the production of errors. Errors place the language learner in a suitable situation for L2 feedback. This feedback in turn offers the learner the opportunity to improve language skills.

During initial stages of L2 development, several hypotheses compete for "dominance." As learners progress along the interlanguage continuum, the hypotheses they test receive favourable, neutral or unfavourable feedback from speakers in the target group. Gradually, learners decide which hypothesis to accept and which to reject. The retention of one hypothesis is ultimately what language learners seek. This is due to an internal, linguistic force known as the *economy principle*. Ellis (1985) describes this principle by stating that "... ideally a linguistic system will contain enough and no more distinctive features than are required to perform whatever functions the user wishes to communicate" (p. 95). It is the force issuing from this principle which moves language learners along the interlanguage continuum towards native-language proficiency.

As language learners move along the interlanguage continuum, stages of development may overlap. This is because there is variability within each developmental stage (Ellis, 1985; Hatch, 1974). This variability results from the language learner having alternative hypotheses. Because of these alternative hypotheses, language learners may use correct L2 forms on some occasions, but incorrect forms on other occasions. This is known as *backsliding*. Backsliding occurs when language learners fall back on a rule they used in a previous stage of their L2 development. Selinker (1974) feels it is indicative of the learner's movement "toward an IL norm" (p. 36). Selinker (1972) and Ellis (1985) point out that backsliding is most likely to occur when

language learners are engaged in a cognitively demanding situation and therefore pay less attention to form.

Error production does not guarantee that learners will work towards attaining native-like proficiency. Some learners are content to achieve a level of proficiency which allows them to communicate effectively (Selinker & Lamendella, 1978; Saville-Troike, McClure & Fritz, 1984; Richards, 1974a). The fact that they have not attained native-like ability does not bother them or prevent them from using the L2 knowledge they have acquired. When learners have reached a point in their interlanguage where linguistic skills no longer develop towards the target language their language has *fossilized* (Selinker, 1972). Fossilized interlanguage exhibits features which are both native- and non native-like containing both correct and incorrect forms of the L2. (Selinker & Lamendella, 1978).

Fossilization may also occur for reasons other than the learners' satisfaction with non-native-like production. In learning an L2, language learners may not get the native language input or feedback they require for linguistic skills to continue developing. Richards (1974b) and Schumann (1976b, 1976c) suggest that when there is a social and psychological distance between two language groups, language learners may stop revising their interlanguage system. Fossilization may also occur for medical reasons. For instance, if a person is having auditory problems, pronunciation may fossilize. Selinker and Lamendella (1978) claim that fossilization can also occur because of neurological changes in the brain limiting the learner's ability to test hypotheses. Again, as is often the case in language learning, these variables may act independently or

together with others. The result ultimately is fossilized speech.

The tendency for language learners, particularly adults, to fossilize before leaving the interlanguage phase is great (Selinker and Lamendella, 1978). As many as 95 percent of language learners fail to become proficient L2 users (Selinker, 1972). Moving beyond such pidgin-like forms found in the interlanguage may therefore prove difficult for L2 learners. Brown puts it succinctly: "It is perhaps only with great persistence that learners overcome this apparently universal pidginization tendency, weed out interlanguage forms, and adopt the second language exclusively" (p.192).

The Monitor Model

The issue of pidginization has been of great interest to Krashen (1982b). His research in the field of L2 learning led him to propose a model for explaining how L2 learning occurs and why prepubescent language learners more easily avoid the pidginization process, thereby becoming better L2 learners. He advanced five hypotheses which are collectively referred to as the Monitor Model. These hypotheses are: 1) the acquisition versus learning hypothesis, 2) the natural order hypothesis, 3) the monitor hypothesis, 4) the input hypothesis and 5) the affective filter hypothesis.

The first of Krashen's hypotheses highlights a difference between 'acquiring' and 'learning' a language. He considers 'acquiring' as a subconscious process, observable in the way children develop their first language. Children are not consciously aware of the rules that govern their language. To them an utterance 'feels' or 'sounds' right.

Ultimately, acquiring a language is in plain terms "...picking' up a language" (p. 10).

'Learning' a language, on the other hand, refers to consciously knowing the rules.

Acquiring a language generally occurs in a natural setting, i.e., outside the classroom, whereas learning takes place in a formal setting, i.e., inside the classroom.

Central to Krashen's Monitor Model is the claim that "... learning does not 'turn into' acquisition" (p. 83). Krashen thereby suggests that learning and acquiring are processed and stored differently though both refer to language development (Ellis, 1985; Piper, 1992). To Krashen 'acquiring' is preferable to 'learning' a language. Acquisition, he feels, occurs when attention is given to meaning. Subsequent to the acquisition of meaning, learners will acquire structure.

There is no age restriction hindering acquisition, except perhaps for pronunciation (Seliger, Krashen & Ladefoged, 1982; Krashen 1982a). Even so, Krashen (1982b) believes that child language learners will ultimately be better language learners primarily because their affective filter is lower than that of an adult (see hypothesis 5).

Krashen's second theory claims that as a second language develops in a natural setting, learners display a predictable or 'standard' order of acquisition. There are variations in this order but the variations are predictable and are observable in learners from various linguistic backgrounds. Krashen notes, however, that when learners are engaged in language learning in a formal situation where metalinguistic knowledge is used, a different type of order is observable.

The third element forming Krashen's view of language acquisition is known as the Monitor hypothesis. This hypothesis sees 'learning' and 'acquisition' playing two

separate roles in language development. According to Krashen "... acquisition 'initiates' our utterances in second language and is responsible for our fluency. Learning has only one function, and that is as a Monitor, or "editor" (p. 15). Learning is thus responsible for making changes in the things we say and write, either before or after the fact.

Krashen also suggests that 'acquired' knowledge may at times act as a monitor (Ellis, 1985). Acquired knowledge acting in the role of a monitor allows one to 'feel' as opposed to 'understand' what is correct. Monitoring can occur during or after language production both in the spoken and written forms of speech. In order for monitoring to occur, however, three conditions must be met. First, the second language learner needs enough time to think about the conscious rules. Second, the performer must focus on form, on *how* to say something rather than on *what* to say. Third, learners must know the rule applying to their production.

The Input hypothesis forms the fourth element of the Monitor Model. Krashen represents this hypothesis with the expression $i + 1$, where i represents the learner's current level of proficiency and 1 represents language just beyond the learner's level of proficiency. Thus in order for learners to develop higher levels of proficiency they must receive input just beyond their current level of understanding (i), hence, $i + 1$. Another term which Krashen uses to express $i + 1$ is *comprehensible input*. According to Krashen, comprehensible input is needed before any internal processing mechanism can be engaged. As Krashen puts it,

... a necessary (but not sufficient) condition to move from stage 'i' to stage 'i + 1' is that the acquirer understand input that contains 'i + 1', where 'understand' means that the acquirer is focussed on the

meaning and not the form of the message. (p. 21)

Provided that comprehensible input is available to learners, they will automatically 'acquire' the L2. Thus, Krashen believes that "...the best way, and perhaps the only way, to teach speaking... is simply to provide comprehensible input" (p. 22). The way in which comprehensible input is offered in a natural setting is observable in caretaker speech. Krashen believes that comprehensible input is best attained when based on the characteristics of caretaker speech. As a result comprehensible input is simple and focused on meaning, particularly in the beginning stages of SLA and is roughly tuned, i.e., the input contains $i + 1$ as well as many new and already-acquired structures. It is also in the 'here and now', a feature of language learning which reflects interests common to both the child and adult.

One of the main reasons why child learners seem to learn languages more effectively than adults is the affective filter, Krashen's fifth hypothesis. This hypothesis is appropriately named given that it concerns the affect or the emotional state of a learner. The affective filter hypothesis states that learners with high levels of motivation and self-confidence and who have a low level of anxiety are in an optimal language learning situation. Their filters in such cases are said to be 'low'. Conversely, 'high' filters represent learners who experience low levels of motivation and self-confidence and who also have high anxiety levels. These learners are likely to receive little comprehensible input and are likely therefore to be poor language learners.

Although the Monitor Model offers an attractive framework for understanding SLA, there are reasons to question its validity. The main resistance arises against

Krashen's claim that 'acquisition' and 'learning' are separate entities. Long (1983) provides evidence from several empirical studies which indicate that language learners are successful even though they learned rules consciously or in a formal setting. There are many language 'learners' who learned their L2 primarily in a formal manner and who seem to use the language without thinking. McLaughlin (1978a, 1981) and Stevick (1984) argue that acquisition and learning are the opposite ends of the same continuum. They believe that language learning follows the same route as memory; what is learned in short term memory, can, with usage based on real need, move into long term memory. According to McLaughlin, both controlled and automatic processes, leading to what Krashen terms 'learning' and 'acquiring', can be either conscious or unconscious. Stevick feels that highly integrated memory patterns correspond to Krashen's notion of 'acquisition'. Ellis (1985) points out that Krashen's Monitor Model does not account for the fact that 'acquired' knowledge is not homogeneous. In other words, a learner may in a given context produce an incorrect utterance ("No look my card!"-instruction to another pupil during a bingo game) while minutes or even seconds later in the same context produce the correct utterance ("Don't look at my card!"). Ellis also points out that acquisition can take place without two-way negotiation. This point is not addressed by the Monitor Model. In addition to the difficulties in maintaining the distinction between *learning* and *acquiring*, Krashen does not provide a description of the internal structures responsible for language learning. Thus, the whole notion of 'learning' versus 'acquiring' is seriously challenged. As Piper (1992) indicates, if the distinction between 'learning'

and 'acquiring' does not exist, then there is no basis for accepting the Monitor Model.⁷

In spite of the criticisms levelled against Krashen, some aspects of the Monitor Model have survived. For instance, linguistic researchers and language teachers still refer to comprehensible input and to the affective filter. These hypotheses have an strong appeal possibly because they point toward what many feel may be occurring in SLA. In addition to this, Krashen's hypotheses serve as a reference point from which further discussions in L2 learning have evolved.

Acculturation

Although Krashen mentions the affective filter involved in his Monitor Model, he only scratches the surface of an area dealing with affective variables. Other researchers go much further in describing them. According to Schumann (1975), the force of these affective variables may outweigh those of aptitude and intelligence. To Schumann, aptitude is important in L2 learning when the learning occurs in a formal (structured) setting. In a natural setting, however, aptitude operates independently of many L2 learning affective variables. Essentially Schumann believes that learners' attitudes toward the target language and culture are of major importance in determining L2 success (see also Ben-Rafael, 1991). He supports this position with research results.

The first variable Schumann (1975) considers is one proposed by Larsen and Smalley (1972). The latter posit that in order to become bilingual, learners must

⁷For a more profound discussion of the Monitor Model, see McLaughlin, 1978b.

'become' members of the target community. They must undergo "redomestication" and assume the position in the new culture as a "neodomestic." Should learners want to become new members of the target community, they may find three sources serving to frustrate their attempts: 1) the target community may not wish to interact with them, 2) the expatriate community may pressure them into staying within the group, and 3) the employer may place them in low "input" situations while still expecting them to learn the language.

In addition to these social situations, learners must also make psychological adjustments in coping with an experience which Schumann (1975) terms "disorientation." Disorientation appears in the forms of language shock, culture shock and culture stress. Stengal (1939) describes language shock as a feeling of dissatisfaction with oneself for not being able to name objects and ideas in the target language. He further suggests that this can result in a feeling of shame which affects the learner's ego. "Appearing comic" may similarly contribute to feelings of inadequacy. These feelings of language shock tend to be more dramatic with older learners than with children. Children, he claims, don't worry about such feelings. This lack of anxiety is thus helpful to the child language learner. A reduction in anxiety, Stengal feels, would therefore profit the adult learner. He states it thusly: "The adult will learn the new language the more easily, the more of these infantile characteristics he has preserved" (p. 478).

Culture shock is a condition which finds learners in an anxious or depressive state. Larsen and Smalley (1972) feel it occurs as a result of language learners having to

alter and adapt coping mechanisms which do not readily work in the target culture. Routines relied on in the L1 culture may be of little use in the L2 culture. As a result of the development of new problem-solving and coping mechanisms, learners find themselves drained of energy. In this stage learners find themselves seeking the company of others from their L1 community, complaining about local customs, and searching for a way out of their predicament (Brown, 1987).

On a less intensive scale than culture shock, learners may experience culture stress (Larsen & Smalley, 1972). If one considers culture shock an acute situation, then culture stress is a chronic one. An example of culture stress arises when, for example, language learners in their L1 community are considered upper class, whereas in the L2 community, they are considered middle or lower class. Coming to terms with this discrepancy may take a long period of time. During this time, learners vacillate between self-rejection and self-acceptance in the target community, with progress in acculturation occurring slowly but surely (Schumann, 1975; Brown, 1987).

This situation, where language learners find themselves in a sort of cultural no-man's land, not completely detached from their L1 community, and not assimilated in the target community, Schumann terms *anomie*. Anomie, according to Lambert (1967) and Acton (1979, cited in Brown, 1987) is a most conducive stage for L2 learning in the process of acculturation⁸. Brown (1987) suggests that this may be so because anomie

⁸Brown (1987: 129) lists 4 stages of acculturation:

- 1) excitement over the newness of surroundings
- 2) culture shock
- 3) culture stress (vacillating recovery, anomie)
- 4) assimilation (acceptance of self in new culture)

provides "... not only the optimal *distance*, but the optimal cognitive and affective *tension* to produce the necessary *pressure* to acquire the language..." (p. 135).

Culture shock may also take the form of homesickness. In this situation, language learners may spend so much time and energy thinking about how life was at home that they have less energy to dedicate to the new language and culture. To overcome this, Larsen and Smalley (1972) feel that learners need to be taken under the wings of a person or group who will help them through such difficult periods. The authors similarly believe that during times of culture shock and culture stress adults may feel not much different than children. This is a reduction in status which they may find difficult to accept.

Schumann (1975) feels that motivation is crucial in moving the language learner along the road toward the L2 community. According to Gardner and Lambert (1972) there are two kinds of motivational orientation: integrative and instrumental. Integrative orientation describes a learner who is interested in learning the language for its own sake and for the pleasure of communicating with L2 community members. An instrumentally oriented learner has little interest in the L2 community but nonetheless desires to learn the language for utilitarian purposes, such as getting job promotions. Of the two types of motivation, Gardner and Lambert feel that integrative orientation is more powerful and accounts for sustained success in L2 learning. Instrumental orientation can also be beneficial in L2 learning where L2 learners feel an urgent "need" rather than a "desire" to learn.

The need or desire to learn an L2 may be helped or hindered by the opinions held

by the learners' L1 community. Schumann (1975) speaks of the social community's expectations with regard to the L2 and its people. When the L1 community looks favourably on the L2 group, language learning is enhanced. Should the L1 community hold unfavourable views toward the L2 group, L2 learning is hindered. Schumann further suggests that for children, parents play perhaps the most important role in learners' acquisition of an L2. Parents who encourage, praise and monitor a child's language learning and communicate positive messages about the target community facilitate L2 learning for the child. Conversely, parents who relay negative messages to the child about the target community make L2 learning more difficult and unattractive for the child. Gardner and Smythe (1975) list several criteria necessary for language learners to be successful. In their view, the learner should be interested in the language, should be non-ethnocentric, non-authoritarian and non-Machiavellian (non-manipulative).

Motivation is also affected by what Guiora, Beit-Hallahmi, Brannon, Dull, and Scovel (1972) refer to as an individual's "language ego." They compare this to the body ego. As the body matures children gradually become aware of their physical boundaries. Guiora et al. suggest that in much the same way, there are boundaries formed around the language of the L1 learner such that syntax, morphology and phonology are outlined. The language ego hypothesis claims that while learners are young their language egos are in flux. At the point where the language ego has completed developing, it becomes much less permeable. Brown (1987) suggests that this happens around puberty. He further posits that because the language ego of adults is more fixed, they may feel

threatened to leave their secure language world to go to another. Because of this, children may be more able to adopt to changing linguistic circumstances. Guiora et al. feel that if language learners (particularly adults) are able to suspend their language egos they are in a better position to learn a second language.

In an experiment to view better how language ego permeability works, Guiora et al. (1972) offered various amounts of alcohol to 5 groups of university students. The authors claim that those students who had between one and one and a half ounces of alcohol pronounced Thai better than the other groups which consumed less than one ounce or more than one and a half ounces. The authors thus claim that the better pronunciation is due to the lowering in inhibitions, which in turn makes the language ego more permeable.

Although the experiment with alcohol deals only with pronunciation, Schumann (1975) feels that it supports his position that ego flexibility can be altered providing the proper psychological factors are at play and working to reduce inhibitions. By lowering inhibitions, Schumann feels that language learners experience less anxiety, feel more accepted, and are more willing to positively identify with speakers of the L2 community. This, in Schumann's opinion, leads to better language learning situations.

Schumann's (1976b) research ultimately permits him to propose a hypothesis which he terms the pidginization hypothesis. A pidgin is "... a simplified and reduced form of speech used for communication between people with different languages" (p. 394). Pidgin languages are characterized by "... a lack of inflectional morphology and a tendency to eliminate grammatical transformations" (p. 394). According to Smith

(1972) pidgins are used for basic communication while natural languages progress to the second and third levels of language known as the integrative (acquiring native-like mastery) and expressive (becoming a linguistic virtuoso and hence, highly esteemed) levels. Schumann incorporates Smith's levels of language usage into his pidginization hypothesis. Schumann explains the thrust of his hypothesis by stating that "... the speech of the second language learner will be restricted to the communicative function if the learner is socially and /or psychologically distant from the speakers of the target language" (p. 396). The distance is increased or decreased according to how the social and psychological variables interact with the language learner. Schumann describes, for instance, what makes up a good language learning situation:

It is also argued that social solidarity and hence a good language learning situation ... will obtain where the 2LL group is non-dominant in relation to the TL group, where both groups desire assimilation for the 2LL group, where low enclosure is the goal of both groups, where the two cultures are congruent, where the 2LL group is small and non-cohesive, where both groups have positive attitudes toward each other, and where the 2LL group intends to remain in the target language area for a long time. (p. 397)

As noted above, psychological distance experienced by language learners also influences second language learning. In order to reduce psychological distance and optimize language learning, Schumann (1976b) suggests that learners resolve the issues of language and culture shock, be integratively motivated and possess a flexible language ego. Because language learners may act as individuals and not as members of a group, Schumann acknowledges that they may learn the target language where they are expected not to, and vice versa. Nevertheless, the pidginization hypothesis predicts that a

reduction in social and psychological distance provides optimal language learning conditions which in turn help language learners move beyond the pidginization stage of language learning. The more learners close the social and psychological distance between themselves and the target culture, the more they are said to acculturate. With regard to second language learning, Schumann (1978) states that "... the learner will acquire the second language only to the degree that he acculturates" (p. 29)

Cognition in Second Language Learning

Cognition refers to processes which allow one to know, to be aware of and to judge information. Smith (1991) suggests that cognition involves inductive learning and conscious manipulation of knowledge. Some of the processes involved in cognition are the use of memory, planning, strategy building and analyzing. In short, cognition refers to thinking.

The definition of cognition has much in common with the definition of metalinguistics. The latter term is used throughout L2 language literature and according to Bialystok (1991) describes those skills which are carried out with deliberate control and awareness of the language learner. These skills become more evolved, structured, explicit and interconnected as time passes. Language learners move, in her opinion, along a continuum of cognition from the simple to the more complex.

During this progression the intimate connection between cognition and language becomes increasingly clear. Bickerton (1981), for instance, argues that language

depends on the power to abstract. Abstract thought is in turn a cognitive process. Brown (1987) states that "...cognitive development and linguistic development go hand in hand, each interacting with and shaping the other" (p. 137). Schumann (1976a, cited in Ellis, 1985) considers that cognitive processes are responsible for *how* SLA arises while sociological factors account for *why* SLA occurs.

The role of cognition in language learning has been raised by Krashen (1982b) in his 'acquisition' versus 'learning' hypothesis. The questions ultimately raised by his hypothesis are to what degree language learning is innate, and to what degree is it reliant on cognitive abilities. Chomsky (1965) felt that language learning occurs as a result of a biologically programmed mechanism. He referred to this mechanism as the Language Acquisition Device (LAD). He based his hypothesis on studies which indicated that some features of the learner's language were not available via experience. He elaborates on this by stating that

knowledge of grammatical structure cannot arise by application of step-by-step inductive operations (segmentation, classification, substitution procedures, filling of slots in frames, association, etc.).

He further explained that behaviourists' speculations ...

have not provided any way to account for or even to express the fundamental fact about the normal use of language, namely, the speaker's ability to produce and understand instantly new sentences that are not similar to those previously heard in any physically defined sense or in terms of any notion of frames or classes of elements, nor associated with those previously heard by conditioning, nor obtainable from them by any sort of 'generalization' known to psychology or philosophy (p. 57-58).

Reich (1986, p. 320) provided the example "Allgone outside" to illustrate Chomsky's

claim. The child who said this never learned this phrase from others, but rather put two pieces of information together to come up with a novel expression. Chomsky's explanation of language learning, therefore, helped to explain why children of all cognitive abilities, except the severely mentally handicapped, are able to learn an L1.

Juxtaposed with Chomsky's position is that offered by Genesee (1976) and Oller and Perkins (1978). These researchers found that cognitive ability and language proficiency were directly proportional to each other, that is, that intelligence predicted proficiency in L2 learning. This claim supported the opinions of many teachers who observed that children endowed with greater cognitive abilities were typically more successful in L2 learning. Yet, it was difficult to ignore Chomsky's position. Researchers puzzled over why this occurred.

Cummins (1979a) merged the notions that language learning is innate (Chomsky, 1965; Smith, 1991) and that cognitive ability determines language learning success (Genesee, 1976; Oller and Perkins, 1978). He hypothesized that there were two kinds of language ability. The first he called cognitive/academic language ability (CALP). This ability, in his opinion, was strongly related to the cognitive skills and academic skills employed in language learning. The second he termed basic interpersonal communication skills (BICS). The skills involved with BICS he related to oral fluency and interpersonal communication. Cummins' distinction clarified research results which suggested that there was a low correlation between intelligence and level of comprehension and oral skills (BICS) (Ekstrand, 1982; Genesee, 1976). At the same time it helped to explain why significant correlations were found between intelligence

and the achievement of learners on tests measuring reading and writing skills (CALP) in the L2. According to Cummins, cognitive skills played an important role in formal (school) situations, but a less important role in informal (natural) settings. Cummins' constructs thus pointed to the possibility that some linguistic skills were acquired almost effortlessly, corresponding to Chomsky's LAD, while others needed greater learner attention, as suggested by the research results of Ekstrand, Genesee, Oller and Perkins.

Fillmore (1991) arrives at an understanding of L2 learning which incorporates many of the theories of Chomsky, Genesee, Oller and Perkins, and Cummins. In Fillmore's understanding of language learning, there are two levels of cognitive processing: the first level is specialized for language learning and is consistent with Chomsky's LAD, the second level concerns itself with general intellectual functioning. In L1 learning or in simultaneous language learning the first level (the cognitive level which specifically deals with language learning) is used almost exclusively. When learners who have already learned an L1 begin learning an L2 (sequential language learning), the second level of cognitive processing is invoked, i.e., the level at which general intellectual functioning occurs. She argues that both are used in language learning, but in varying degrees. For example, in L1 learning the learner tends to use predominantly the first level, whereas the level 2 processes are called upon more in L2 learning. She further maintains that linguistic data can, through practice, pass over to level one processing skills, a view also held by McLaughlin (1990b). Fillmore feels her model helps to explain the difference between L1 and L2 learning.

Fillmore's view of language learning, therefore, has implications for L2 learning.

It suggests that there is always access to the level 1 processor. Thus, age need not be a hinderance in L2 learning. She qualifies her position by listing three conditions which must be met for learners to be successful:

- 1) learners must need or desire the second language,
- 2) there must be speakers of the L2 in a position to help the learners (teachers, for example),
- 3) learners must have enough contact with target community speakers to make language learning possible.

To the degree that any of these conditions are dysfunctional, or absent, language learning will be hindered.

There is, however, one scenario described by Fillmore which posits the possibility for language learning to occur in the absence of point 3 listed above. Fillmore (1991) claims that, although there may be a lack of contact with target language speakers, learners may still be successful provided the topic they are dealing with is relevant and interesting. Fillmore thus suggests that success in the L2 learning classroom is possible. Teachers know, however, that keeping all students interested all the time is an impossible task. According to Fillmore, there must be high exposure to target language speakers to help offset the times when interest levels of learners are low, hence her suggestion for cross-cultural contact.

Even when external conditions are favourable for second language learning, learners from similar backgrounds or even from the same family experience varying degrees of L2 learning success (Maccoby & Jacklin, 1974; McLaughlin, 1990a; Cummins, 1991a). The theories and research of such authors as Chomsky, Cummins,

Genesee, and Fillmore attribute the different degrees of success not to the innate level 1 processor, but to the variations occurring in the processing skills at level 2 (Fillmore's description). This view is also supported by Skehan (1986) who observed a strong relationship between the rate of first language acquisition and second language learning. This led him to suggest that a language processing capacity existed and that this aptitude affected language learning ability in both the L1 and L2. This processing capacity was also viewed as permitting cognitive skills to transfer from the L1 to the L2 (Cummins, 1979a, 1979b, 1991a; Hildebrand, 1974; McLaughlin, 1981; Tremaine, 1975, cited in Harley 1984). The transferring of skills in turn was helpful to language learners particularly in speeding up the learning process (Brown, 1987; Burstall, Jamison, Cohen & Hargreaves, 1974; Cummins, 1981). Taylor (1974) states that

There is no cognitive reason to assume that adults will be less efficient than children in language learning. In fact... it seems logical to assume that the adult's more advanced cognitive maturity would allow him to deal with the abstract nature of language even better than children. (pp. 32-33)

Although Taylor refers to adults, his research clearly suggests that the more cognitively advanced language learners are, the better prepared they are for learning particularly those aspects of the L2 which foster CALP development.

One of the principle ways of assessing cognitive skills is by measuring I.Q. levels. Research suggests that cognitive skills correlate very highly with I.Q. levels (Bialystok, 1991; Cummins, 1984b; Genesee, 1976; Hatch, 1983). The research of these authors reports on students of average and above average intelligence. Bruck (1984, 1985), on

the other hand, compared French immersion students with weak cognitive skills with a control group in the English stream. She found that progress was made in both groups and that the cognitively weaker French immersion group "... demonstrated comparable cognitive and first language skills to similar children educated only in their first language" (p.90). Although the weaker academic students did not outperform their peers of average and above average intelligence in the French immersion, Bruck's study showed that the controls were also unable to do so in the regular English stream. The above research suggests that those of weaker cognitive skills can still make progress in an L2. It also indicates that cognitive skills contribute in a directly proportional manner to L2 learning success and that intensive second language programs do not prevent the child from progressing in L2 and cognitive development.

There is, nonetheless, some question as to the suitability of second language programs for some learners. Trites (1984) studied eight groups of students in various language settings designed to highlight learning disabilities. He found that a unique group of learners exists in French immersion. These learners exhibit what Trites terms a 'maturational lag.' He reported that "... there are important neuropsychological test differences between groups of children who succeed when placed at a young age in an intensive second language learning program as compared with those who fail" (p. 165). Trites suggested that the area responsible for these maturational lag difficulties was the temporal lobe region of the brain. He went on to report that the neuropsychological effects disappeared by age 9 at which point students would be able to succeed in an intensive L2 learning program like French immersion. The students who suffer from a

maturational lag, however, tend to have far fewer difficulties progressing in their L1s.

Wiss (1989) agrees with Trites that there is in French immersion a subgroup of learners who are cognitively and linguistically immature and who fall under the title 'maturational lag.' She adds a second group of learners to this subgroup of potential unsuccessful learners. This group, the learning disabled, will not grow out of their learning disabilities and thus would only double their linguistic troubles by remaining in an immersion program.

Rondal (1984) shares the opinions of Trites and Wiss that intensive second language learning is not for everyone, particularly the learning disabled. He is blunt about his views and states: "If bilingual education is not rendered compulsive or felt to be highly necessary, one might as well dispense with it among moderately and severely retarded individuals due to the danger of destabilizing their meagre linguistic accomplishments" (p. 159).

The focus of Trites, Wiss and Rondal is on what challenged language learners can't do with little regard to what they can do. In considering the research of other authors, it becomes clear that there is a lot that these learners can do. Burns and Olson (1983) cite studies by Levin (1972), Light (1981), Stein and Weinrib (1977), and Troike (1978) which indicate that language learning is possible for everyone. Cummins (1984b) points out that Trites' data and hypothesis regarding weaker French immersion students and their poor TPT scores are unfounded, particularly given that there is a large body of research which claims that no differential effects occur in children with language

impairments in the English and immersion programs. Cummins cites research which indicates that French immersion problem children were rated average by their teachers in listening comprehension, though they were less successful in oral production. Genesee's (1978/79) research, moreover, demonstrates that some children considered to have low academic ability seem to perform in certain L2 skill areas such as listening comprehension and oral production as well as those with average or even above average I.Q.s. It would appear that low academic performers can be successful in intensive L2 learning programs especially if they are evaluated on what they have learned as opposed to what they have not (Bruck, 1984; Malecka, 1987).

There is, nonetheless, one group of learners who may suffer negative cognitive development as a result of becoming bilingual in a formal setting. Cummins (1979b) refers to this group as 'subtractive' bilinguals. He explains that a linguistic 'threshold' exists for all L2 learners. The language learner must have a minimum L1 development in order to profit from a bilingual experience. Moreover, language learners must attain a minimum threshold of competence in the L2 in order to experience any of the benefits of bilingualism.

The threshold contains two boundaries. The first is the 'lower threshold.' Falling below this level represents 'subtractive bilingualism,' that is, language learners lose their L1 as they learn the L2 and/or find their language denigrated by the majority language community. Learners below the lower threshold function at a low level in both their L1 and L2. In order to avoid negative consequences from bilingualism, learners must attain the lower threshold (McLaughlin, 1984). The second boundary is the 'higher threshold.'

Rising above this represents 'additive bilingualism.' Learners reaching this level experience stable L1 development and a certain 'ease' in working in the L2. This 'ease' is not instant, but must be developed. It is similar in nature to the concept that the more one learns, the easier it is for one to learn. At this stage, learners function at a high level in both languages. Between the two thresholds lies a zone which Cummins refers to as 'dominant bilingualism.' In this zone, one of the two languages is dominant. According to Cummins, neither positive nor negative cognitive effects occur in this zone.

Cummins' levels and zones are not precisely measurable. They are rather "... likely to vary according to the children's stage of cognitive development and the academic demands of different stages of schooling" (Cummins, 1979b, p. 230).

The learners who are most likely to experience cognitive and linguistic difficulties are children from a minority language background (Cummins, 1984a; Lambert, 1974). MacNab (1979, cited in McLaughlin 1984, p. 211) explains that minority language children are

...forced to learn the second language, no matter what the cost in other learning. This demand for second-language skills may be especially difficult for average and duller children because slowness in learning the language cuts into time needed for other learning and because they do not have the opportunity to specialize in other subject areas where they might find learning easier. In addition, the subtractive environment is a stressful one because the child's cultural heritage is denigrated by the society. (p. 251)

Thus, the difficulties experienced by children in a subtractive situation may be largely of a social nature which subsequently affects their linguistic abilities. Whatever the cause of their linguistic distress, these children need special educational attention if they are to

be successful students in a bilingual program.

To conclude, the general thrust of the research points to the fact that learners with weak level 2 cognitive skills may learn L2 communicative and oral skills, but will experience difficulty in acquiring those aspects of language learning which require more cognitive development, such as reading and writing (Harley, Hart & Lapkin, 1986; Bialystok, 1991). A subgroup of minority language children may be at risk in school if they are in a subtractive language learning environment. Aiding them through their social adjustments would appear to be a reasonable approach to guiding them to successful bilingualism.

Optimum Age for L2 Learning

As children age, their cognitive abilities develop (Cooper, 1991; Fillmore, 1991; Piaget, 1968). It has been noted that cognitive development is directly related to language learning ability, particularly as regards the acquisition of CALP. This direct link with language learning implies that the older one is, the better one is able to learn an L2. Following this logic one could argue that adults are better language learners than children. Yet, the position that adults are better language learners contradicts the commonly held view that children are able to "pick up" an L2 (BICS) and are consequently better language learners. Data drawn from both natural and formal settings exists in support of both claims.

Researchers offer many reasons for beginning L2 learning early, i.e., near school

age, as the following summary indicates. Children

- 1) develop better interpersonal linguistic skills than adults (Harley, 1986).
- 2) receive more exposure to the language or, in Krashen's terms, receive more input (Burstall, 1975; Kessler & Idar, 1979; Brown, 1977). The outside world treats adult L2 learners differently from child learners by providing them with less comprehensible input (Fillmore, 1991; Krashen, 1981).
- 3) receive more opportunity for spontaneous use (Swain, 1981) and are provided with larger quantities of simple input in a more supportive atmosphere where their L2 understanding is more monitored (Hatch, 1983; Scarcella & Higa, 1982).
- 4) receive a high degree of attention and affection which contributes to language learning success (Brown, 1977).
- 5) require less energy and concentration than adults when they speak (Paradis & Lebrun, 1984).
- 6) are more venturesome and less inhibited than adolescents (Ausubel, 1964; Elkind, 1970; Taylor, 1974; Schumann, 1975). This is because they don't perceive language learning as an enormous task, but rather take it in their stride. By age 15, however, they are aware of major differences between their L1 and L2 and can therefore find L2 learning to be overwhelming (Piaget, 1968; Rosansky, 1975, cited in Brown, 1987; Krashen, 1975).
- 7) are less aware than adults that they are learning language (Brown, 1987). They see linguistic features as a way of representing their thoughts which is beneficial to language learning (Rosansky, 1975, cited in Brown, 1987).
- 8) are more likely to attain native-like pronunciation than adults (Ausubel, 1964; Oyama, 1982a; Scovel, 1988).
- 9) focus on meaning, unlike adults who focus on form (Fathman and Precup, 1980, cited in McLaughlin 1981; Krashen, 1982b).

For these reasons, learners who begin an L2 in childhood frequently achieve higher L2 proficiency in the long run than learners who begin an L2 after puberty. This is, in part, because early L2 learners' tend to develop interpersonal skills (BICS) better than adult L2

learners (Krashen 1982a; Paradis and Lebrun, 1984; Cummins, 1983; Harley, 1986; Kessler & Idar, 1979; Swain, 1981). Adult language learners, on the other hand, enjoy certain advantages over child L2 learners. They

- 1) learn faster than children because they can negotiate with their interlocutors, thereby sustaining discussions which provide comprehensible input (Scarcella & Higa, 1982).
- 2) have a longer attention span than children which is useful in L2 learning (Paradis & Michel, 1984).
- 3) have better developed cognitive capacities than children (McLaughlin, 1981; Paradis & Michel, 1984). They therefore don't have to learn abstract concepts, only verbal representations.
- 4) can make conscious, grammatical generalizations which help L2 acquisition (Harley, 1986).
- 5) take advantage of strategies such as planning speech, repeating and self correcting more often than children (Fathman & Precup, 1980, cited in McLaughlin, 1981).
- 6) focus on form more than children. This is particularly useful in a formal learning situation (Fathman & Precup, 1980, cited in McLaughlin, 1981; Hammerly, 1989a, 1989b; Seliger, Krashen & Ladefoged, 1982).
- 7) cope more adequately with word order differences between the L1 and L2 which learners between the ages of 2-1/2 and 9 find difficult (Zobl, 1983).

These factors favour adult language learners and make them well-suited for language learning, particularly in formal learning situations.

Given the host of advantages for both younger and older learners, the question arises: Is there evidence that an optimum age exists for L2 learning? Logic suggests that learners who are still children but who are nearing adulthood can enjoy the advantages inherent in both categories (Brown, 1987; Hammerly, 1989a, 1989b; Harley, 1991).

There is also research which has supported this assumption.

Collier (1987) studied 1,548 limited English proficient (LEP) learners representing 75 different languages. Her subjects were taken from Grades K through 11. She observed that students arriving in the United States between the ages of 8 and 11 were the fastest achievers of English proficiency. Snow and Hoefnagel-Höhle (1978a,b) studied approximately 100 subjects of English L1 background in Holland in a natural setting. These subjects were broken into groups of 3- to 5-year-olds, 6- to 7-year-olds, 8- to 10-year olds, 12- to 15-year olds and adults. They reported that over the first 6 months, the subjects aged 12 to 15 demonstrated the fastest L2 language acquisition while the slowest L2 acquisition was made by the subjects aged 3 to 5. They further observed that at the end of the year the 8- to 10-, and 12- to 15-year-olds had achieved the best control of Dutch while the 3- to 5-year-olds demonstrated the poorest control. In two other studies related to pronunciation, Snow and Hoefnagel-Höhle (1982a) found that the optimum age for L2 pronunciation was between the ages of 3 and 15. Ekstrand (1982) studied the English L2 acquisition of some 1,000 students ranging from age 8 to 11. He found that ability in comprehension and pronunciation increased almost linearly with the 11-year olds performing better than the 8-year olds. Fathman's (1975) research of 200 children aged between 6 and 15 learning English in American schools, similarly found that children aged 11-15 years demonstrated better control of morphological and syntactical features as measured through oral production than the younger learners. Her study also found that the learners aged 6-10 were better at English pronunciation. Other studies (Ervin-Tripp, 1974; Krashen, 1982a; Scarcella & Higa, 1982; Oyama, 1982b;

Patkowski, 1980; Ramirez & Politzer, 1978) similarly supported the belief that learners were strongest in language acquisition at or near the age of puberty. These studies, moreover, indicated that the maximum age for learning an L2 most effectively was 15 (Harley, 1986).

Although the above research involves learners in both natural and formal situations, other studies have concentrated on L2 learning primarily in formal situations. These studies also pointed to an "optimal age" for L2 learning. The data have been gathered from language learning situations where learners had been exposed to the L2 for different amounts of time, and at different levels of intensity. In a study designed to measure the level of success in the acquisition of grammatical competency, Dunkel and Pillet (1962) found that students with only one year of secondary school French performed better than students of the same age who had begun their French studies five years previously in Grade 3. Burstall (1975) studied French second language (ESL) students at age 8 and 11 and found that by age 16 the Grade 8 students held a slight advantage only in listening comprehension. The two groups, however, were equal in oral production, reading and writing abilities. Calman (1988) provided empirical data which suggested that "... ESL students who begin French in Grade 6 or earlier, achieve by Grade 8 a level of performance similar to that of regular students who begin their study of French in Grade 4" (p. 124). Oller and Nagato (1974) found that by Grade 11, Japanese students having learned English as a second language (ESL) from Grades 1-6 did no better on a cloze English test as those students who began learning English in Grade 7.

Evidence from the field of French immersion has also supported the notion of an

optimum age for language learning. Lapkin, Swain, Kamin and Hanna (1983) studied three classes of late French immersion and found that students with less intensive exposure to French (650 hours of instruction) performed better on the IEA French listening and reading tests than students who received more intensive exposure (780 hours of instruction). Lapkin et al. further noted that the class with fewer hours of formal exposure to French were as successful on the *Test de compréhension* and *Test de mots à trouver* as the class with more hours of exposure. Adiv and Mocros (1979, cited in Genesee, 1981) and Genesee (1979) observed more dramatic results in comparing early French immersion students with Grade 8 late French immersion students. They found that students who had begun to learn French in immersion kindergarten did not perform better than those who started late French immersion in Grade 7 or 8 (see also Genesee, 1981). Swain (1981) reported similar results of her comparison of Grade 8 early and Grade 10 late immersion students. She discovered that Grade 10 late immersion students with 1,400 hours of instruction performed as well as Grade 8 early immersion students with over 4,000 hours of French instruction on a French cloze test (LFI = 20.4 vs EFI = 19.9). She also reported that LFI students performed better than EFI students on a reading comprehension test (LFI = 18.2 vs EFI = 14.8). However, her research indicated that EFI students did somewhat better than the LFI students on a test of listening comprehension (EFI = 15.0 vs LFI = 12.0).

The research of Lapkin et al., Adiv and Mocros, Genesee and Swain indicates that in spite of the slight advantage in listening comprehension, there is little advantage in beginning French immersion in kindergarten as opposed to beginning near the onset of

puberty, for, by late adolescence, older child learners end up almost on par with younger learners (Harley, 1986, 1992; Cummins, Harley, Swain & Allen, 1990).

A second variable relating to the optimum age for L2 learning is the intensity of exposure to the L2. It is clear to researchers that the best milieu for L2 learning in a formal setting is in an intensive language learning setting (Adiv and Mocros, 1979; Genesee, 1979; Lightbown & Spada, 1994; Lindholm, 1987; Lapkin, Swain, Kamin & Hanna, 1983). Swain and Lapkin (1982), for instance, find that one year of late French immersion permits learners to perform better in French than learners who had 10 years of the "drip-feed" approach to learning French in the core program even though both groups of students have a similar amount of exposure to French. Lapkin et al. (1983) come to a similar conclusion and state that "... given a number of hours to be allocated to instruction in French at the elementary level it is preferable to concentrate them over a two- to three-year period, rather than distribute them over a nine-year period" (p. 204).

To summarize, research results indicate that the 'optimum' age for L2 learning is near the age of puberty. At this point in L2 development, the convergence of child and adult strengths maximally benefit the learner. Research further suggests that the most efficient way to promote L2 learning is to concentrate the hours over a shorter rather than a longer time span.

The selected theories and variables discussed in this chapter provide the framework for understanding how L2 learning occurs. Their impact on L2 learning in a formal setting affords the impetus for suggesting a restructuring of the French immersion program. The need for restructuring French immersion is further strengthened when the

criticisms raised against this program are taken into account.

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CHAPTER V

CRITICISMS AGAINST FRENCH IMMERSION

Although French immersion has enjoyed great "success" in the field of L2 instruction and learning, it has been criticized on several fronts. Most notable among these is the level of proficiency which French immersion students attain. As previously noted, initial reports created the impression that immersion students become bilingual, almost as a matter of course (Penfield & Roberts, 1959). Bilingualism came to be synonymous with proficiency. This ultimately led to the belief and expectation that FI students achieved near-native competency.

This, however, is not the case. Various aspects of the performance of immersion students immediately identify them as non-native speakers. Research has consistently identified those areas in which immersion students continue to have weaknesses. Immersion students, for example, have difficulty with the verb system, even at the secondary school level. For instance, they do not always know when to use the *imparfait* as opposed to the *passé composé* (Harley, 1986). In addition to this, they use a grammatically simpler verb system, allowing them to avoid more complex forms (Harley & Swain, 1978; Spilka, 1976; Helle, 1985). By Grade 6, 81% of student utterances consist of only one word, a phrase, or a clause (Harley, 1985, cited in Swain & Lapkin, 1986). This indicates that students develop avoidance strategies which in turn lead them make redundant utterances (Hammerly, 1989a, 1989b). Lister (1987) and Hamm (1988)

have noted that increased opportunity to use French helps improve the ability of a student to communicate a thought, but accuracy is, for the most part, unaffected. Also, students make errors of the most basic kind in 52 % of their sentences after 7 years of French immersion (Spilka, 1976). Time does not improve the errors. By Grade 12 early French immersion students make errors in 53 % of their sentences. The errors appear in gender differentiation, verb tense, endings, pronouns and prepositions. This data is particularly interesting because it was gathered from volunteers, i.e., those who felt confident about their French proficiency (Pellerin & Hammerly, 1986; Safty, 1989).

A major contributor to error production is interference from the L1 (Hammerly, 1989a; Helle, 1985). It is common to hear such phrases as *Je suis onze ans*; *Il veut moi de dire francais à il*; or *Il demande moi de parler*. Such errors occur even after 10 years of immersion (Safty, 1989). The above data thus indicate that immersion students have weaknesses with the grammatical structures of French. These weaknesses are particularly noticeable in the productive language skills, that is, speaking and writing (Safty, 1989).

Immersion students ultimately end up speaking "... a curious blend of French and English..." (Safty, 1989: 564), a linguistic phenomenon which challenges Krashen's and Penfield's belief that children "pick up" a language simply by receiving "input" (Hammerly, 1989a, 1989b). Lister (1987) writes that "Krashen overstates the success of French immersion by overlooking certain aspects of the program. ... he overestimates the proficiency level of immersion students by neglecting to recognize their interlanguage, which in fact at times would impede communication" (p. 703).

In light of these criticisms French immersion can only be considered a partial success. Several reasons appear in the body of second language learning literature to explain why French immersion students do not attain better results:

- 1) Most notably, students are not truly immersed. They are surrounded by non-native speakers for classmates with only the teachers as their models. Under these circumstances, students suffer from a lack of authentic input, with the result that they reinforce each other's mistakes and interlanguages (Hammerly, 1989a, 1989b; Helle, 1985; Swain & Lapkin, 1986). The term "immersion" is therefore a misnomer, for the children are not immersed in an authentic Francophone milieu (Bibeau, 1984; Lister, 1987). Given that immersion classes are not representative of an authentic environment, it is understandable that students will not just "pick up" the French language, but a form of it (Hammerly, 1982).
- 2) Students are constantly under pressure to convey meaning in a great variety of contexts (Adiv & Mocros, 1979; Swain, 1974). Since the immersion students have a limited knowledge of French, they cannot avoid making many errors (Swain, 1974).
- 3) Errors are not given enough attention (Hammerly, 1982). Students are encouraged to "use" the language and are encouraged when they do no matter how incorrect their utterances may be (Hammerly, 1989b).
- 4) As soon as immersion students realize they are making themselves understood and find their utterances accepted, they lose their incentive to attain the fluency level of native-speakers (Harley & Swain, 1978), increasing the likelihood that students will fossilize in their language development.
- 5) A lack of effort also prevents students from progressing further than they do. Many prefer subjects like math in French because they don't have to talk as much (Morrison & Pawely, 1984).
- 6) Once students fall into the habit of making the same errors, they find self-correction difficult (Hammerly, 1989a, 1979b). Harley, Allen, Cummins and Swain (1987) noted that after an 8-week focus on 2 French past tenses, the experimental group performed better than the control group on tests demonstrating understanding and use. Three months later, however, the experimental group fell back to the level of the controls and no significant difference was maintained.

- 7) Though language pedagogy is slowly changing, (Lightbown, 1992) French immersion classes still tend to be teacher-centred (Lightbown, 1990; Swain & Lapkin, 1986). As a result, students get little practice in speaking in the classroom. They also, being from majority language milieus, get little opportunity to use French outside the school (Sharp, 1992; Swain & Lapkin, 1986). This has resulted in students at the high school level being unable to express themselves clearly (Morrison & Pawley, 1984).
- 8) Students hear some forms of French rarely. For example, they may hear *vous* more rarely than *tu*. Minimal exposure to language features leads to poor control of these features (Harley, 1986; Lightbown, 1990; Swain & Lapkin, 1986).
- 9) There are problems with the curricula. Lister (1987) is concerned about the use of texts designed for native French speakers, but which are used in immersion classes with students who return to a predominantly Anglophone community at the end of the day. He states that "... at the intermediate level, our materials have not been simplified and the extent to which they are comprehensible to all students is highly questionable" (p. 704). This indicates that students are struggling. This struggle continues into the secondary level. By Grades 9 and 10, students continue to have difficulty understanding and expressing themselves clearly in French (Morrison & Pawley, 1984).

The expectations that students can somehow absorb native-like French are unrealistic in the immersion setting. Unless the child is truly immersed in an authentic environment where the majority of speakers are from the target language background, there is 'no easy road to bilingualism' (Bibeau, 1984).

As previously noted, the most beneficial age for second language learning appears to be near puberty. Although there is a common belief that children will learn more easily than adults, Harley (1984, 1991) points out that starting children early in French immersion may prevent them from achieving grammatical competence. There is a strong possibility that the child's language will fossilize in an atmosphere where error correction is infrequent and where children are encouraged simply to make themselves

understood (Harley, 1984, Bibeau, 1984). Furthermore, there is little point in drawing the attention of younger learners in early immersion to the grammatical errors they make, since they are too young to understand the concepts which require a greater degree of cognitive development (Hammerly, 1989b).

Pawley's research (1985) supports the notion that early immersion students run the risk of fossilizing, particularly when error correction is lacking. Pawley examined the four skills of FI students in the Ottawa area. She found that on the Foreign Service Institute Scale, the early French immersion students received between 2 or 2+ out of a total possible of 5. (The 2+ level indicates that the speaker can satisfy routine needs but has weaknesses in correct usage of the language.) She further noted that, by this point, immersion students had logged more than 7,000⁹ hours of French instruction. Though the students could express themselves in a fluent manner, they did so with many inaccuracies.

The common expectation was that after thousands of hours of French instruction, immersion students would perform better than they did. That they did not perform as well as was expected was disturbing, particularly since there were examples of adults achieving as well or better on the same types of tests with fewer hours of instruction. Hammerly (1989b), for instance, observed that well-motivated adults scored 2+ and 3 on the Foreign Service Institute Scale (FSIS) after some 700 hours of instruction at the foreign service institute. Reich (1986) reported that language learners in the army

⁹According to Hammerly (1989b), after 13 years in immersion, students have logged approximately 7,000 hours of French instruction.

needed 1,300 hours of instruction to achieve near native-like levels of competence in Vietnamese.

In addition to the success language learners can experience in programs such as those listed above, other research results suggest that learners experience higher levels of success in intensive language programs other than French immersion. For example, Hamm (1988) found that core students who received 1,500 hours of French instruction followed by a 3 to 6-week stay in a Francophone community performed almost as well on the American Council on the Teaching of Foreign Languages (ACTFL) oral proficiency interview as students who had gone through the immersion program and who logged between 3,000 and 7,000 hours of French instruction. Lapkin, Harley and Taylor (1992, in press) similarly reported that Grade 9 and 10 core French students involved in a one semester 'mini-immersion' experience including several subjects taught in French and a two-week stay in Quebec performed better than Grade 12 comparison core French students on listening comprehension tests. It therefore appears that the effect of the number of hours students spend in French immersion tapers off with time, that is, more time spent in FI does not result in increasingly better language control for students. The skills students learn in immersion level off well before native-like control of the language occurs.

The French immersion program has also been criticized along socio-economic lines. FI has been built on an unusually high number of students coming from the upper socio-economic strata (Burns & Olson, 1983; Ouellet, 1990; Reich, 1986). An example of the socio-economic profile of one FI school was observed in the Earl Kitchner School

where 50 % of the FI students came from families where fathers were professionals (Burns & Olson, 1983). At the same time the fathers in the English stream were exclusively in blue collar positions. Although the percentage changes from school to school, Burns and Olson noted that the percentage of professionals in immersion schools was greater.

In their study, Burns and Olson (1983) also found that school boards did not strive to reach "all" parents. They noted that school boards and school personnel were not active agents in the decision-making or in making parents of the lower socio-economic level aware of the advantages of the FI option. The weak recruitment procedures of school boards "... in effect have determined the social characteristics of the cohort. The effect, again, not the intent, has been to stratify immersion children from non-immersion children" (p. 52).

This stratification has resulted in the "streaming" of students with the more gifted going to typically smaller FI classes (Halsall, 1991) and the less gifted going to the English stream (Burns & Olson, 1983; Crawford, 1976; Helle, 1985; Hammerly, 1989b; Pfeiffer, 1979). This has in turn caused a serious "brain-drain" from the regular core French classroom as well as from English schools. Burns and Olson (1983) examined eight school boards and found that on an I.Q. test where the national average was 100, the lowest I.Q. encountered in a FI class was 110. These results, they reported, were similar to other studies carried out in Ontario immersion schools. They further observed that as the students progressed through each year, the class I.Q. increased systematically. The authors attributed this increase to the departure of "unsuccessful" students from the

program. These "unsuccessful" students, they further noted, found French immersion difficult because of the pressure put on them by teachers, other students and parents to succeed.

English stream teachers who are left with students performing at a lower academic level than immersion students have commented on the effect of the "brain-drain." They have expressed feelings of being excluded from teaching above average students to whom they would otherwise have access (Burns & Olson, 1983; Hammerly, 1989b). They were also displeased by the fact that French immersion teachers get to "pick and choose" their students, which has created a "push-out" phenomenon (Burns & Olson, 1983; Cummins, 1984a). As a result, English stream teachers have observed a dwindling in the number of peer leaders and role models of the more capable students who are important for classroom dynamics.

The streaming which has occurred has resulted in comparisons of FI students with other students in both core and English stream classes. The nature of these comparisons has typically been to promote French immersion. These comparisons pointed out the strengths of FI. In so doing, however, they have injured the self-esteem of those not in the program. One such comparison appeared in Swain's (1983) *The Trial Balloon That Flew*. In the last chapter of the book, the author implied that "true Canadians" would want to avail themselves of the program, since it was superior to the core French program. Another example has been a survey of FI teachers who indicated that they felt that FI students were better educated than others (Burns & Olson, 1983).

The effects of such comparisons have made a strong impression on both FI and

core French students. French immersion students feel that their level of French is "superior" to the core students. Core students, conversely, feel that they are receiving second-rate French (Burns & Olson, 1983; Cummins, 1984a). Furthermore, Burns and Olson (1983) note that "... positive identification status, and solidarity were features of the French immersion students-- features which were not mirrored to the same degree in the other students we observed, including Francophones in Francophone schools" (p. 6). The feelings of superiority and inferiority felt by each group have contributed in creating a rivalry between the groups. This has resulted in each group calling the other names (Burns & Olson, 1983). Name-calling has helped divide the community of immersion and English stream students and their parents. Thus, although the intentions of the authors supporting FI were good, they have helped create tensions between those who are in French immersion and those who are in English stream programs (Crawford, 1976).

The difficulties created by the split in the school French programs have led to the criticism that FI promotes elitism, since it promotes a superior program for those who can "handle" it (Cummins, 1984a; Sharp, 1992). Teachers and administrators have contributed in creating this perception by "recommending" students for continuation in immersion. These recommendations depended on such criteria as academic progress, acceptable I.Q. levels and, in some cases, on whether the parents of immersion students spoke French (Burns & Olson, 1983).

Immersion schools also provide a list of "considerations" for parents to study before they decide to send their children to French immersion. Such "considerations" offered by immersion schools are deemed to be in the best interest of the child. They

include the willingness of parents to read a great deal to the child (Frisson, 1989), and the willingness of parents to observe their child for indications of good/poor second language learning potential. Indications of second language acquisition potential include such facets of a child's profile as the L1 competence of the child, the frustration (motivation) level of the child, and the level of success the child attains on non verbal and non auditory sub-tests (Demers, 1994). An example of a more thorough list of "considerations" appears in an insert in Demers article. This list is given below in its entirety.

The successful student in French immersion

- is verbal, likes to talk
- imitates easily
- experiments without fear of making mistakes
- is exposed to many models of good modelling (at home, in the community and in school)
- readily accepts challenges
- shows strengths in first language
- trusts
- is usually attentive and focussed
- is willing
- has good auditory discrimination
- has good memory and good meta-cognitive awareness
- has determined parental support and convinced parents

The unsuccessful student in French immersion

- is often a reluctant speaker
- imitates with difficulty
- doesn't notice errors
- often fears making mistakes
- poor modelling environment (at home, in the community and in school)
- has a defeatist attitude
- often has poor first language skills

- mistrusts
- often is inattentive and unfocussed
- is often unwilling
- has poor auditory discrimination
- has poor memory and poor meta-cognitive awareness
- often has unconvinced parents, and unprepared or unwilling to help

In addition to this list, parents must consider the amount of remedial support services available to the child in the immersion program in question. Given such "considerations", one is left with the impression that French immersion is for the "perfect" student.

Parents in the English stream, on the other hand, do not have such considerations to make for they have no choice when the child is of school age. When children in French immersion are seen to be poorly placed they can still fall back on the English stream¹⁰. On the other hand, when children in the English stream do poorly, they have nothing to fall back on. Furthermore, there is also an element of exclusion inherent in the immersion program. Students must enroll in early, middle and late immersion and attend classes from the beginning of the program.. If they don't, they may not enter the program at a later date. Thus people moving into a region with a child ready to enter Grade 1 will not be permitted to send him/her to early French immersion. Similarly, students may not enter other immersion programs if they are deemed to be late. Late entry students are, however, readily permitted into core classes. For English stream

¹⁰Though they are accommodated in their English courses, their level of French is typically superior to that of their peers in core French. There are no special provisions made for such students. They simply enter the core program if they continue in French (Halsall, 1991).

parents the lack of a program to fall back on, and the element of exclusion from the immersion program because of tardiness, or decisions made too late, further contribute to the perception that immersion is an elitist program.

In addition to dealing with the criticisms regarding the academic success and socio-cultural backgrounds of students, French immersion educators and administrators must also deal with the objection that FI students receive more financial support than core students in the system. Prior to the implementation of French immersion, school boards administered funds given to them by their province. There was no federal support for core French, the only French option then in place. With the creation of French immersion, the federal government established agreements with the provinces through the Department of the Secretary of State (Department of the Secretary of State of Canada, 1989a). Under section III (2) of the Canada-Nova Scotia agreement (Department of the Secretary of State of Canada, 1989b), for example, the following priority appeared: "... Canada and Nova Scotia agree to give special attention to the following [two] areas of interest: - the development and expansion of French immersion programs..." (p. 3)¹¹. These agreements were created, therefore, as a way of getting federal funding directly to immersion programs.

The financing of education is based on a two-tiered system. The provinces use a complex formula to determine how much money each school board receives. This formula is based on such criteria as student enrolment and the size of the school to be

¹¹The second of the two priorities mentioned involves French first language education for the Francophones in the province who are funded separately from FI and core classes.

maintained. Essentially this formula allows the province to offer each school board an equal amount of funding. In addition to the equal amount of funds distributed to each school board by the province, there is an infusion of federal funds to be used specifically for the development of French immersion and French as a Second Language.

The majority of these funds goes to the French immersion program¹² (Burns & Olson, 1983; Canadian Education Association, 1992; Collinson, 1989; Safty, 1989; Department of the Secretary of State of Canada, 1989a). For instance, from the years 1983 to 1988, the federal government gave the provinces and territories \$85,319,858 for immersion infrastructure support, and \$165,073,654 for French second language (core) instruction for infrastructure support (Department of the Secretary of State, 1989a). Yet, students in the French as a Second Language program have typically outnumbered FI students 7 to 1 (Dietrich, 1991).

Although it may appear that core students receive more funding, when seen on a per capita basis, they do not. A breakdown of the federal statistics to a provincial level helps illustrate how much financial aid is given to French immersion, and how much to French as a Second Language students.

In 1988 in Nova Scotia, 96,127 students were enrolled in core French, while 4,328 students were enrolled in immersion (Nova Scotia Department of Education,

¹²Published information indicating a per capita contribution to French immersion as opposed to core students was found in no single source. Those interested in finding this information must go to several sources and work out the figures for themselves. There are publications which offer total contributions made by the federal government (see Appendices, 1990-1991, Nova Scotia, published by the Department of the Secretary of State of Canada), but these data are based on the combined contributions to immersion and core programs.

Statistics and Data Entry, personal communication, July 18, 1994). In that year the federal government contributed \$396,006 to support the French immersion infrastructure and \$1,313,891 to support the infrastructure of the French as a Second Language program. On a per capita basis, immersion students received \$91.40 while core students received \$13.60. At the same time, by Grades 3 or 4, early French immersion students received less than seven times as much French instruction. In a five-hour day, Grades 3 or 4 immersion students received approximately 60 percent of their day's instruction in French, amounting to 180 minutes (Ouellet, 1990), while core students received 45 minutes (or more) of French instruction per day. This suggests that immersion students received only four times as much French instruction. They thus appeared to receive more financial assistance than core students.

That the FI program should require more money to operate is logical (Helle, 1985). There are extra costs in running a separate administration, translating texts into French, creating French libraries in immersion schools, inviting guest speakers and cultural events, creating a separate teaching staff, and offering busing and lunch programs to immersion students. But the distribution of funding described above for immersion programs perturbs many parents in the English stream. While money seems to be available for immersion programs, some schools in the English stream are experiencing threats of closure or major cutbacks in programs offered like music and art. Elementary core French is also undergoing cutbacks and a reduction in hours in some parts of the country. This leaves students of core French, which already has a poor reputation, with an even weaker program.

English stream parents are naturally worried about their children's education.

They contrast the financial difficulties which their schools and programs are experiencing with the cost involved in running French immersion, which seems by comparison to be unaffected by financial woes. It is clear, for instance that by offering immersion programs school boards can "generate lucrative [federal] grants" (Safty, 1989: 563). English stream parents perceive this to mean that some students receive more financial support than others. This further contributes to divisions in the community.

When considered against an historical backdrop, the divisions which have arisen in Canadian communities appear ironic for two reasons. The first is that one of the main goals of French immersion from its inception has been to foster a spirit of understanding and cooperation between the French and English cultures. It now appears that in trying to solve the French-English problem, an English-English problem has arisen. Although immersion students develop positive attitudes towards the French community (Crawford, 1976; Cziko, Lambert, Sidoti & Tucker, 1980; Day & Shapson, 1988; Gardner, 1979; Parkin et al., 1987; Pfeiffer, 1979), they develop negative ones towards their Anglophone peers. The second is that the thrust of educational philosophy has been toward integration, as witnessed by the move toward cooperative learning, mainstreaming and the move to abolish honors and extended classes (Lapkin, Harley & Taylor, 1992, in press). French immersion breaks with this trend by creating two groups of students within the education system. The upshot of the implementation of French immersion has thus been to create differences between FI and core programs of such a serious nature as

to divide communities.

Given these differences and the findings noted above, it is understandable why FI has drawn criticism. The expectations placed upon FI to produce native-like speakers have been unrealistic (Harley, 1986; Sharp, 1992). Additionally, there is data to support the critics' perception that French immersion is elitist assuming an almost private school status within the public school system.

In conclusion, French immersion may be considered successful because its students are able to use French better than core students and because it has been helpful in developing L2 teaching methods which are better than those previously used in L2 learning classrooms. If, on the other hand, the yardstick for measuring success of French immersion is that it permits students to communicate in French as native speakers and simultaneously helps to unify the country, then it has not met its goals. This is because students do not attain native-like control of the language, and because French immersion promotes disunity in areas where it has been implemented.

CHAPTER VI

TOWARDS INTENSIVE FRENCH LEARNING

There is a sense of unfairness associated with French immersion. This manifests itself in two ways. First, expectations of native-like competency are unrealistic (Harley, 1986; Sharp, 1992). Without considerable contact with members of the French community, especially with peers, and without more focus on form and structure (Lighthown & Spada, 1994) immersion students will fail to develop native-like proficiency. Second, French immersion students enjoy the benefits of more resources than other French programs. This translates into a better French (if not overall) education, owing in part to fewer students per class, and to a streamed educational environment. In order to alter the public's opinion that the education system is showing 'favoritism' towards FI students, changes must occur. The challenge for the education system thus becomes how to make alterations so that all French students are given the same opportunities to learn French while maintaining a successful L2 program similar in calibre to French immersion.

This section offers suggestions for teaching French in the public school system consistent with second language teaching practices and in such a manner that all students receive equal opportunities for achieving success in French at a level similar to that offered by French immersion. This alternative to French immersion addresses such aspects as terminology, resources, structure and substance.

In striving to make French education the best it can be for all students, educators must consider three major findings presented in this paper:

- 1) Early French immersion is not necessary: late immersion learners do as well, or almost as well, as early learners.
- 2) The best age to begin L2 studies is near puberty at which time learners enjoy the advantages of child and adult learners.
- 3) All but the most severely handicapped can learn a second language, particularly at the BICS level.

Based on the above parameters, a broad outline for the restructuring of French immersion takes shape. Inherent in this proposal is the dismantling of early French immersion.

The first suggestion is to change the name of the program. The term French immersion does not truly represent an immersive experience (Lister, 1987), nor are the students immersed in a French culture (Bibeau, 1984). A more appropriate term referring to what typically occurs in the immersion classroom would be *intensive* French training.

Resources typically allocated to early French immersion would be redirected to the delivery of a new intensive French program (Ouellet, 1990). This program would appear at the Grade 5 level in all schools offering French. At this time, students would be approximately ten years old, that is, near the age of puberty. Moreover, by delaying intensive French instruction to the approximate age of 10, the threat of maturational lags can be avoided (Trites, 1984). At the same time, students would have had more time for a good grounding in their L1, thereby increasing the likelihood of successful L2 learning (Cummins, 1979b).

Because of the high number of students enrolled in French programs, it is expected that every school in which French is taught would offer an intensive French program at the Grade 5 level. The suggestion is to offer the course at the beginning of the year for a duration of five months. This would amount to approximately 400 hours of intensive French instruction time (Spada & Lightbown, 1989). During this time, and employing the techniques used in immersion, students would be taught French, with the possibility that later in the program, parts of some subjects could be taught in French. This would challenge students and would therefore create a richer learning experience (Lightbown & Spada, 1994). The focus of the program, however, would be on BICS development, i.e., on developing in each student the ability to communicate. In this manner, all students - including the cognitively less gifted - would be encouraged to learn the language.

Any changes in the delivery of French instruction must also include one of the principal goals of education, namely, that all students be afforded the opportunity to reach their potential (Nova Scotia Department of Education, 1991-1993). Currently, many are unable to reach their potential in French because they are offered the drip-feed method of language learning, a method considered to be the worst of all possible methods for language instruction (Hawkins, 1988; Spada & Lightbown, 1989; Stern, 1985; Swain, 1981).

Error correction and focus on form would also play a role in the students' learning as both are needed in order to guide the learner to correct usage of the language (Hammerly, 1989a, 1989b; Spada & Lightbown, 1993; Lightbown & Spada, 1994;

White, Spada, Lightbown & Ranta, 1991). As White (1990, cited in Spada & Lightbown, 1993) points out, learners sometimes have to be told how the language *does not* work.

Error correction should also occur in such a way as to avoid creating unnecessary anxiety in the student. One way of doing this is for the teacher to note on a worksheet the most common mistakes made by students. By getting the class as a group to suggest corrections, no single person feels threatened. Consequently, students are not placed in an anxiety-provoking situation. Serious errors in speech which lead to misunderstanding or a lack of understanding would be corrected instantly by the teacher (if possible) in an attempt to help the student find the proper expression needed for communication.

Lightbown (1991) points out that the teacher's emphasis on helping students say "... what they themselves had already decided to say" (p. 211) significantly contributes to successful L2 learning.

Focusing on the form of the language, on the other hand, is less threatening than singling out students for error correction, since it involves presenting learners with the proper structure for use in a given context. In a classroom setting with just one role model, focus on form should not be overlooked, for it is valuable in helping learners better understand the language (Ellis, 1985; Spada & Lightbown, 1993; White, Spada, Lightbown & Ranta, 1991; Lightbown & Spada, 1994; Lightbown, 1991, 1992). As is the case in immersion classes, finding the balance between focus on meaning and focus on form would continue to be a major goal for language teachers (White, Spada, Lightbown & Ranta, 1991; Lightbown & Spada, 1994).

After five months, students would return to their usual curricular activities while

continuing in a less intense French course aimed at furthering students' knowledge of French. This course would essentially be a revamped core program, since students coming from the intensive French program would be working at the level of current secondary school core French students (Lightbown & Spada, 1991, 1994). This revamped course might include increased hours of instruction to further promote L2 acquisition (Hammerly, 1989b). This program would continue through Grade 6. By the end of Grade 6, it is expected that the students would have had a strong beginning in French and would know enough French to survive at a basic functioning level. They would, for instance, be able to order food, talk about sports, the weather, shop for clothing and be able to handle conversations involving an exchange of money.

In Grade 7, students and their parents might be involved in making decisions about the future French education of their child. Two options might be available for students. The first option, and perhaps the less preferable, would offer students the possibility of continuing in what is currently known as a late immersion setting, providing the cost is not deemed to be excessive. The existing late French immersion infrastructure would facilitate this transition, and would serve those students who wish to become 'specialists' in the language. Throughout this phase, more attention would be given to the more formal aspects of the language and would involve the development of CALP. Those who chose not to 'specialize' would continue in the revamped core French program where the focus on the development of BICS would gradually change to allow for more CALP development. This would continue through secondary school or until the time arrives when students are offered the option of terminating their French studies.

The second option would see all students remaining in a revamped core program. Rather than sending students to an intensive program in Grade 7, as mentioned above, this option might see an increase in total number of instructional hours (Hammerly, 1989a) during which time subjects may be taught in the L2. Because all students would stay together in their community school and be in the same program, this option would be more in "sync" with current educational philosophy which makes it, therefore, a more attractive alternative.

One of the goals of this revamped core program would be to provide students with extended periods of contact with native speakers (Collinson, 1989; Harley, 1986; Lapkin, Harley & Taylor, 1992; Lewis & Shapson, 1989; Lister, 1987; Ouellet, 1990; Swain & Lapkin, 1986). This is necessary to further increase students' French skills (Hamm, 1988), since classroom learning alone is seldom, if ever, sufficient to produce native-like bilinguals (Bibeau, 1984; Brown, 1987; Hammerly, 1989a, 1989b; Lister, 1987; Swain, 1972). Such contact may involve exchange programs, visits to the target culture, or visits from French native speakers to the Anglophone community. As a result of intensive contact with native speakers, students are likely to experience an increase in their level of motivation and a further development of positive attitudes towards the Francophone community, which, in turn, is helpful in language learning (Clément, Gardner & Smythe, 1977a, 1977b; Gardner, 1979; Gardner, Smythe, Clément & Gliksmann, 1976; Wallach, 1973).

Until students are able on a large scale to take advantage of programs offering intensive exposure to the target community, educators must strive to provide as much

contact with native speakers as possible. One way of achieving this may be for Anglophone students to pick a classmate who will be the spokesperson for the class on a video cassette to be exchanged on a regular basis with a Francophone peer. These video clips might include a walk through the community in which the spokesperson lives, a description of the interests of the spokesperson, or a section on the spokesperson's classmates and the school which they attend. All students could share in the viewing and making of such video cassettes. By such video exchanges, learners communicate on a more personal level with a native speaker. With relatively little funding, the two correspondents could crown their correspondence for the term/year by visiting each other's class for several days and partaking in activities designed by the host students.

Another method for encouraging contact with native speakers is through the use of technology. Through the use of interactive computer programming in combination with the "information highway," students may be able to communicate with each other visually and in written form for a low cost. It is not unreasonable to expect that with the support of technology, Anglophone students from all over the country will be able to communicate instantly with Francophones from many nations.

The groundwork for such an intensive language program has already been laid in the province of Quebec (Spada & Lightbown, 1989). An intensive course in English is currently offered to French students for the first five months of Grade 5¹³. During the other five months of that school year, students "... complete the requirements for the

¹³From 1976 to 1993, the intensive English program in Quebec has spread from two to 30 boards and has enriched the educational experience for nearly 22,000 Francophone students (Lightbown & Spada, 1994).

other subject matter necessary for that grade level (in French), with the emphasis on the language arts and mathematics programs" (Lightbown & Spada, 1994, p. 2). Parents are content with this program because it offers their children greater proficiency in English without interfering in the development of the child's L1 proficiency (Lightbown & Spada, 1994).

Spada and Lightbown (1989) find that the proficiency of the intensive English students is superior to that of core English students. They report that on a picture description task, intensive English learners talk more fluently than their peers from the core ESL program. The authors also note that whereas core English students need coaxing to develop their descriptions, intensive English students need none, and willingly offer six times as much information in their descriptions of the same pictures (intensive students - 600 words versus core students -50 words). In addition, the authors observed that intensive English students use a greater variety of vocabulary items.

Lightbown and Spada (1991) also offer evidence that Grade 11 students who participated in the intense English program in Grade 5 and continued in core English, are superior to Grade 11 students who were instructed solely in core English (the drip-feed method) when tested for volubility (amount of speech) and accuracy (correctness of speech). The intensive students "... parlent non seulement plus que les élèves qui n'ont connu que le programme régulier, mais ils ont une meilleure correction grammaticale pour un certain nombre de structures anglaises" (p. 106)**. In expressing their opinions and those of the teachers involved, Spada and Lightbown (1989) write

... we cannot refrain from expressing a subjective impression that

these [ESL] classes are among the most exciting and enjoyable we have ever seen. Teachers and students clearly feel that they are accomplishing a great deal and are having fun at the same time. To have visited those classes in the first week and return four weeks later is to renew one's faith in the process of language learning in the classroom setting. (p. 25)

As with initial reports on French immersion, the intensive English course is considered to be "... a great success" (Lighthown & Spada, 1994, p. 11).

Two other positive aspects of the intensive L2 learning program described by Lighthown and Spada (1991) help explain the program's success. First, students are more likely to use their knowledge of English outside the school. This helps students develop their L2 skills (see also Lapkin et al., 1983 and Tucker, Hamayan & Genesee, 1976). Second, the Francophone students learning intensive English adopt more positive attitudes towards the English community and a general increase in tolerance for other cultures. These features are also prevalent in French immersion.

There are other benefits associated with an intensive language learning program at the Grade 5 level. Along academic lines, students are at the optimum age for language learning and learn the most in a shorter amount of time. They simultaneously enjoy a much stronger start in learning French by avoiding the drip-feed method. This age also permits them to by-pass the threat of a maturational lag and to acquire more native-like accents than is typically possible after puberty. At the same time, students are better able to comprehend what they can expect from the course. Along social lines, students receive an equal opportunity to learn a higher calibre of French, thereby increasing their level of education. This would occur within the context of the community school. This,

in turn, would contribute to restoring community unity. Finally, more, if not all, students would have increased employment opportunities.

There are, however, some disadvantages in implementing an intensive French program. The most obvious is the restructuring necessary to modify the current system. Such restructuring would have to take into account such things as cost, staffing, and a transition period where one program is phased in as the other is phased out. This is not an impossible task. When FI began, it went through "growing pains." The same may be expected in implementing an intensive French program. However, the growing pains will be less traumatic than they were in establishing French immersion. When immersion began, there was no infrastructure in place - teachers had to be trained and curricula had to be developed. There is currently a large number of French teachers, core and immersion, who are in a position to help alleviate the problem of staffing and program transition. At the same time, the curricula developed in French immersion would be useful in an intensive French environment. This transposition of resources and knowledge from French immersion to an intensive French program would also include the established teaching methodology used in immersion.

Still to be determined would be the cost of such a program. Cost analyses would provide the blueprint for determining how much funding the federal government would have to contribute towards the implementation process. The rerouting of immersion funding, however, would significantly, if not completely, reduce the financial stress of such program restructuring.

Another disadvantage could be that not all students are "cut out" for French

immersion, and therefore are not likely to learn in an intensive L2 situation. It is true that not all students will perform equally well in French. But this is true for all subjects. There is enough evidence in the literature to suggest that all students, except the severely mentally challenged, can succeed in learning an L2 no matter if they are from a low socio-economic class (Genesee, 1978, 1988, cited in Ouellet, 1990) or of lower than average ability (Bruck, 1984, 1985; Burns & Olson, 1983, Cummins, 1984b; Genesee, 1978/79; Malecka, 1987).

In further addressing the issue of restructuring, Canadians must answer the question: How bilingual are children to become? Acceptance of the French immersion program suggests that Canadians are satisfied that "French immersion has set out to achieve what it has accomplished: functional bilingual competencies" (Safty, 1991, p. 114). Perfect bilingualism is not offered in any school-based L2 programs. Yet, functional bilingual competencies may be obtained through programs other than immersion. Many French immersion teachers, for example, participated in a core French program, followed by a prolonged stay in a Francophone community. An intensive French course, based on Lightbown's model in Quebec, can produce results similar to those in French immersion, particularly if intensive contact sessions with native speakers are a part of the student's educational experience (Clément, Gardner & Smythe, 1977a; Ouellet, 1990). At the same time, an intensive language program would reach all students enrolled in French as a Second Language programs¹⁴. Ultimately, if the

¹⁴According to Dietrich (1991) French immersion serves only 12 percent of the school population.

Canadian government wishes to make the country truly bilingual, it must aim at effectively educating as many of its citizens as quickly as possible so that they may cope at a basic functioning level in a Francophone community. An intensive French program, such as the one outlined above, may help the government achieve its goal.

Advantages, however, far outweigh the disadvantages, principally because they outline a more equitable system of educating students in French. Though the costs are unknown, it is reasonable to assume that restructuring would necessitate an amount similar to that currently being spent for French second language education. Additional costs might be incurred should the federal government support students' visits to the target culture for an extended period of time. Though disadvantages do exist, it is clear that the government cannot afford the educational, social and political consequences of a continued dichotomy in French second language programming.

CHAPTER VII

REASONS FOR L2 LEARNING

A great deal of time and effort are spent on second language learning in Canada. Is it necessary? Why learn a second language? Why learn French? The answers invoke economic, political and personal reasons.

L2 learning in general in English-speaking North America occupies a low status on the list of education priorities. In the U.S., for example, out of a total of eight school subjects, students rank foreign languages eighth with respect to enjoyment, seventh with respect to importance, and first with respect to difficulty (Goodlad, 1984). The same low status given to language learning is also found in England where foreign languages rank 15th out of 15 subjects according to level of satisfaction (Powell, 1986). The status of second language learning is so low that it appears as if artificial languages are considered more important than natural languages in most English-speaking communities.

At the same time, English enjoys top status among world languages. This helps explain why the status of other languages is lower in the eyes of Anglophones. While languages are disappearing at the rate of 12 a year (Couture, 1992), English continues to grow, achieving 90% dominance in the "English-speaking world" (Krauss, 1992). Krashen and Terrell, (1983) point out that the knowledge of English alone is sufficient for business and travel since the English language is spoken so widely in the world.

English is also a dominant language in the field of science and technology.

Consequently, other languages are less prominent and tend to have a reduced status in an English-speaking community.

The high status of English, combined with geographic isolation, has had a negative effect on language learning for Anglophone North Americans who perceive little or no need or desire to learn a second language. This lack of motivation seriously jeopardises success in second language learning (Anderson, 1954; Brown, 1987; Frostig & Maslow, 1973; Krashen, 1975; Rondal, 1984; Seliger, Krashen & Ladefoged, 1982; Snow & Hoefnagel-Höhle, 1978a; Taylor, 1974; Tyler, 1949).

Although the average Anglophone in North America may perceive little need or desire for learning a second language, governments and business see things differently. Inman (1987) and Weatherford (1986) point out that the American economy and national security are threatened by continued monolingualism. Hamayan (1986) states that an international trade gap exists in the U.S., and warns that this gap will be filled by those international businesses which better meet the linguistic and cultural needs of their foreign clientele. America is lagging behind on this front. Hamayan also cautions that America's national security is threatened when Americans can't understand those from foreign countries. As an example, she suggests that the attack on the Berlin discotheque in March, 1986, may have been prevented, if American intelligence officers had been able to understand the messages they were intercepting between Tripoli and the Libyan People's Bureau in Berlin. The gist of Hamayan's article is that if the U.S. wishes to continue its economic growth and help preserve world peace, Americans must strive to

understand the language and culture of others. The same is true for Canadians.

In addition to the economic and geo-political benefits offered by L2 learning, there are numerous personal benefits. Travel is becoming more commonplace as the planet shrinks. Travellers who speak the language of the country they visit enjoy a richer experience than they otherwise would since they better understand the people and their customs. Because of the ability to speak the language, such visitors experience a reduction in frustration and isolation (Weatherford, 1986).

L2 learning also enriches the educational experience of learners by giving them a better perspective and understanding of their L1, and by giving them skills which enhance their ability to express themselves (Neufeld et al., 1992) Weatherford (1986) quotes Vermont Royster as saying

What is involved is a process in which the study of a different language gives a person an understanding of the nature of language itself, a sense of structure that is difficult to acquire from studying one's own familiar language. Any new language forces us to think why... we need to do what we do to express ourselves (p. 4).

In a similar manner, L2 learning helps develop cognitive abilities (Ben-Zeev, 1977; Burns & Olson, 1983; Cummins, 1991b; Ekstrand, 1992; Ianco-Warrall, 1972; Malherbe, 1978; Morrison & Pawley, 1984; Netten & Spain, 1989; Peal & Lambert 1962; Swain, 1981; Swain & Lapkin, 1982). Weatherford (1986) for example, reports that students who study a foreign language in high school perform better on the verbal and math portions of the Scholastic Aptitude Test than those who don't.

Some authors (Bever, 1981; McLaughlin, 1978a) theorize that language learning

is beneficial in developing thought processes. There is current neurological research underway in California indicating that "exercising" the brain is important in staying mentally "fit." Scheibel (1994) offers preliminary evidence to suggest that the more one challenges the brain, the more dendrites are produced. Dendrites are needed for neurotransmission, which, in turn, is necessary for the storage and retrieval of information in the brain. He theorizes that as long as the brain is continuously challenged, storage and retrieval processes should continue to work well. Since language learning is considered to be "challenging" (Burns & Olson, 1983; Eardley, 1984; Goodlad, 1984; Swain, 1981) it, along with many other subjects, may help in training the brain for continued good use in later life.

Another way of looking at the issue of L2 learning is to consider the disadvantages in second language learning. Students, for instance, may not wish to learn a foreign language. There are always students who dislike one subject or another. It is a continuous challenge for educators to help such students understand the reasons for learning subjects offered in the school system. Similarly, students may be less successful than others at L2 learning. Again, there are students across all subject areas who experience low levels of success. The education system must continue to seek ways of helping them to be as successful as they possibly can so that they may reach their potential in all subject areas.

There are also financial considerations which may be great. Educators and tax payers must continuously evaluate the costs and the benefits. It is clear that a well-rounded education is extremely important in today's world. L2 learning is an integral

part of a well-rounded education. The cost in not promoting L2 learning, as suggested earlier, is likely to be too considerable in terms of lost business opportunities and poor communication abilities with other countries. Such costs are too important to ignore.

Though there are disadvantages associated with L2 learning, they are not strong enough to compel the Canadian federal government and educators to abandon the promotion of L2 learning. They continue to promote L2 education for all of the advantages listed above. These, however, are secondary to the main reason: to promote unity in Canada. To do this, educators and the federal government focus on one language in particular - French. They are aware that English is not threatened, but rather threatens the existence of French in North America. As a result, if French Canadian culture is to survive, French language is needed outside Quebec in Canadian schools (Mignault, 1992). The emphasis for learning French is therefore based on political motives which are meant to reduce tensions between the two major linguistic groups thereby helping to unify the country by maintaining French Canadian culture.

English-speaking Canadians, particularly students (Cziko, Lambert, Wallace, Sidoti, & Tucker, 1980) generally accept the government's position that both groups learn each other's language. There is, however, one major threat to the government's plans for creating a truly bilingual country.

As Schumann (1975, 1976b, 1976c) and Ben-Rafael (1991) make clear, when the target community does not care whether a given language group learns the target language, the motivation to learn that target language deteriorates. The deterioration intensifies if there is a belief that the target community does not like the language

learners' community. The threat of Quebec separating from Canada creates just this perception and contributes to low motivation of language learners (Oller, Hudson & Liu, 1977). Indeed, if Quebec were to separate, it is likely that French immersion would be dismantled, since the political need for it would no longer exist.

In the final analysis, second language learning involves more than the classroom, teacher and curriculum. It involves a people and their culture. How these people feel about the target community plays a major role in their learning endeavours. In order to support the effort to make Canada a bilingual country, educators and government administrators must also assist in creating a climate conducive to language learning beyond the walls of the school. They may, for instance, attempt to counter the negative image French has received, primarily through the media, in English Canada¹⁵. If current polls and voter trends are accurate, the majority of Québécois do not wish to separate. Given this, one way to offset the negative impression so commonly portrayed through the media, is for educators and the government to promote positive impressions. This could occur by having Anglophones and Francophones express their appreciation to each other for learning each other's language. This may happen through the use of publicity or by having native speakers express this directly in a classroom setting. In this manner, each group would feel complimented by the fact that the other is learning their language. This would help both groups of language learners by reducing, or even eliminating, one of the

¹⁵Similar negative attitudes towards learning English occur in Quebec. Naturally, this would also have to be countered. See, for example, Mareschal (1976) and Gagnon, (1972, 1976) for further discussion.

barriers to language learning, namely, the perception that the target culture does not care for the second language learning community. In this way, the government would add to school level support, a more global support for second language learning. Both levels of support are critical if the nation is to become successfully bilingual. The degree to which both of these levels of support can be implemented will mark the degree of success in rendering Canada a bilingual country.

To conclude, it is apparent that the French immersion program, though not without weaknesses, is more successful than core French. It is also apparent that French immersion must be restructured to better meet the needs of society, as well as the goals laid down by the education system. It is unreasonable that only a small percentage of students are exposed to a language program known to be the most successful in the school system. In the case of French program delivery, what is good for some students should be good for all students. Yet, because of staffing and financial reasons French immersion has not reached all students. The federal government and educators must, nonetheless, make a concerted effort to balance the way French is delivered while maintaining a high level of student proficiency. By doing so, they can foster community, as well as national unity. The unity question having been addressed, educators can then turn their concentration on the teaching of French. The suggestions in this thesis offer the direction which the federal government and educators might consider in achieving this end.

Endnotes

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 - to provide the students with the opportunity to acquire a functional competence in both oral and written French, enabling them to communicate on a personal level and also in professional situations;
 - to ensure a normal development of oral and written English;
 - to ensure proper learning in the subject areas taught in French or in English and allow a normal cognitive and emotional development.
 - to further a better understanding of the culture of French Canadians and Francophones in general while developing an interest in and respect for the student's own culture.
- **
 - ... not only speak more than students who only experienced the regular program, but they have better grammatical accuracy for certain English structures.

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