

***Foreign language learning:
A review of problems and perspectives***

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Resumo

A aprendizagem da língua estrangeira é abordada através da identificação e da análise de vários problemas levantados pela investigação sobre o ensino-aprendizagem da segunda língua. Mais do que uma descrição cumulativa de diferentes respostas para as questões em análise, procurou-se a identificação de áreas de confronto entre várias perspectivas, incidindo, com esse objectivo, nos pressupostos teóricos que as enformam.

Primeiro, as dicotomias existentes entre os conceitos de “segunda língua” e “língua estrangeira” e entre “aquisição” e “aprendizagem” são analisadas no âmbito da investigação recente. Depois, são caracterizados os contextos do ensino da língua estrangeira em Portugal e da segunda língua no Canadá e nos Estados Unidos da América do Norte. Finalmente, são abordadas algumas das questões mais polémicas no domínio do processo de ensino-aprendizagem das línguas. Nomeadamente, algumas das questões decorrentes da discussão sobre as diferenças entre a aprendizagem da primeira língua e a aprendizagem da segunda língua.

Abstract

The construct of foreign language learning is addressed through the identification and the analysis of the seemingly unresolved problems raised by research in the field of second

language acquisition. More than a cumulative description of the answers for the questions in analysis, the text searches for the identification of the conflicting areas among the several theoretical perspectives.

First, the distinction between the concepts of *second* language versus *foreign* language and *language acquisition* versus *language learning* will be addressed within the scope of recent theoretical claims. Then, after a brief characterization of the Portuguese foreign language context and the bilingual contexts of Canada and the United States of America, a discussion of questions posed by recent research will follow. The issues in analysis are related with some of the questions raised by the discussion of the differences between foreign language learning and native language language acquisition.

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Introduction

Claiming for a much closer relationship between theoretical knowledge and its practical implications, one can not avoid the criticism of the extremely great gulf still existing between language teachers on the one hand, and linguists, pure and applied on the other, which, besides appating fundamental interrelated issues, make it very difficult for the flow of ideas from linguistics to language teaching.

Traditionally, language teachers, and particularly foreign language teachers, have been taken to be more concerned with whatever is directly related with the classroom situation (teaching methods, techniques, materials, text books), rather than with theoretical assumptions related to the language acquisition phenomenon *per se*. Cook (1981) has, however, referred to occasionally narrow relationships between second language research and second language teaching when certain teaching models were proposed by researchers and widely accepted by teachers .

Probably related to that situation is the fact that foreign language (FL) learning, distinct from second language (SL) learning, has never been a privileged field for language acquisition research inquiry itself. As Duff and Polio (1990, p. 154) has put it, "the foreign language classroom is a language learning context which has only recently received attention from applied linguists". Research on English language learning, in spite of the fact that English is the world's most wide spread foreign or additional language (in 102 countries it is the first foreign language chosen by most students. Fishman, Cooper and Rosenbaum, 1977), has had the tendency to approach the EFL (English as a Foreign Language) phenomenon from the "practical" language teaching perspective rather than from the global language perspective. European literature, as well as American or Canadian literature, on EFL, in the classroom context, has been more concerned with methods, approaches or classroom techniques, providing EFL teachers with extra tools that might help guarantee the foreign language success of their pupils, rather than with questions related to the phenomenon of second language acquisition *per se*, which has been the "reserved" province of research for linguists.

However, Larsen-Freeman (1987, p. 2) described language-teaching methodology "as a triangle, with each angle [...] representing a basic area of the field. "The first angle would be designated as "Language learning/language learner" and would address questions like *what is the nature of the language acquisition/learning process, who is doing the learning, and what are the factors that influence the learner?* The second angle would have to do with the subject matter to be taught, and the third should comprise "both language teaching as a process and the role of the language teacher as an agent in the process" (p.2). My perspective here coincides with Larsen-Freeman's first angle perspective: the *language learning/language learner*. Consequently, this text will address second and foreign language learning with the general purpose of identifying the problems and questions raised by recent research in the field. The aim of further understanding the phenomenon of learning a FL at adolescence is subjacent to the inquiry into the various theoretical approaches of SL learning (or second language acquisition) on the pages that follow.

First I will analyse what seem to be differences between some pairs of concepts germane to FL learning and teaching: namely, the concepts of *foreign* versus *second* language and the concepts of language *acquisition* versus language *learning*. In order to illustrate the FL learning situation, which is one of the concerns of this text, a brief description of the Portuguese foreign language learning praxis will precede the discussion. Also, a short reference to the foreign language immersion experience, in Canada, will be mentioned here due to its close relationship with the concept of bilingual education, and due to the reputation of the Canadian immersion programmes as successful learning experiences for majority-language students. In addition to examining immersion for review of some of the social and educational aspects of bilingualism, I will examine some relevant research questions on SLA, which have raised a reasonable debate, in search of some insight into the phenomenon of foreign language learning. The questions that will be addressed have to do with the kind of possible differences between foreign language learning and first language acquisition process; the hypothetical existence of a critical age period for second language acquisition; the assigned differences between younger and older learners of a foreign or a second language and, finally, and necessarily very briefly, the cognitive advantages, or disadvantages, of being a bilingual, in a bilingual context.

Foreign Language and Second Language

The great majority of second language research studies approach FL and SL as being the same thing, usually mentioned as second language acquisition, or second language learning. However, some foreign language educators have the conviction that the two language learning contexts do not seem to be similar. As Bley-Vroman (1989, p. 42) stated, “foreign language learning takes place when the language to be learned is not the native language of the society [e.g., English as a foreign language in Portugal]. Second language learning takes place in a country where the language is spoken (e.g., English as a second language in the United States)”. The author prefers the term “foreign” rather

than “second” to refer to the global phenomenon of foreign and second language acquisition.

Stern (1983, p. 15) reported that the term *foreign* used to be taken to refer to all types of non-native language learning. According to the same author, it was Catford who, in 1959, introduced the term L2 (second language) as opposed to L1 (native language). Since then, the expression *second language* has been used to refer to the language (or languages) acquired besides, or after, the individual’s first (or native) language. Although Stern (1983, p. 16) found the distinction between second and foreign language justifiable, he considered that it should be “employed with reservations” for the reason that the emergence of that distinction (right after World War II) had to do with “nationalist susceptibilities in discussions on language questions”.

For Ellis (1986), second language acquisition (SLA) is not a uniform and predicable phenomenon since the acquisition of a second language is the result of a complex interrelation of several factors pertaining to the learner on the one hand and to the learning situation on the other. “Second language acquisition is not intended to contrast with foreign language acquisition. SLA, is used as a general term that embraces both untutored (or ‘naturalistic’) acquisition and tutored (or ‘classroom’) acquisition”. Ellis, like many other authors, identified SLA with untutored acquisition of a second language and FL learning with classroom acquisition of a foreign or second language. Nevertheless, the author stated that “it is, however, an open question whether the way in which acquisition proceeds in these different situations is the same or different” (p. 5).

Klein (1986) says that the choice of the terms second language learning, or bilingual first language acquisition, is, in most cases, a matter of personal preference. Klein identified second language learning with the parallel acquisition of two languages, and he stated that his own preference for the term second language acquisition was a matter of “following common usage” (p. 15). The author further distinguished among several designations according to the age where acquisition of the non-native language started: (a) Bilingual First Language Acquisition —when two languages are acquired between the first and the third

year of life; (b) Child Second Language Acquisition—when the non-native language is acquired between the third year of life and puberty; Adult Second Language Acquisition—when the non-native language is acquired after puberty.

In reference to the distinction of foreign versus second language learning, Klein (p. 19) reported that

“the term ‘foreign language’ is used to denote a language acquired in a milieu where it is normally not in use (i.e., usually through instruction) and which, when acquired, is not used by the learner in routine situations.[...] A ‘second language’, on the other hand, is one that becomes another tool of communication alongside the first language; it is typically acquired in a milieu in which it is actually spoken.”

Abstractly, there are no differences underlying the acquisition of a foreign or a second language. Whether we talk about first, foreign, or second language acquisition the real problem lies, said Bley-Vroman (1989, p. 42), in the explanation of “how language acquisition takes place given the limitations of the data”. However, the characterization of the settings of FL and SL remains of great practical importance for language teachers. Considering that FL and SL acquisition refer to different realities in some aspects, those differences should be reported in order to help us understand, and more clearly define, the outline of the so-called logical problem of language acquisition.

The first difference concerns the specifics of the learning situation, “the foreign language classroom seems to be different from the second language classroom in that the students in the former are linguistically and culturally deprived” of the target language and culture (Duff and Polio, 1990, p. 5). Due to this fact, and to the fact that most students share the same L1 in the FL classroom setting, and thus tend to use it more often, the quality and quantity of target language interactions among teachers and pupils in the FL classroom are reduced when compared to the quality and quantity of the target language interactions generally occurring in SL classroom settings. Hatch and Hawkins (1987, p.

263) suggest that the limitation in the language interaction, that characterizes foreign language classrooms, might have direct implications for the kind of language knowledge students acquire:

“for the learner who has acquired a foreign language in an environment where few opportunities for interaction with native speakers exist, the type of syntactic structures and lexicon are determined by experience with the written text. If one learns a language via reading, the types of experience are quite different from those noted above (unplanned spontaneous talk versions...)”.

Second, when analysing FL and SL in reference to the social support and academic prestige tied to their intrinsic meanings, one finds that FL and SL acquisition are valued differently by social and academic communities (Chew, 1987). In the Portuguese academic context, for instance, the label foreign given to any language means that that language is part of the formal curriculum at the basic and/or the secondary school levels. During the nine years of compulsory education Portuguese students have to study two foreign languages. The first foreign language is chosen at the fifth grade (French or English), and for two years students learn the same foreign language, which is taught four times a week in a 50 minute lesson period. At seventh grade students have to initiate the study of another foreign language, besides the one they bring from the second level of basic schooling. At seventh grade both foreign languages are taught for a 50 minute lesson period, three days a week.

The languages offered by the basic and secondary school curricula are not the languages spoken by any language dominant group in the Portuguese society, nor is the native language of the students less privileged to the point that they need to learn another language to communicate in social or professional situations. On the contrary, in the Portuguese context, FL learners are majority-language speakers. That is, their native language is the Portuguese language. Portugal is a monolingual country. However, fluency in a foreign language is not seen as any threat to the native language competence or to the cognitive development of the students. In

fact, and sharing Montaigne's idea that foreign language fluency is a virtue, proficiency in the foreign language has always been highly encouraged by the social community and by the great majority of secondary school parents—at least in the urban contexts.

The Portuguese FL teaching panorama does not greatly differ from the European situation in secondary schools. In the particular geographical circle of the EEC, and except for the two officially bilingual countries of Belgium, and Luxembourg, all the other ten countries provide formal and compulsory education in foreign languages as well (Fróis, 1990).

The experience of foreign language learning also seems to be different from the experience of SLA in terms of the role of culture in the learning process. SLA apparently emphasises the role of cultural dispositions and attitudes in the process of successful language acquisition; the degree of acculturation seems to affect the learners' competence for without acculturation language competence will be incomplete (see Schumann, 1978 for the concept of social distance and d'Anglejan, 1978 for the concept of cultural isolation). In the FL learning context culture is, more often than not, reduced to "the status of providing a suitable content for language practises", or of offering the focus of advanced text comprehension studies (Buttjes, 1990).

The educational goals underlying the learning (and the teaching) of a foreign language are somewhat different from the goals underlying the learning of a second language. Most students learn the foreign language a couple of hours a week, during the three or five years of second and third level of basic and secondary schooling (approximately 130 hours per year in the second level of basic school curriculum, and approximately 100 hours per year in the third level of basic and secondary school curricula) and, afterwards, most of them make little use of that knowledge. The general expectations of FL proficiency, at the end of secondary school, are not as high as in the case of SL proficiency. The great majority of FL students have no frequent contact with the foreign language classroom; they do not have a community speaking the language within which to communicate, and hence the FL teacher is their most reliable possibility for practicing effective communication in the target language.

Belasco (1981, p. 310) formulated a strong opinion in reference to SL learners when he affirmed that: "given the conditions presented by the average classroom, few learners—if any—really acquire a second language". Lack of success in foreign language learning is also referred by Bley-Vroman (1989, p. 43) "as the most striking characteristic of adult foreign language learning". Martinet (1984), addressing the issue of bilingualism and biculturalism in a French context, has even suggest that it is better for FL learners to remain "marked" by "ethnicity speech markers such as foreign pronunciation" (p.19). It is the author's view that bilinguals, who strive for "perfection" because they are highly motivated to assimilate the new semiotic behaviour, may experience interactional problems both in production and in perception due to "non-understanding, misinterpretations, and faulty inferences explicit" (p.19).

Nonetheless, FL learning cannot be considered a general failure. Lambert (1981), in an analysis of the effects of early versus late bilingualism, says that full bilingualism is possible at any age even through the intensive study of a second language. However, the author further reports, based on current research findings, that differences in the starting point of SLA "have significant effects on the linguistic, cognitive and emotional development of a child" (p. 15).

There might then be other differences between the bilingual and the foreign language learner, as users of a second/foreign language, besides the attributable differences in communicative competence, which seem to favour the former. The bilingual is usually characterized by research as someone who either (a) has moved from his own country to another country where a different language is spoken; (b) was born in a country with two official languages; (c) has parents that speak two different languages, or (d) belongs to a family that has decided to have their children speaking two or more languages for cultural reasons. In all those situations, the bilingual is guided by a much stronger drive to use the foreign language fluently and accurately than is the foreign language learner, due to social, affective, or cultural reasons.

Bilingualism: Some Educational Aspects

Second language education is closely related to the concepts of bilingualism (defined below) and bilingual education which guide ESL and Second Language Immersion curricula. According to the following authors cited by Hornby (1977), bilingualism can be defined as the ability to speak (use) two languages fluently, that is, "native like" ability in both languages (Bloomfield 1933). Such a definition is, however, very broad since reality shows us that it is very rare to find speakers with equal linguistic competence in the two languages they speak. Narrower definitions would maintain that a bilingual person is someone who can express him/herself, even minimally, in two languages (Haugen, 1956) or someone who uses two languages, alternatively (Weinreich, 1953). Hornby (1977, p. 3), stated that

"the best way to deal with this variation in definitions would seem to recognize that bilingualism is not an all-or-none property, but instead, it is an individual characteristic that may exist to degrees varying from minimal competency to complete mastery of more than one language".

The main notion that one can take from the review of the available definitions of the concept is that the bilingual is not necessarily equally competent in both languages, and that there are different levels of bilingualism. Besides, one of the difficulties of research in the field is precisely the definition of bilingualism. Beardsmore's words (quoted in Agar, 1991, p. 168) put the problem clearly:

"It is not an easy task to start any discussion on bilingualism by positing a general accepted definition of the phenomenon that will not meet with some sort of criticism. Definitions are numerous and are continuously being proffered without any real sense of progress being felt as the list extends." (1982:1)

Dolson (1985) revised a considerable number of authors in search of a clear definition of bilingualism. He mentioned (pp. 8-9; as well as Menyuk, 1988; Adler, 1977; and Hornby, 1977) some of the definitions that have helped our understanding of the bilingual phenomenon. They are: (a) coordinate/compound bilingual—Weinreich's (1953) distinction between coordinate and compound bilinguals stated that a compound bilingual is an individual who has acquired in childhood two languages simultaneously. Because compound bilinguals do not keep language systems separate they experience considerable interference between them. As Hornby (1977, p. 5) said "compound bilinguals are taken to simply have two distinct modes of expression". A coordinate bilingual is someone who has acquired a second language after having initiated (or even completed) the process of acquisition of his native language. S/he keeps the two semantic systems separate, and does not experience considerable interferences between them." (b) natural/school bilingual—Skutnabb-Kangas' (1984) distinction between a "natural bilingual"—a person that acquires a second language in a non formal context—and a "school bilingual"—a person who acquires the second language in formal teaching situations. (c) additive/subtractive bilingualism—Lambert's (1977) concepts of additive and subtractive bilingualism. Additive bilingualism is a language learning experience characterized by the acquisition of two languages that are equivalent in terms of social dominance and prestige; Subtractive bilingualism is, in contrast, the characteristic of the second language learning experience of minority-language students. Subtractive forms of bilingualism usually develop in learning situations in which the students' L1 is attributed a lower (or subordinate) social status, and also whenever the students are denied the opportunity to develop literacy experiences in their own native languages.

Menyuk (1988, p. 248), commenting on Lambert's use of the distinction between coordinate and compound bilingualism, pointed out that the time of acquisition of a second language has been frequently used by research as one of the factors differentiating between bilingualism (early acquisition) and second language acquisition (late acquisition). The author stated that "children who fall into those two groups [bilinguals and second

language acquirers] really fall along a continuum from bilingual to monolingual with some limited knowledge of another language”.

Adler (1977) and Hornby (1977), referring to the difficulty in defining bilingualism precisely, mentioned two other traditional distinctive definitions for bilinguals—dominant versus balanced bilinguals (Lambert, Havelka, and Gardner, 1959). The term balanced bilingual is intended to refer to individuals fully competent in both of the languages they speak, while the term dominant bilingual refers to those individuals who, although speaking two (or more) languages, respond quicker in one language than in other (or others). That is, their competence is not equivalent in both languages.

Besides the reference to some definitions that became germane to the understanding of the complexity underlying bilingualism, Dolson (1985) reported the difficulty in finding a definition that captures the dynamic nature of the phenomenon, and he quotes Mackey (1970, cited in Dolson, 1985, p. 10) who clearly drew our attention to what some other authors have also referred to—the need to consider the degree of bilingualism in bilinguals:

“The solution to the problem of definition is to consider bilingualism [...] not as an absolute but as a relative concept. The question should not be simply “is a person bilingual?” but rather “How bilingual is he?”... Such a definition would put the subject on a more stable theoretical basis and would open the way to a systematic measurement of the degree of bilingualism.”

Hakuta, Ferdman and Diaz (1987, p. 284) approached the concept of bilingualism in a threefold perspective, holding that it has been used to refer to different realities. Firstly, it has been used to refer to an “individual-level mental” concept, and accordingly to this notion, it is “a characteristic of individuals who possess or who use two linguistic systems”. The authors call this type of bilingualism—cognitive bilingualism. Secondly, it has been used to refer to a “social psychological” concept; within this view it still is an individual characteristic, but a characteristic of individuals “who organize the social world in terms of the different groups and

social situations associated with the two languages in which they interact". This second notion, social psychological bilingualism, does not emphasize the linguistic aspects of bilinguals, but rather the "social correlates of the two languages" they speak. Finally, the authors reported that bilingualism has also been understood as a "societal construct"; within this view, bilingualism is used to describe the "interactions between social groups and societal institutions, as well as among groups, which [...] boundaries correspond to linguistic boundaries". The construct of societal bilingualism takes language as a way of signalling group membership, as well as a means of maintaining "the group cohesiveness and identity" (p. 285).

Bilingual education has also become, at least in the USA, another controversial issue. Foster (1984, p. 1) stated that, in the USA "bilingualism was once associated with the elite in the prestigious schools and colleges. [But] as the European model of education based on the study of the classics disappeared, the study of languages declined and institutions of higher education began to reduce their language requirements for entrance or graduation." To Foster (1984), it was the successive devaluation of bilingual education that has led to the virtual ignorance of foreign languages among a majority of American students. The author stated that "due to court rulings and government financing, [bilingualism education] has been transformed from bilingualism for all into a social issue with social overtones."

For Alatis and De Marco (1981) the failure of the foreign-language programmes in the United States is inscribed in a vicious circle of influences:

"(...) as long as minority or immigrant or refugee languages are accorded low status, that is, as long as they are considered a feature that necessitates remedial or compensatory measures, minority languages and cultures will not be a valued part of American society. At the same time, until these languages and cultures are valued by the mainstream society, members of that society will have relatively little interest or incentive to learn those languages, since the social status of the target language is lower than the American mainstream." (p.4).

Ovando (1990) characterized the issue as controversial, and revealed the powerful political, cultural and social forces that surround bilingual education. The author went further by stating that part of the problematic situation of bilingual education now-a-days in the United States is due to the fear that bilingual education may threaten American patriotism. That is, English monolingualism is thought to ensure national unity, while bilingualism involves the risk of foreign loyalty. The point, as Ovando saw it, is that there are two kinds of bilinguals, accepted differently in the United States. The Northern European languages are more prestigious and encouraged more as foreign languages, than the Hispanic, Asian and Native American languages which "the dominant society is reluctant to accept as they are identified with historically stigmatized racial and linguistic minorities" (p. 342).

Attacks on bilingual education (reported, for instance, by Fishman, 1977) have been pointed to as a consequence of those attitudes toward determined immigrant groups. An example of those early views about some of those not very prestigious minorities, is given by the words of Brigham (1922, cited by Hakuta, Ferdman and Diaz, 1987, p. 19): "The representatives of the Alpine and Mediterranean races in our immigration are intellectually inferior to the representatives of the Nordic race which formerly made up about 50% of our immigration".

Haugen (1969, cited in Ovando 1990, p. 245) declared that "bilingualism has been treated as a necessary evil, a rash on the body politic, which time might be expected to cure without calling the doctors". Nevertheless, an opposite opinion was defended by Shulz (1991) concerning FL learning. The author believes that during the last decade FL learning has regained increasing relevance and, consequently, FL enrollments are once again on the rise in the United States.

However, the most typical identified situation of bilingualism is still related to immigrant groups generally characterized as more or less socially deprived, or, at least, not generally able to share the dominant status of the native populations of the countries where they immigrate to; second language speakers (bilinguals) are usually, then, language minority speakers. That is, their native

language is the language of the social minority groups which is dominated by speakers of their second language —e.g., the Spanish or the Portuguese native speakers in the USA, or the Capeverdean native speakers in Portugal.

Immersion Techniques

The context for research on second language acquisition (SLA) has been the Canadian special language education programmes—designed for language majority groups and generally identified as Immersion Programmes—, the American ESL programmes, and the English-only mainstream programmes in regular state schools, in which most of the minority-language groups learn the language of their host country.

The first Canadian second language immersion experience began in 1965 in the suburban Montreal community of St. Lambert. The initiative, according to Genesee (1983), was an alternative experiment to regular French Second Language learning programmes, and it reflected the Anglophone parents' growing concern with the linguistic barriers that isolated their community from French-speaking Quebecquois.

Immersion, as Genesee (1983, p. 3) defined it, is "a type of bilingual education in which a second language (or second languages) is used along with the children's native language for curriculum instruction during some part of the students' elementary or secondary education". Actually, there are three kinds of immersion programmes: Early-Total Immersion—this model typically provides all instruction in SL for the first two years of schooling. From second or third grade on, students begin to receive instruction in their L1 in increasing amounts of time; Early-Delayed or Early-Partial Immersion—in which students get balanced instruction in both languages from kindergarten through grade 12; and Late-Immersion programmes—in which students begin their immersion experience in grades seven or eight. These programmes differ mainly with respect to: (a) the grade level during which the SL is introduced as a major medium of instruction; (b) the amount of instruction provided in the SL; (c) the number of years during which the SL is used as the major medium

of instruction. According to Genesee (1983, p. 3), the basic goals of bilingual education are:

1. to provide the participating students with functional competence in the second language which may or may not be native-like;
2. to maintain and develop normal levels of first-language competence;
3. to ensure achievement in academic subjects commensurate with the students' academic ability and grade level;
4. to instil in the students an understanding and appreciation for the target language group, their language and culture without detracting in any way from the students' identity with an appreciation for the home language and culture.

These goals would not be possible without certain pedagogical conditions which, while guaranteeing the prosecution of the stated objectives, will, as well, foster global students' academic success. According to Genesee (1983, p. 3), these pedagogical conditions which support the educational philosophy of the immersion experience are the following:

1. The students are permitted to use their home language in school and in the classroom at least during the initial part of the program;
2. Attempts by the students to use the second language for communicative purposes are strongly encouraged by the teachers or, conversely, grammatical or structural errors in the students' communicative use of the second language are not given undue attention;
3. Both the first and the second languages are used for regular curriculum instruction in addition to language arts instruction;
4. The teachers in Immersion programs act as monolingual models (e.g., the French teachers use only French).

The assessment of the French language proficiency of Immersion students' has involved comparisons between French Immersion students and English control students receiving conventional core FSL instruction (30-60 minutes a day), and comparisons between French Immersion students with native French-speaking students attending regular French schools in Quebec. The English language development of Immersion students was assessed by comparing their English language performance to that of control students attending regular English programmes.

Studies reviewed by Genesee (1983) found that, on English language proficiency, Immersion students in Early-Partial and in Late-Immersion programmes reached parity, in most cases, with the English control students on language arts tests. Early-Immersion students demonstrated a lag in English literacy skills, in the first grades, when compared to English control groups. Early-Immersion students were tested prior to any instruction in English language arts. The reported result was expected in the case of students without any formal training in literacy skills.

As for French language proficiency, when comparing the performance of Immersion students with their English controls, it was found that Immersion students demonstrated a superior performance on all types of tests. When compared to French control students, it was found that Immersion students scored as well as the former on tests that assessed listening and reading comprehension; however, on tests that assessed productive language skills—speaking or writing—or knowledge of grammar, Immersion students' performance was found to be "less than native-like although very good" (Genesee, 1983, p. 13).

Despite the successful results consistently reported for the Canadian immersion programmes, (Lambert and Tucker, 1972; Barik and Swain, 1974; Genesee, 1979; Swain and Lapkin, 1982, 1986), there are authors who have claimed that, in the case of the United States second language learning experience, the effectiveness of such programmes has not been conclusively proved (McLaughlin, 1985). A brief look into the current discussion of the goals and the methods used with the SL programmes in the US, will help us understand the complexity of SL learning and teaching.

McLaughlin (1985, p.4) stated that although the second language performance of Canadian immersion students is impressive, “they do not acquire what every minority-language child in the United States is expected to acquire—native-like fluency in the language”. The author’s opinion is that Immersion students learn more French than they would in FSL programmes, but they “learn a special type of French—Immersion French.” Quoting Genesee (1979), he sustains that “even after many years in an immersion program the children are reluctant to interact with native-speaking French children because they do not feel their language skills are adequate”. Nevertheless, he realizes that “immersion programs optimize language learning by providing the opportunity for the creative construction process to operate in a natural communication setting” (p. 5). The creative construction process, according to Dulay, Burt and Krashen (1982, p. 10), holds that second language acquisition proceeds along universal lines, and it refers to “the subconscious process by which language learners gradually organize the language they hear, according to rules that they construct to generate sentences”.

McLaughlin criticized the advocates of immersion programmes in the United States for not considering the detrimental social factors affecting the effectiveness of those programmes, and for not mentioning some of the pedagogical conditions underlying the success of the Canadian experience, namely the respect for the students’ native language. Analysing bilingual education in the United States of America, McLaughlin (1985, p. 7) said that “unfortunately there is no typical bilingual education program in the United States. There are many different types of programs fashioned to the needs of different type of students; in a certain sense it is correct to say that there are as many bilingual programs as there are bilingual classrooms”. The author identified ESL programmes as part of a submersion approach, that he characterized as including “any program in which minority-language children are placed in a classroom with a small or large group of native speakers and where the medium of instruction is not the language of the child” (p. 6) . The term was first used by Cohen and Swain (1976) who contrasted Immersion methodology with what they named submersion approach. Submersion here

refers to the “sink or swim” approach where no adjustments are made in the school curriculum, and thus the cultural and linguistic capital of minority students are not taken into account.

Submersion programmes do not meet any of the pedagogical conditions assigned to Immersion Programmes and yet, even when there is “a few hours a week of pull-out ESL, or special instruction with a teaching aide, the predominant school experience of most minority-language children in the United States continues to be a submersion experience” (McLaughlin, 1985, p. 6).

Cummins (1984) also criticized severely the educational praxes of bilingual programmes for minority language children. He affirmed that not long ago, minority children’s bilingualism was regarded as a source of cognitive confusion and language handicaps which, in turn, “explained” their poor academic performance. Furthermore, he attacked a certain kind of “scientific research” that, while apparently supporting those assumptions, was also used to justify the attempts made by school to eradicate those children’s bilingualism.

Today, the situation has changed somewhat, but there still are many students who start formal instructional programmes without any competence in the school language and are praised for any use they make of that language. Cummins (1984, p. 154) reported that those children are still frequently mixed with students whose L1 is the language of the school and that “their lack of proficiency in the school language is often treated as a sign of limited intellectual and academic ability.”

The scene just described represents the basic characteristic of the submersion approach, but when it is compared to the descriptions of immersion programmes more striking differences are still noticed. In submersion programmes, paraphrasing Cummins (1984, pp. 154-155), the teacher, more often than not, cannot understand the students’ L1 and ignores their culturally determined expectations of appropriate behaviour; in contrast, the typical Immersion teacher not only is familiar with the children’s L1 but is also aware of their cultural background thus being able to respond appropriately to their needs. The children’s language and background culture in Immersion is never denigrated by the teacher; in the submersion approach, the native-language of

minority children is often viewed as “the cause of academic difficulties and an impediment to the learning of L2. [...] In general what is communicated to the children in Immersion Programs is their success, whereas in submersion programs children are often made to feel accurately aware of their failure” (p. 155).

Quoting Swain (1979), Cummins (1984, p. 155) suggests that “despite their superficial similarity, immersion and submersion programs are clearly different programs and it is not surprising that they lead to different results”. Cummins identified Immersion Programmes with additive bilingualism, and submersion programmes with a subtractive form of bilingualism, due to the lower status attributed to the students’ L1. According to Dolson (1985, p. 17) “investigations on bilingual populations have consistently shown additive bilinguals to have conspicuous advantages over their subtractive bilingual or monolingual counterparts. [In addition, he suggested that] virtually all successful language development programs have been operated in additive bilingual contexts”.

The different perspectives on the issue of second versus foreign language learning can be summarized as follows. The characteristics of the learning context that supports the acquisition of a second language, be it the case of language minority students or the case of language majority students, seem to be different from the characteristics of the learning context that support the acquisition of a foreign language. Furthermore, the educational goals and expectations are also different for these two ways of learning a non-native language. However, as stated by some researchers, it is not yet clear if there are any qualitative differences between the cognitive processes that lead to second or to foreign language acquisition. Ultimately, as Klein (1986) stated, the distinction between second and foreign language has also tended to coincide with the distinction attributed to learning and acquisition. The consequent debate over the issue has led to some controversy in the explanation of the differences between acquisition and learning, and as Wode (1981, p. 218) says, the question which it is difficult to answer is “whether the foreign language learning student applies totally different neuropsychological language

processing and language learning mechanisms when he is taught a language as opposed to when he learns it without instruction”.

Acquisition versus Learning

Designated as Krashen’s most important contribution to the field of language teaching (Stevick, 1980), the distinction between acquisition and learning still raises controversy in theoretical discussions. As Ellis (1986, p. 6) says, “the term acquisition is used to refer to picking up a second language through exposure, whereas the term learning is used to refer to the conscious study of language.” In Krashen and Terrel’s (1983, p. 26) own words:

“the acquisition-learning hypothesis” claims that adults have two distinct ways of developing competence in second languages. The first is via language acquisition [...]—the natural way to develop linguistic ability. The second, [...] is by language learning [which is] “knowing about” language or “formal knowledge” of a language. While acquisition is subconscious [implicit], learning is conscious [and] it refers to explicit knowledge of rules, being aware of them and being able to talk about them.”

McLaughlin (1981) pointed out some implications of the two ways of learning a language, which he addressed as opposing concepts:

“(...) second language learning in the classroom involves skills that are quite different from those involved in second language learning outside the classroom. The classroom learning context is different both in function and in frequency of structure. The semantic task is more complex, and it is not surprising that the child has frequent recourse to first-language structures.” (p. 25)

An opposing view is proposed by the cognitive model of language learning of O’Malley, Chamot and Walker (1987). The authors have suggested that the process of SL learning is an active



conscious process, in all language settings—at least in the beginning stages. These authors further stated that “where Krashen’s linguistic theory predicts unconscious learning, cognitive theory predicts awareness” (p. 302). In addition, they say that cognitive theory sees the linguistic distinction between acquisition and learning as “unnecessary and parsimonious”. According to O’Malley, Chamot and Walker, evidence has supported their claim that “L2 learners are aware of [language learning] strategies used outside the classroom as well as those used in school settings” (p. 302).

Bialystok (1978) and Winitz (1978) preferred to use the terms implicit and explicit learning instead of Krashen’s opposing terms of acquisition and learning. Winitz (1981, p. 302) also stated that he “prefers the [former implicit/explicit] usage because it does not distort the meaning of the term learning as it is used in theoretical psychology”.

Although not a new idea, as Krashen and Terrel (1983) pointed out, the acquisition-learning distinction has led to a vivid debate in the research field of second language acquisition. I do not stand for a radical position concerning that distinction. As Finnochiaro (1982, p. 2) advised, “there should never be a question of adopting in toto one or another of seemingly conflicting notions (acquisition vs. learning). Elements from both sides of these “opposing” pairs can be effective for many students at different stages of the learning process.” Ellis (1986) used the term acquisition to refer to learning in both settings “naturalistic” and “tutored”. Krashen and Terrel (1983, p. 11) have also said that: “we use the words ‘learning’ and ‘acquisition’ interchangeably, although they are sometimes used in the L2 literature to distinguish between conscious and subconscious language development”.

The concepts of conscious and subconscious knowledge are also not clearly defined in Krashen’s acquisition-learning hypothesis presentation. Nonetheless, the reader is tempted to equate acquisition with a subconscious process and learning with a conscious process. In fact, those terms have been mentioned as referring to those mental processes, as in Westphal (1989, p. 95), when he commented on Chomsky’s misuse of the distinction between acquisition and learning...

“When Chomsky (1986:24, and elsewhere) uses the expression “language learning”, he certainly means “language acquisition”. The language acquisition/learning distinction nowadays standard in the literature on L2 acquisition research and L2 pedagogy is not an issue in the study of competence grammars since these are, by definition, attempts to give an explicit representation of the intuitive/tacit/ unconscious knowledge speakers have of their native languages, and hence the relevant linguistic literature instinctively uses the terms language acquisition or language learning as generally meaning language acquisition, unless the distinction is made explicit in a certain way.”

Bialystok (1983), for instance, criticises the lack of clearness in the literature concerning the definition of conscious versus subconscious (or, sometimes, unconscious) mental processes, and she claims that: “[...] most mental processes are relatively automatic, but it is difficult to accept automatic as equivalent to unconscious. Further, the presence or absence of the introspective function does not convincingly distinguish conscious from unconscious mental activity” (p. 100).

In Bialystok’s earlier work (1978, 1979, 1981, 1982) it was suggested that “implicit” and “explicit” representations of linguistic knowledge were derived mainly via acquired or learned routes, respectively (1978, p. 72-73). Implicit knowledge was said to be demonstrable, but not amenable to mental analysis. Explicit knowledge, on the other hand, was said to be “transferable to other contexts”, and verbally justifiable (1981, p. 34). More recently, (Bialystok, 1982) the author has substituted the terms implicit and explicit knowledge by using the terminology “unanalyzed” or “analyzed” dimension of knowledge. The author has also claimed that there is not such “a straightforward mapping between formal learning and the development of analyzed knowledge, nor between informal exposure and the development of unanalyzed knowledge” (1982, p.199).

Irrespective of the interest that these different theoretical positions might have for second language acquisition theory, the

point is that, it is beyond the immediate objective of this text to limit the discussion to the controversy underlying the distinctions between the terms. Consequently, language acquisition and language learning, in the foreign language context, will be globally referred to as foreign language learning in this text, except if cited authors refer to it otherwise. To end up this brief reference to the ongoing debate I quote Gregg's (1989, p. 16) extreme words about it:

“Like so many other terms in the field, acquisition is in many ways infelicitous. It is important to remember — and surprisingly easy to forget — that when we talk about acquisition in SLA research, we are not talking about acquisition in the sense that one acquires polo ponies, Ladder figurines, or CBS, but rather in the sense that one acquires vicious habits, a taste for Brie, or a potbelly. We are talking, that is, about some sort of change in the organism resulting from its interaction with the environment. The change can be of greater or lesser permanence [...] but the use of the term does presuppose a minimum degree of stability. Thus one does not normally speak of the acquisition of a bloody nose or of bad breath.”

Questions Posed by Research in Foreign Language

There are some other questions, closely related to the discussion of the acquisition/learning topic, which I intend to review here for they are of outmost importance to the comprehension of the foreign language learning phenomenon. Four questions will be examined next: (a) How different is foreign language learning from first language acquisition? (b) is there a critical age period for foreign language learning? (c) are older learners as good as children in foreign language learning? and, finally, (d) are there any cognitive effects related to bilingualism?

How Different is Foreign Language Learning from Native Language Acquisition?

When Ervin-Tripp (1974) reported, as a result of her studies, that there are a great number of similarities between the type of sentences understood and produced by children learning a first language and children learning a second language, she contradicted a widely assumed notion which held that first and second/foreign language learning processes were definitely different phenomena. Other authors also attempted to deal with the similarities, and/or with the differences, in the order of acquisition of specific features in first and foreign languages (see Dulay and Burt, 1974; Milon, 1974; and Gillis and Weber, 1976), and the controversy was then settled. The last two decades have witnessed a variety of positions held concerning either the similarities or the differences between native and foreign language acquisition processes.

McLaughlin (1981, p. 23) stated that the comparison between first and second language development implied contrasting learning situations, different input, and different linguistic and cognitive skills on the part of the learners.

Ervin-Tripp (1981) said that the comparisons between first and second language learning were usually made on the basis of: (a) "outcomes", such as errors or order of acquisition; (b) "conditions for successful learning", which may involve factors usually discussed in research on native language acquisition; and (c) "inferred cognitive strategies", because it is her opinion that the strategies may be the same and yet the outcomes may be different due to the intervention of prior knowledge which accelerates the learning of the second language.

Those that propose that the outcomes are similar have reported findings which suggest that the same developmental sequences can be found in the acquisition data for native and foreign language learners of a target language. Several authors have compared first language development and second language development and found similarities between both processes which demonstrate that children and adults approach language basically in the same way (e.g., Dato, 1970; Ravem, 1974; Wode, 1976; Meisel et al., 1980, cited in McLaughlin, 1981. Cook, 1973; Palermo and

Howe, 1970; Stolz and Tiffany, 1972, cited in McLaughlin, 1984; and Hatch, 1978, cited in Ervin-Trip, 1981). Freed (1980) compared speech adjustments made by native English speaking adult with younger native speakers of English and also with adult foreign language speakers. Her findings demonstrated that, in analyses of syntactic complexity, “foreigner talk and baby talk are very similar indeed.” (p. 25). However, even if one stands for a strong position in the defence of a common language-acquisition system for both first and foreign language learning, one would have to admit that there are differences in the learning conditions for the successful development of both languages, as I have previously indicated. There is still one fact which is beyond dispute—the starting points are not the same.

Thus, it is not surprising that most authors who stand for the existence of a qualitative difference between the two language acquisition processes stress the differences found in the learning conditions of both languages—native and foreign. Bley-Vroman (1989, p. 43), for instance, proposes a Fundamental Difference Hypothesis, in accordance with the tradition of generative grammar, and says “that, at least in gross features, adult foreign language learning is much more like general adult learning than it is like child language development”. He advanced nine reasons to support his view about the differences underlying first and foreign language learning. In synthesis, the first two are lack of success and general failure—which the author, as I have said, classified as the most striking characteristics of adult foreign language learning. Then, the author indicated a fact which he labelled as self-evident: “there is substantial variation in degree of success, [among adults], even when age, exposure, instruction and so forth are held constant” (p. 45). There is no such variation in child language development.

Besides variation in “degree of attainment”, foreign language learning also leads to differences in what the author called the “type of attainment”. For Bley-Vroman the fact that there is variation in goals in foreign language learning, “follows naturally from the hypothesis that adult foreign language acquisition is a type of general problem solving, [since like] cognitive models of general problem solving [it] involves setting goals” (p. 46).

Fossilization (in the sense used by Selinker, 1972) is the fifth characteristic attributed to foreign language learning as opposed to first language learning. According to Bley-Vroman, fossilized learners have no remedy in terms of language development, which ceases at a certain stage. They reach a certain (low) level of success and, then, stabilize there permanently. "Of course there is no fossilization (short of success) in the children's language acquisition process [says Bley Vroman]. Stages are inevitably passed through; the system remains plastic until success is achieved" (p. 47).

The last four characteristics attributed by Bley-Vroman to foreign language learning, and which are not shared by native language learning process, are: indeterminate intuitions; importance of instruction, negative evidence and role of affective factors.

Indeterminate intuitions refers to "the unclear character of non-native intuitions [which has] even prompted some scholars to suggest that a third class of grammaticality judgements—indeterminate—is needed in the description of learner language" (p. 47).

Bley-Vroman's suggestion was that the "knowledge system" underlying second language speakers, or non-native language speakers, performance—as the author put it—may not possess the same characteristics of the system that supports native language performance. The foreign language speakers' system is thought to be incomplete in the sense that it may be, "in part, a relatively heterogeneous collection of strategies for achieving communicative goals. It cannot, according to this view, generate all the sentences of that language, and only the sentences in that language. The author stated that "such fundamental differences between the knowledge system produced in first and foreign language acquisition suggest that the same cognitive learning system does not give rise to them both" (p. 47).

Under the heading of importance of instruction, Bley Vroman addressed the issue of instruction and practice in foreign language learning. The author cited the studies of Krashen and Seliger (1975), and Long (1983) to support the idea that instruction does aid foreign language learning; however, Krashen and Terrel (1983)

have said that “routines and patterns” are only beneficial to second language acquisition in an indirect way. Concerning the role of practice in the SL classroom, although taking “systematic organized, controlled drills” as the only synonym for practice in the foreign language classroom, Bley-Vroman said that—contrary to what is obviously known in relation to native language acquisition—, practice does play a prominent role in foreign language acquisition.

Negative evidence (or the availability of information about which strings of words are not grammatical sentences) is considered an issue of much high controversy and it will not be addressed here (for review of the subject see, for example, Marcus, 1993). However, Bley-Vroman (1989) also indicates it as one of the nine characteristics that distinguish first and foreign language acquisition, since, says Bley-Vroman, the former does not rely upon it in any consistent way. Role of affective factors is the last reason advanced by the author in the comparison between first and foreign language development process. The author states that success in first language “seems unaffected by personality, socialization, motivation, attitude and the like” (p. 49). Being so, native language acquisition is thought to contrast strongly with foreign language learning, where those factors have been demonstrated to play a very important role.

An opposite view is presented by McLaughlin (1984, and other authors, namely, Cooper, 1970; Macnamara, 1973; Newmark and Reibel, 1968; Roberts 1973; cited in McLaughlin, 1984) who have maintained (in spite of the strong position held by the defenders of the paradigm of generative grammar), that first and second language learning in childhood and second language learning, even in adulthood, involves essentially the same type of process—with similar developmental stages, and involving the same strategies. They admit that there are differences between first and second language learning, but they argue that these are quantitative differences not differences in the kind of processes responsible for language development be it the native, or a foreign language.

Bialystok (1989) analysing the skill components of language proficiency, states that the task of second language learners is to

“cultivate skill components that were already mastered for a first language”. She argues that “second language acquisition is then an extension of first language acquisition in that it depends upon the same mental processes”, [and that] it is discontinuous from first language acquisition to the extent that the skill components [of language processing] must be reassembled and reorganized to accommodate the new language” (p. 2).

Wode (1981, p. 232), claiming for a unified approach to the study of language acquisition, said that he has gathered data on the acquisition of negation which showed that “certain developmental learner structures and errors occur in all nonpathological types of language acquisition or learning”. He concluded that “these error types result from underlying processing abilities that are universally available to any human being throughout his lifetime”.

Menyuk (1988) has also referred to this controversial issue. She cited the study of Dulay and Burt (1975) as representative of the view of those who held that first and second language rely on the same acquisition process. Menyuk claimed that it was this view that once led “researchers to assume that, just like in first language acquisition, exposure alone could lead to acquisition of a second language by, at least, young children” (p. 257). Moreover, the author cited the longitudinal studies of Hakuta (1978), and Hoh and Hatch (1978), which “provided evidence for differences, as well as similarities”, between the processes of first and second language acquisition. Menyuk has reported that the differences found were due to factors such as “age, experience, education, socioeconomic status, learning environment, language background and personality” (p. 258). According to the author, it is the understanding of those factors, which have been identified as leading to differences in second language acquisition, that is of great importance to educators, and particularly to foreign language teachers, I would add.

Apparently, it is not yet clearly explained whether the process of second language learning is of the same kind, or different from, first language learning. In spite of the hypotheses proposed by the different paradigms (linguistics and psycholinguistics), it seems that more evidence is still required from research in order to help the understanding of the issue. Yet, there are two other questions

that are closely related to the problem that I have just referred: the question of whether there is, or not, a critical age period for foreign language acquisition, and whether children are better, and faster, than adults in learning a foreign language.

Is there a Critical Age Period for Foreign Language Learning?

The critical period hypothesis specifies that native-like competence in foreign language can only be acquired prior to adolescence. Adolescents (and adults) can not acquire language the same way children do, because they have lost plasticity of the brain due to the process of brain specialization which was believed to be completed by puberty. As a consequence of this view, it has been widely believed that young children are the fastest and the most efficient acquirers of a foreign language. Language researchers have recently begun to dispute this common assumption, and there is an on going debate over the optimal age for the beginning of a foreign language.

The issue of a critical period of development for language acquisition began with the studies of Penfield and Roberts (1959) and Lenneberg (1967) who attributed a biological basis for language acquisition. They suggested that language acquisition was only possible during the critical period due to the process of lateralization of the human brain. According to that view, the phenomenon of cerebral specialization is a slow process that lasts from age two till puberty. During that process, "children are assigning functions little by little to one side of the brain or the other; included in these functions, of course is language" (Brown, 1980, p. 47). Scovel (1969) extended that view to foreign language acquisition and suggested that before complete cortical specialization, it was possible for children to acquire another language besides their own, by mere exposure to that language, but it would be difficult to acquire languages that way, after the establishment of cerebral hemisphere dominance, due to the consequent loss of cerebral plasticity. Scovel contended that foreign language accents are evidenced by those who begin a foreign language at that time. Guiora et al. (1972) have also stated that after that critical age period it would be difficult to acquire "authentic" (native-like) pronunciation in the target language.

Since then many have been the theories that have accounted for the existence of a critical, or at least a sensitive, period for language acquisition (see Brown, 1980; Santos, 1985; Menyuk, 1988; for reviews). Some of them have assumed biological explanations (e.g., lateralization) others have offered reasons which are based either on cognitive development, or on affective factors and motivation. Krashen (1975), for example, has attributed to the emergence of formal operations the need to construct a conscious theory (grammar) of the target language, which then obstructs the adult's access to native-like competence by virtue of inhibiting the course of natural and complete acquisition of a second language. Stengel (1939), sustaining a psychoanalytic view, states that the developed superego of adults makes it more difficult for them to reach native-like competence in a foreign language.

Carroll (1980) reported results on three experimental studies designed with the purpose of getting some insight into what internal mechanisms the adult learner utilizes during the process of acquisition of a second language. Subjects were Navajo-English bilinguals, with different levels of proficiency in the second language, who were tested in three dichotic listening tasks. Findings led the author to suggest that:

- “(a) There appears to be no reactivation of childhood language learning processes that may at some stage involve right hemisphere participation by adults in formal language classes.
- (b) Early exposure does appear to allow the reinvoking of first language learning processes at a later date.
- (c) While age of exposure would seem to be a more powerful variable, intensive-immersion programmes may influence processing strategies” (p. 86).

Recently, Hurford (1991) has revived the biological argument in the critical period for language acquisition issue. The method used was a computer modeling and simulation in which “a population was set up and the individuals in it were made to live reproduce and die in regular ways” (p.165). Findings led the author to conclude about the existence of a critical period which ends around puberty.

However, Krashen (1973) has long suggested that the hypothesis of the critical period based on biological factors was not correct, since he affirmed that lateralization takes place well before puberty—around age five. For Krashen (1986) second language learners acquire a language roughly the same way children do, that is, by being exposed to comprehensible input, in a low-anxiety situation, when presented with interesting messages and when these messages are understood. In addition, the author does not attribute any important role to the first language in the process of second language acquisition. Dulay and Burt (1974) and Bailey et al. (1974) have questioned the relevance of the critical period hypothesis to second language learning by mainly demonstrating that first language and second language learners follow similar sequences of acquisition of specific grammatical and morphological items.

Other authors have rejected the biological basis for the critical hypothesis as well, and some have suggested that lateralization may precede language (Molfese, 1977, cited in Santos, 1985) or even be present at birth (Krashen, 1975; Entus, 1977, cited in Santos, 1985). More recently, McLaughlin (1984, p. 50) has put it this way:

“On the basis of what information we possess, [...] it seems reasonable to conclude that the brain has more plasticity with respect to language function after childhood than Penfield or Lenneberg were willing to admit. In fact, most recent reviews of the biological evidence point to the conclusion that the aging of the brain during childhood does not diminish the ability to learn language and that no period of the life span is critical to such acquisition”.

Generativists have also reassessed the issue of a critical period for language acquisition in somewhat different terms. Generativists' common assumption about language acquisition states that there are innate, biologically pre-determined principles (Universal Grammar) which constitute one component of the human mind—the language faculty (a new formulation of the LAD

concept). That language faculty is thought to be a highly specialized mental organ which grows and matures as it selectively processes the language data provided by the linguistic environment. Westphal (1989), for example, approached the issue by stating that the explanation to the problem posed by the critical period hypothesis should be found within Universal Grammar (UG) theory. The author affirmed (p. 88), in accordance with the Chomskian tradition, that because "the LAD becomes relatively inefficient after puberty" adults do not acquire language as readily and as efficiently as children do. Within this view, what happens is that the child

"unconsciously approaches the language acquisition task equipped with a highly structured and restricted system of principles with certain open parameters to be fixed by experience [...] as these parameters are fixed, grammar is determined." (p. 88).

Presumably, then, along with the principles and parameters of UG, the language faculty includes a parameter setting mechanism "whose function is to fix unspecified parameters of UG in one way or another" (Westphal, 1989, p. 88), that is, in either their marked or unmarked case. What is assumed is that "once all the parameters are fixed for L1, the parameter setting mechanism becomes dysfunctional, as a consequence of having completed its task" (p. 89), making it difficult for adults to acquire native-like competence in some aspects of the target language. Hence, it is stated that adult learners use nonlinguistic strategies and abilities to construct the grammar of the foreign language.

Other studies have supported a similar view. Assuming that adults do not have access to the UG for a redefinition of the rules of the language system in accordance with the grammar of the target language, Bley-Vroman (1988, p. 52) speculated that adult learners rely, however, upon "a kind of surrogate for universal grammar from knowledge of the native language".

Johnson and Newport (1991) addressed the issue of the critical period effects for both first and second language acquisition. The author investigated whether and to what degree

critical period effects could be found for universal properties of language considered innate acquisitions. The study involved a group of 44 native Chinese speakers who had arrived in the U.S.A. between the ages of 4 and 38 years. Subjects were all adults who were tested in a broad range of learned language-specific grammatical properties. Results showed a gradual decline in the accessibility of subadjacency. In all measures, performance declined with increasing age of arrival in the U.S.A.. The results achieved were supported by previous research studies (e.g., Oyama, 1982; Patkowski, 1982; Johnson and Newport, 1989; Newport and Supalla, 1990, cited in Johnson and Newport, 1991). The authors concluded on the existence of a critical period for the acquisition of language.

Another way of trying to explain how foreign language learners construct the grammar of the target language is given by Cook's (1988, p. 182) proposal of an indirect access hypothesis. Cook proposes that UG is available to adult language acquisition process, but that this availability is only limited to the manifestations of UG present in their native language. That is, during the process of construction of their L2 grammar, adult learners do not have direct access to principles of UG and so, they are not able to reset parameters where L1 and L2 differ. According to the indirect access hypothesis, principles of UG are only available to L2 learners in the form in which they are instantiated in the language they have already acquired—their L1 (Thomas, 1991).

Schachter (1988, 1989), although not dismissing the possibility that adult foreign language learners have access to the UG principles and parameter settings "instantiated in the first language", has concluded, however, that there is no basis to believe that foreign language learners have direct access to UG. That is to say that whenever L1 and L2 parameter values diverge, learners are unable to reset them.

White (1981) defends a distinct position. She suggests that the language learner has access to UG and, in addition, that there is an interaction between the universal principles and the learner's developing perceptual abilities. In other words, White suggests that the learner's perception controls the features of the input data

s/he is able to attend to, at the different stages of development, data which are used to set different parameters of UG. According to White, it seems then that there are different principles which become relevant at different points of the process of development of perception. Recently, White (1988) has suggested that L2 grammars do not violate invariant linguistic principles; i.e., learners of a foreign language do not commit "impossible" errors. White (1989) maintains that, in accordance with recent proposals from learnability theory, there are learning principles, distinct from (although interacting with) UG principles, that determine the language process. According to this view, the foreign language learner's failure to reach native-like competence is not so much due to the inaccessibility to the UG principles, but it may be attributed to the lack of operating efficiency of some of the learning principles. White (1989) investigated whether one of those principles, the Subset Principle was still operating in the foreign language acquisition process. She studied two groups of second language learners: English native speakers learning French (FSL), and French native speakers learning English (ESL). Her results were not conclusive and did not allow her to confirm what she called the subset hypothesis. Consequently, White suggests that the Subset Principle no longer operates effectively in second language acquisition:

"these results are not consistent with the subset hypothesis; if the Subset Principle had been applied, ESL subjects should have totally rejected adjacency violations in English, contrary to what was found. The results from the FSL learners, on the other hand, suggest that the learners may be only partially aware that French relaxes the adjacency condition; they treat French as if it is more strict than it actually is." (p. 153).

There are, however, studies that have demonstrated findings which suggest that adult (or adolescent) language learners still have access to UG principles. Al-Buanain (1991) investigated some aspects of the developmental sequences in the process of acquisition of Arabic as a second language. His hypotheses had to

do with the problem of interlanguage development, and the discussion of his findings was based on theoretical assumptions regarding the universality of the language acquisition process. He reported that, taken as a whole, his findings provide support for the view that adult (foreign) language syntactic processing is more likely to be guided by the universal processes of acquisition, and he suggests that the foreign language learning process is essentially a developmental process.

Thomas (1991) also addressed the question of whether adult learners have access to the principles and parameters of universal grammar in the process of construction of the grammar of the target language. In her review of the current state of the debate, she referred to recent studies in which findings have challenged the assertion that negates adult access to UG (e.g., Felix, 1988; Martohardjono and Gair, 1989; White, 1990; du Plessis et al. 1987; Scharz, 1990, cited in Thomas (1991).

Thomas' own research findings on the study of the interpretation of English reflexive pronouns by native speakers of Japanese and by native speakers of Spanish, as well as on the interpretation of a Japanese reflexive (*zibun*) by native speakers of English and by native speakers of Chinese, suggests that "L2 learners observe constraints defined by universal grammar, constraints which they could not have derived solely from inspection of the input data, nor from the treatment of anaphors in their native language". These findings, as the author stated, are supported by findings of previous work on second language acquisition of anaphors; namely the results reported by Finer and Broselow (1986), Hirakawa (1990), and Finer (1990) —studies cited in Thomas, 1991—, which are consistent with the hypothesis of second language learners being able to reset UG parameters to values not present in their native language.

That means that, on the basis of current reported research findings, adult language learners seem to have direct access to principles and parameters of universal grammar in their interpretation of anaphors in a foreign language.

The findings of the preceding reviewed studies, done within the scope of Universal Grammar Theory, contribute to reaffirming the complexity of the answer to the specific question of how a

second, or a foreign language is acquired by learners who have already achieved mastery of a first, or native language. The issue becomes even more problematic when one realizes that it is probably related to one of the most contentious areas of debate among psycholinguists: “the degree to which the capacity for language is inherent, species specific, and reliant for its development upon the exposure to adult language models.” (Ratner, 1993).

The answers claimed by generativists do not, however, always seem to reflect a unitary explanation of the phenomenon. There is common agreement on the existence of the innate linguistic structure, or Universal Grammar; there is also a tendency to theoretically support the hypothesis that, in the process of development of their L2 grammars, adult learners use other abilities and strategies besides the ones used when learning their L1, since the human language faculty, or “the innate system that guides child acquisition no longer operates in adult foreign language learning” (Bley-Vroman, 1988, p. 41). However, as I hope I have demonstrated, there also seems to be some kind of controversy when it comes to the interpretation of the empirical evidence generated within the purpose of addressing the hypotheses proposed by generativists.

On one hand, Bley-Vroman (1988) suggests that L2 learners build their L2 grammars relying on a “kind of surrogate (universal) grammar; Cook (1988) proposes an indirect access hypothesis to explain L2 learners access to UG principles; Schachter (1988, 1989), in accordance with Bley-Vroman, denies L2 learners the direct resetting of UG principles and parameters; and, White (1981, 1988, 1989) agrees with the existence of learning principles interacting with UG principles in the development of the second language process. On the other hand, Al-Buainan (1991), Thomas (1991), and a reasonable number of other authors (cited by Thomas, 1991) advance recent empirical evidence in support of the hypothesis that states that L2 learners still have access to UG principles and parameters during the process of building their L2 grammars.

In summary, it seems that at least some aspects of the logical problem of language acquisition, namely the issue of the adult

access to UG principles, are still far from having a generally accepted explanation. In the meanwhile, the question of the differences between native and foreign language acquisition has also been examined by another perspective: Some researchers have dismissed the belief that first language acquisition is a fairly easy and fast process, and have compared the time that a child needs for proficiency in the first acquired language with the time needed by children to acquire a second or foreign language.

Klein (1986) says that although children are quite fluent in their native language by the school years, they still have some language problems to face in terms of rules and structures, which are acquired later in life, not to mention the fact that lexicon is a life time enterprise. From this assertion, the author followed that, after all, "first language acquisition is neither as easy nor as quick as one tends to assume at the outset" (p. 9). Still, five year old children have been exposed to their native language for more than a total of 9.100 hours, an amount that is underestime, since one has to agree that children are usually exposed to more than five hours of language per day. By contrast, the author reported that, many second language schools offer total immersion programmes where the foreign language is taught twelve hours a day for periods of four to six weeks. At the end of those longer programmes, the time spent by learners with the foreign language amounts to as little as 500 hours. Yet, most of the foreign language learners who finish them usually demonstrate "a reasonable command of the language, albeit limited in terms of vocabulary and syntactic variations" (p. 9).

Klein pursued his idea by further saying that if we compare the two time scales (for native and foreign language learning), it is evident that view "of first language acquisition being quick and easy compared with the labour of second language learning is nothing but a myth" (p. 9).

Another group of scholars have also questioned the hypothesis of the critical age period for foreign language acquisition on the basis of evidence that suggests that children, after all, are not as quick, and as efficient, in learning a foreign language as adolescents seem to be. This assertion obviously takes us to the examination of the question of whether there are any

differences between children and adults in learning a foreign language.

Are Older Learners as Good as Children in Foreign Language Learning?

The belief that children are the fastest and the most efficient learners of a second or a foreign language is closely related to the belief that there is a critical age period for language acquisition, that this critical age period is situated at puberty, and that, consequently, it is difficult to reach native like competence in a foreign, or second, language after that period of human life.

Research studies whose findings have demonstrated that younger learners are better than older learners, in second language acquisition, have also indicated that the advantages of the younger ones are related to specific aspects of the target language ability: namely, in the acquisition of native-like pronunciation (Asher and Garcia, 1982); in the mastery of the phonological system (Oyama, 1982; and Fathman, 1982); and in the acquisition of syntax, (Patkowsky, 1982).

Collier (1987) has also confirmed that young is better when it comes to standardized measures (reading tests) of English for academic purposes. The study assessed the time required by fourth, sixth, eighth and eleventh grade students with limited English proficiency (LEP) to become proficient in English for academic purposes in ESL programmes. The findings revealed that the 12-15 age group, irrespective of the high levels of second language proficiency achieved in only a couple of years, were the group that required the longest periods of time (6-8 years) to reach grade-level norms in academic achievement. The fastest group were the 8-11-year-olds, who only required two and a half years to reach the 50th percentile on national norms in all subject areas tested.

More recently, Collier (1989) has synthesized current research findings on the time that is required by ESL students to become English proficient for schooling purposes. She found that

“(...) both language minority and language majority

students generally take 4 to 7 years to reach national norms on standardized tests in reading social studies, and science, where as their performance may reach national norms in as little as 2 years in L1 and L2 tests in mathematics and language arts” (p. 526).

In terms of the relationship between age and foreign language acquisition, Collier reported that, according to her research review, the optimal age for second language acquisition was situated between ages 8 to 12 (for subjects with several years of schooling). Adolescents, with solid native language schooling, were also equally efficient acquirers except for pronunciation.

Other scholars suggest that adults may be faster than children in initial phases of foreign language learning, but that, in the long run, children are still the most efficient learners of a non-native language. Krashen and Terrel (1983, p. 44), for instance, found that “children are better with respect to ultimate attainment; [and that] over the long run, those who start second languages as children will usually reach higher levels of competence than those who start as adults (i.e., after age 15)”.

Krashen and Terrel (1983) suggested that children are better than adults in acquiring languages for the reason that only children achieve native-like proficiency levels. However, the authors mentioned three ways in which adults are “faster” than children in the acquisition of a second language. First, the superiority of adults in the initial phases is due to the adult’s ability to control conversation and to keep conversation going. Adults, compared to children, also demonstrate a greater ability to get the other speaker in the conversation to modify the input in order to make it more comprehensible. Second, adults are able to overcome the “silent period”. They can produce sentence structures in the foreign language which they have not yet fully acquired. Krashen and Terrel claim that adults are better able than children to use the monitor; that is, to be able to consciously use the rules of the target language which have been learned in the classroom. Third, adults have a greater knowledge of the world and, consequently, a larger cultural background which facilitates their language learning process.

Winitz (1981) also compared third grade children (mean age 8.8 years) and college students (mean age 21.7 years) on measures of phonetic distinctions with which they were unfamiliar. The results revealed that adults performed better than children, on the discrimination of the foreign language speech sounds, only in beginning phases of language learning experience. After having acquired a significant amount of experience on the target language, adults did not perform as well as children on similar measures of speech-sound discrimination. Nonetheless, the author states that he did not include in the sample children between 12-15 years of age, who have been found to be the ones achieving higher performance levels during all phases of the foreign language learning process.

Other studies claim that older language learners are better than younger ones. But, in sum, there seems to be some consensus in the results of research studies concerning this issue: if there is a period during which foreign language learning seems to be facilitated—that period is precisely adolescence.

Krashen and Terrel (1983) cite the results of Scarcella and Higa (1982) who found that older learners (15 and 16 year olds as opposed to 8 and 9 year olds) are better at “managing conversations or controlling the input directed at them and making it comprehensible”. Santos (1985) cites a reasonable amount of studies in which findings have shown that older is better than younger when it comes to learning a foreign language.

Snow and Hoefnagel-Hohle (1982) compared adults and different age children competency in oral Dutch language measures of phonology, syntax and vocabulary. They found that 12 to 15 year olds consistently progressed faster than the other age groups in analysis, (three-five; six-seven; eight-ten) in controlling the use of the foreign language in all of the skills tested. Adults did as well as the 12-15 year-old group, at least in the initial phases of foreign language learning competence.

Snow (1981) reviewed the data reported in Snow and Hoefnagel-Hole, and found that those older learners were much faster in the foreign language acquisition process because they seemed to skip some of the early stages of acquisition.

Ekstrand (1982) found that, within the age range of six to ten years old, pronunciation ability as well as listening comprehension

ability increased with age, holding constant, among other factors, amount of teaching, teacher factor and mode of presentation.

Olson and Samuels (1982) found that high school and college age subjects were better in measurements of accuracy of foreign language pronunciation when compared to a group of elementary school age children. Their results also did not show any differences between the two older groups examined.

Asher and Price (1982) in examining reading comprehension ability in different age groups (ages ranging from 8 to 21), found that adults were superior to children of any age group, and also that the 10 and 14 year-old groups were better than the 8 year-old one.

On the basis of the findings of a study that investigated aspects of foreign language syntax and morphology with English-speaking children living in Switzerland (ages 4 to 9), Ervin-Tripp (1974) reported that the older children (above seven years old) were the fastest in learning the morphological rule of number and gender, most of the features of segmental phonology, and were also faster in mastering the syntax tasks. The superiority of the older children, was attributed by Ervin-Tripp to their greater capacity to solve problems, to make sub-rules, and to carry in mind several principles.

McLaughlin (1984) cites the findings of Asher and Price (1967) in a study that investigated four groups of English speakers learning Russian. Children from second, fourth and eight grades were compared to a group of college undergraduates in their task performance in imitation and retention of Russian language. Their findings revealed that adults were consistently superior to any other group in all tasks. McLaughlin also refers to the findings of Braine (1972, cited in McLaughlin, 1984) who reported that adults were superior to children in learning a miniature artificial language under controlled learning situations. These findings were supported by other research studies (e.g., Grider, Otomo and Toyota, 1961; Politzer and Weiss, 1969; Bühler, 1972; Heilenman, 1981, cited in McLaughlin, 1984). According to McLaughlin (1984), these studies produced evidence that older learners perform better than younger learners in classroom second language situations.

Diller (1978) stated that adults can reason more effectively

than children and that this fact allows them to learn languages faster than children. The author adds:

“(...) adults are superior to children in all aspects of language learning except possibly in pronunciation. That is to say that adults can master a certain amount of grammar and vocabulary in less time than children need, if both children and adults are given optimal learning situations” (p. 108).

Burstall (1975), examining the performance of elementary foreign language learning school children on measures of listening, speaking, reading and writing, also considered adolescents as the most efficient learners of a foreign language. The author found that 16-year-old speakers of English, introduced to French at age 8, were only slightly ahead of 16-year-old students who had initiated French at age 11. Lapkin, Kamin, and Hanna (1980) also found that 10th grade students from late French immersion programmes, with 1.400 hours of French instruction, on a basis of 20 to 40 minutes a day, demonstrated achievement scores very similar to the achievement scores of 10th grade students from early French immersion programmes, with 4.000 hours of French instruction accumulated since kindergarten.

It seems that, after all, age may be a factor in foreign language development. Nonetheless, and although the available evidence has indicated that older students (at least adolescents) outperform younger students in foreign language learning, the point is that age is still considered an unresolved issue in current research (Diaz, 1983). Researchers have indicated a number of factors that cannot be separated from the age question, when analysing the advantages, apparently evidenced by older foreign language learners. Included in these factors is the cognitive development variable, which has been pointed out as a major positive influence in older foreign language learners performance (Collier, 1989). Today, research studies actually tend to equate bilingualism with cognitive advantages, as we shall see in the next pages of this text. It has not always been like this. Not long ago, there was a serious debate over the seemingly negative cognitive effects of

bilingualism. The question of the cognitive effects of foreign language proficiency will be examined next.

Foreign Language Proficiency and Cognitive Development

The systematic investigation of the relationship between bilingualism and cognitive ability dates from the beginning of this century, parallel to the flourishing of psychometric tests of intelligence. In fact, the notion of cognitive ability at the time was a psychometric one based on the differential performance of individuals within a defined population of IQ tests (Hakuta, Ferdman and Diaz, 1987). The great majority of those early studies suggested that there were negative relationships between bilingualism and linguistic, academic and intellectual achievements (see reviews by Arsenian, 1937; Darcy 1953, 1963; and Macnamara 1966).

In 1953, Toussaint (cited by Avognon, 1989) affirmed that “opponents and detractors of bilingualism in the main, claim that bilinguals have psychological problems that make them produce hybrid utterances that turn them into hybrid and marginal persons in language use and social situations”. Others had been even more explicit concerning the language handicap attributed to bilinguals, as Hakuta, Ferdman and Diaz (1987) indicated, while citing Thompson’s (1952) American textbook on child psychology:

“There can be no doubt that the child reared in a bilingual environment is handicapped in his language growth. One can debate the issue as to whether speech facility in two languages is worth the consequent retardation in the common language of the realm” (p. 367).

In fact, the poor performance of immigrants on intelligence tests was repeatedly declared as synonym of their inferiority, in a wide range of abilities, when compared to their monolingual peers. Diaz (1983, p. 25) summarized the findings of those early studies and reported that bilinguals, when compared to monolinguals, have been found to: (a) use poorer vocabulary (Barke and Perry-Williams, 1938; Grabo, 1931; Saer, 1923); (b) have a more

deficient articulation (Carrow, 1957); (c) perform more poorly in mathematics (Carrow, 1957; Manuel, 1935); (d) demonstrate lower standards in written composition as well as many more grammatical errors (Harris, 1948; Saer, 1923).

Today, researchers are unanimous in recognizing the several methodological problems of those studies concerning the way their samples were collected and analyzed. Lambert (1977) said that

“One trouble with most of the early studies was that little care was taken to check out the essentials before comparing monolingual and bilingual subjects. Thus, such factors as social class background and educational opportunities were not controlled, nor was much attention given to determining how bilingual or monolingual the comparison groups actually were.” (p. 15).

Diaz (1983) reported that there were studies (e.g., Bruner, 1929, cited in Diaz, 1983) in which the degree of bilingualism of the children was measured by the degree of foreignness of the parents; i. e., a child born in a family in which both parents were born abroad was thought to have a higher degree of bilingualism than a child who only had one parent with foreign nationality.

One way or another, the point is that the results of those studies have influenced the views of a whole generation of researchers towards the cognitive disadvantages of foreign language proficiency, and only in recent years have there been voices that claimed the contrary.

Hakuta (1987) suggests that some of the literature in the early part of this century that assigned negative consequences to bilingualism was rooted in the debate between hereditarian and environmentalist interpretations of the low performance of immigrant children on the IQ tests, and as such, is only “of interest from the view point of the history of science” (p. 1373).

Hakuta, Ferdman and Diaz (1987) have also hypothesized about the relation between cognition and language in the light of the positions held by different theories of cognitive development, namely learning theory, skill theory, Piagetian operational thought, Chomskyan rationalism, and Vygotsky’s views of mind and society.

Hakuta, Ferdman and Diaz suggest that those who subscribed to Chomskyan nativist's explanation of human language learning ability, might have also defended a hereditarian interpretation of individual differences in intelligence (Jensen, 1980) and, consequently, "would not predict bilingualism to have any effect on the course of cognitive development" (p. 286). In contrast, as the authors say, those who have emphasized "the role of learning and environment would easily accommodate influences of bilingualism on development" (p. 286). These views would be shared by traditional learning theory, skill theory and Piagetian constructivism. The strongest claim for the relationship between bilingualism and cognitive development would come, according to the authors, from Vygotsky's theory followers who have proposed that

"(...) cognitive functions might exist in rudimentary form as part of the child's genetic endowment, but the majority of variance in cognitive growth [is] explained by the way in which society amplifies and interrelates these capacities" (p. 290).

Menyuk (1988) has also referred to the narrowness of the view that claims the negative cognitive effects of bilingualism and the belief that takes language acquisition to be a limited capacity; and thus, accordingly, those that have acquired two languages instead of one would have a "reduction in knowledge of either languages" (p. 65). The author further suggested that this same assumption has been defended by those who sustain that "cognitive development is highly dependent on language knowledge, [and being so, a] reduction in language would detrimentally affect cognitive development in bilingual children" (p. 65).

It was only with the study of Peal and Lambert, in 1962, that empirical data was reported to have demonstrated a positive influence of bilingualism on children's cognitive ability. Peal and Lambert started by measuring the degree of bilingualism of 364 10-year-old children in Canada. The final sample included 75 monolinguals and 89 "truly" bilinguals (i.e., balanced bilinguals). Measures of cognitive ability were administered to those two

groups of subjects, as well as measures of their attitudes toward the foreign language community. The findings of this pioneer study have demonstrated that bilinguals, compared to their monolingual peers, performed significantly better in most of the cognitive tests (verbal and nonverbal abilities), even with groups appropriately controlled for sex, age and socioeconomic status differences. The results of the Peal and Lambert study demonstrated that, on nonverbal ability tests, bilinguals were superior to monolinguals in those tasks that required mental manipulation and reorganization of visual stimuli. The authors have concluded that overall bilinguals in their sample when compared to monolinguals were found to have a more diversified pattern of abilities.

Other studies have followed Peal and Lambert's line of research, and the literature on the subject produced in the last half of this century has not produced results showing that bilingualism is in any way detrimental to cognitive development. The contrary is true, as attested to by the large amount of references of research studies that have reported a positive relationship between aspects of cognitive growth and bilingual ability. Those studies have been consistently cited by those who have reviewed the issue of the relationship between bilingualism and cognition (e.g., Diaz, 1983; Cummins, 1984; Hakuta, Ferdman and Diaz, 1987). All of them have reported that bilinguals, compared to their monolingual peers, showed advantages in certain cognitive abilities measured. (e.g., Peal and Lambert, 1962; Liedke and Nelson, 1968; Balkan, 1970; Ianco-Worrall, 1972; Bain, 1975; Barik & Swain, 1976; Cummins, 1976; Ben-Zeev, 1977; Duncan and De Avila, 1979; Hakuta and Diaz, 1985; Diaz, 1985a; Diaz and Padilha, 1985)

Hakuta, Ferdman and Diaz (1987) consider that the issue of the effects of bilingualism on cognitive development still raises questions of considerable complexity. The authors claim that a serious assessment of the relation between bilingualism and cognitive abilities must take into consideration the various socio-pedagogical conditions under which bilingualism occurs.

Having examined current research studies on the issue, Diaz (1985a) points out the existence of three gaps in the methodology of the reviewed studies: The first gap has to do with the fact that most studies have compared bilinguals with monolinguals, and

because those two groups may differ in a large number of sociolinguistic factors, there is the possibility that the findings of those studies can be attributed to group differences rather than to the effects of bilingualism on cognitive development.

The second identified gap has to do with the bilingual samples selected for some studies. Diaz says that the reviewed studies have “failed to look at the effects of bilingualism on nonbalanced bilinguals, that is, children who have disparate abilities in the two languages” (p. 1377). Among the bilingual samples, selected from the ESL programmes, there are many children who can not be considered true or balanced bilinguals. Due to their low level of bilingual competence they are generally excluded from the research samples which only include balanced bilinguals.

The author referred to Cummins (1976) threshold hypothesis which suggests that until children have attained a minimum threshold level of competence in the foreign language, they may perform differently from children who have attained such a level of language competence, on cognitive and academic tasks.

In short, Diaz has suggested that results concerning the positive effects of bilingualism on cognitive development might have been different if those nonbalanced children were selected for research examination; but, here are the author’s own words:

“(…) the fact that balanced bilinguals outperform their monolingual peers on several cognitive measures does not tell us the whole story regarding the impact of bilingualism on cognitive development. [...] The effects of bilingualism must be looked for separately in children of different second language abilities” (p.1377).

The third limitation observed by Diaz (1985a) in current research concerns the correlational nature of most studies. The author’s opinion is that now that research has demonstrated a positive relationship between bilingualism and cognitive ability, and because it is not yet clear which of the two factors is the cause or the effect in that relation, researchers should address the issue in longitudinal studies, for observations at more than one point in time

would allow the performance of cause-effect analyses between bilingualism and cognitive variables.

Diaz (1985a) own study was designed in response to some limitations observed in other studies. The author studied two extreme groups (high and low second language proficiency) in kindergarten and first grade. Data were collected twice during a period of six months. Children were administered language proficiency tests in their first language (a Spanish version of the PPVT-Peabody Picture Vocabulary Test) and in their second language (the English version of the PPVT), and they were also administered a battery of cognitive tests measuring verbal and spatial abilities. Findings summarized by Diaz (1985) suggest that degree of bilingualism is a predictor of cognitive ability, in the case of children with low-second language proficiency. This relationship between bilingualism and cognitive variability was not found to be as significant in the case of high-second language proficient children.

In synthesis, it seems that the problem of the relationship between bilingualism and cognitive development is still far from a common accepted answer. Although Diaz's (1985) comments on the results reported in some of the studies reviewed sound appealing, and besides his interpretation of his own findings, the whole issue of the relationship between foreign language proficiency and cognitive ability seems to be rather complex and difficult to interpret due to the large number of factors, such as linguistic, cognitive, social, cultural and even politic factors, that might interfere with that relation.

Concluding Remarks

Like Ratner (1993) says, in his analysis of Locke's (1993) challenging perspective of many of the assumptions currently implicit in certain accounts of language acquisition, a full account of a phenomenon should not dismiss any of the findings about that phenomenon. It was with this idea in mind, that this search for an insight into some of the complexities of the process of foreign language learning covered some of the most debated problems of research on Foreign and Second Language Learning.

The aim of this discussion was to review studies in the field of second language acquisition. It began by examining the distinction between the concepts of “second language acquisition” and “foreign language learning”, then the Portuguese foreign language learning context was characterized in comparison to the bilingual learning contexts of Canada and the United States of America. It concluded with an analysis of major questions posed by research in the field of foreign and second language acquisition.

Research on second and foreign language learning does not yet have a long tradition in language acquisition studies. For this fact, it is not surprising that most of the questions raised by researchers do not yet have a satisfactory answer. That is, an explanation that might be accepted by the several areas of knowledge more or less concerned with such problems (e.g., linguistics, psycholinguistics, sociolinguistics, psychology and education). Most of the questions raised, as well as most of the answer advanced, are formulated by theorists deeply involved in their own field of research, and therefore, it may be premature to require explanations depurated from the strong impact of the particular visions, methodologies and analytic tools of the several disciplines.

Further, it may also very well be the case that the problems posed by researchers in the field of second language acquisition can not be fully explained while there are still some difficult problems to solve in the field of first language acquisition. Just to name a few, the explanations advanced for the logical problem of (first) language acquisition are not yet widely accepted, the relationship between language and cognition is not yet fully comprehended, and the concepts of mind and conscience are still constructs highly debated, across the academic world.

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